



# ENVIRONMENTAL CHECKLIST

FOR THE

## MUNICIPAL CODE, CENTRAL LATHROP SPECIFIC PLAN (CLSP) PHASE 2 UPDATE, AND ASHLEY WAREHOUSE PROJECT

(CEQA) Guidelines Section 15183

AUGUST 2023

*Prepared for:*

The City of Lathrop  
390 Towne Centre Dr  
Lathrop, CA 95330

*Prepared by:*

De Novo Planning Group  
1020 Suncastr Lane, Suite 106  
El Dorado Hills, CA 95762

D e N o v o P l a n n i n g G r o u p

---

A Land Use Planning, Design, and Environmental Firm





# ENVIRONMENTAL CHECKLIST

FOR THE

## MUNICIPAL CODE, CENTRAL LATHROP SPECIFIC PLAN (CLSP) PHASE 2 UPDATE, AND ASHLEY WAREHOUSE PROJECT

(CEQA) Guidelines Section 15183

AUGUST 2023

*Prepared for:*

The City of Lathrop  
390 Towne Centre Dr  
Lathrop, CA 95330

*Prepared by:*

De Novo Planning Group  
1020 Suncastr Lane, Suite 106  
El Dorado Hills, CA 95762



## **INTRODUCTION**

This document provides an analysis of three distinct, yet closely related actions being contemplated by the City of Lathrop. These include an update to the Lathrop Municipal Code and Zoning Map (referred to as, the “Municipal Code Update”), an update to the Central Lathrop Specific Plan (CLSP) Phase 2 (referred to as, the “CLSP Phase 2 Amendment” or “CLSP-2 Amendment”), and the proposed Ashley warehouse project (referred to as, the “Warehouse Project”). The characteristics of these three actions are described in greater detail below.

These three projects are being implemented as a result of the City’s recent comprehensive General Plan update, which was adopted in September 2022 (“2022 Lathrop General Plan” or “General Plan”). As a result of the recently-adopted General Plan, the City is initiating an update to the Municipal Code and Zoning Map to bring the Municipal Code and Zoning map into consistency with the 2022 Lathrop General Plan. The City is updating the Phase 2 portion of the Central Lathrop Specific Plan in order to bring the CLSP Phase 2 into consistency with the General Plan. The City has also received a development application for the Ashley Warehouse project within the boundaries of the CLSP Phase 2 area. Given the close relationship between these three actions, and the fact that they are all subsequent steps to implement the Lathrop General Plan, the City has analyzed these three projects collectively, in this environmental document. This document refers to all three projects collectively as the “Project.”

These three projects are described in greater detail on the following pages. The analysis included in this report focuses on the projects’ consistency with the General Plan, the analysis contained in the 2022 Lathrop General Plan Environmental Impact Report (EIR), and any site-specific environmental impacts or cumulative impacts that may result from Project implementation.

As explained in the following pages, the proposed projects are consistent with the 2022 Lathrop General Plan, for which an EIR was prepared and certified, and there are no site-specific or cumulative impacts associated with the proposed projects that have not been fully addressed in a previous environmental document, or that cannot be reduced to a less than significant level through the application of uniformly applied development policies and/or standards. The findings presented below demonstrate that no additional environmental analysis/review is required under the California Environmental Quality Act (CEQA) prior to approval of the proposed projects.

The Municipal Code Update and the CLSP Phase 2 Amendment would not result in any physical development, project entitlements, or other ground disturbing activities. The proposed Ashley Warehouse Project would result in the development, construction and

operation of a retail, office/call center, and warehouse and distribution facility (described in greater detail below). The Municipal Code Update and the CLSP Phase 2 Amendment would implement the policy guidance provided in the 2022 Lathrop General Plan, and would bring these planning documents into consistency with the 2022 Lathrop General Plan. While all three actions/projects are addressed in this environmental analysis, the bulk of this analysis focuses on the proposed Ashley Warehouse Project in order to determine if any site specific impacts would occur from development and operation of the Ashley Warehouse Project.

## **STUDIES AND REPORTS**

This document includes references to several reports that were prepared for the proposed Warehouse project, and are provided in the following reference materials (included as attachments):

- Attachment A. Biological Resources Analysis Report For The Dos Reis Ranch Property. Prepared by: Olberding Environmental, Inc. May 2021.
- Attachment B. Preliminary Geotechnical Engineering Report. Prepared by: Terracon Consultants, Inc. August 16, 2021.
- Attachment C. Phase I Environmental Site Assessment Report. Prepared by: Partner Engineering and Science, Inc. Report Date: March 8, 2021.
- Attachment D. Shallow Soil Investigation Report. Prepared by: Partner Engineering and Science, Inc. Report Date: May 27, 2021
- Attachment E. Central Lathrop Specific Plan (CLSP) Phase 2 Specific Plan Update (2023).
- Attachment F Acoustical Assessment Prepared by: Saxelby Acoustics May 15, 2023.
- Attachment G: Air Quality-Health Risk Technical Report Prepared by: De Novo Planning Group 7/19/23.
- Attachment H: Traffic Impact Analysis (TIA) Prepared by: TJKM. August 9, 2023
- Attachment I: Lathrop Ashley Warehouse CalEEMod output file

## **PROJECT OVERVIEW**

The Project area consists of the “CLSP Phase 2 area,” the “Warehouse Site,” and the City of Lathrop as further discussed below.

### *PROJECT LOCATION*

**Municipal Code: and Zoning Map:** The Lathrop Municipal Code and Zoning Map are applicable Citywide.

**CLSP Phase 2 Amendment:** The CLSP is located within the northwest portion of the City. Phase 2 of the CLSP includes the northernmost portion of the CLSP. Figure 1 shows the location and boundaries for the entire CLSP area, and identifies the Phase 2 and Phase 2 areas of the CLSP. Figure 2 shows the project areas within the city. As noted above, the CLSP Phase 2 area is the subject of the analysis for this portion of the project.

**Warehouse Site:** The Warehouse Site is composed of approximately 89.82± acres located at the northwest corner of Dos Reis Rd and Manthey Road. The Warehouse Site and the associated facilities and site improvements are located exclusively on Assessor's Parcel Number (APN) 192-020-140. The Warehouse Site and site plan are shown on Figure 3.

### *EXISTING SITE AND LAND USES*

**CLSP Phase 2 Amendment:** The CLSP Phase 2 Amendment Project area is substantially undeveloped and largely vacant, with sparse ruderal vegetation, large lot residential uses, and existing agricultural uses in the northern portions of the CLSP Phase 2 Project area. The 2022 Lathrop General Plan designates the CLSP Phase 2 Project area as Limited Industrial. Figure 5 shows the 2022 General Plan land uses for the CLSP Phase 2 area and the surrounding area. The CLSP Phases 2 area is zoned Office Commercial, Variable Density Residential uses, Parks and Open Space and Institutional uses. Figure 6 shows the existing and proposed zoning for the CLSP Phase 2 Project area.

**Ashley Warehouse (Warehouse Site):** The existing Warehouse Site is currently undeveloped and largely covered in bare dirt, with sparse growths of grasses. The General Plan designates the Warehouse Site Limited Industrial. Figure 5 shows the General Plan land uses for the Warehouse Site and surrounding area. The Warehouse Site is zoned Office Commercial, Variable Density Residential, and Park. Figure 6 shows the existing and proposed zoning for the Warehouse Site.

### **PROJECT DESCRIPTION**

The proposed projects would include an update to the Lathrop Municipal Code and Zoning Map, adoption of the Central Lathrop Specific Plan (CLSP) Phase 2 Amendment, and approval of the Warehouse Project (combined as the proposed project). Each project component is described below:

*A. MUNICIPAL CODE AND ZONING MAP UPDATE:*

The proposed Municipal Code Update would modify Title 10 (Vehicles and Traffic), and adopt various amendments to Title 17 (Zoning) of the Lathrop Municipal Code (LMC); and for those properties that were classified with new general plan land use designations as part of the 2022 General Plan Update, to assign corresponding zoning designations to those same properties on the Lathrop Zoning Map, in order to bring the Code into consistency with the 2022 Lathrop General Plan and meet the requirements of Government Code Section 65860.

The Project includes rezoning the CLSP-2 Project area to potentially allow for Limited Industrial site uses, and a park and open space buffer area. The purpose of this proposed rezoning is to establish consistency with the 2022 General Plan land use designations. This action is being initiated by the City of Lathrop.

*B. CLSP PHASE 2 AMENDMENT:*

The City of Lathrop adopted the Central Lathrop Specific Plan (CLSP) on November 9, 2004. The 2004 CLSP provided for the development of approximately 1,521 acres located south of the northern city limit line, west of Interstate-5, north of the Mossdale Village planning area, and east of the San Joaquin River as illustrated in Figures 1 and 2 (CLSP Plan Area).

The CLSP Plan Area consists of two primary development phases. Phase 1 of the CLSP covers approximately 797 acres in the southern portion (Phase 1 Plan Area), and Phase 2 applies to the 724-acre northern portion (Phase 2 Plan Area). Dos Reis Road serves as the dividing line between the two phases. Phase 1 of the CLSP has largely been entitled and significant development has occurred throughout Phase 1.

The Central Lathrop Specific Plan Phase 2 Amendment (“CLSP Phase 2 Amendment”) includes updates and modifications only for the Phase 2 Plan Area portion of the Central Lathrop Specific Plan, comprising the 724-acre area north of Dos Reis Road. The CLSP-2 Amendment does not, in any way, alter, amend, or otherwise change the vested entitlements for the CLSP Phase 1 area, which is the 797-acre area south of Dos Reis Road. The original 2004 CLSP and the associated entitlements continue to govern the residential mixed use development in the CLSP Phase 1 Plan Area.

The CLSP-2 Amendment revises all policies, regulations, land use concepts, and development standards with respect to Phase 2 and supersedes the 2004 CLSP for the area north of Dos Reis Road.

The City of Lathrop is the sponsor of the CLSP-2 Amendment in order to modify the 2004 CLSP for the Phase 2 Plan Area so that the CLSP-2 Amendment is consistent with the



recently adopted 2022 Lathrop General Plan. The 2004 CLSP designated residential, parks, schools, and commercial uses within the CLSP Phase 2 Plan Area. The CLSP-2 Amendment changes the residential, parks, schools, and commercial land uses within the Phase 2 Plan Area to Limited Industrial and retains the Open Space designation consistent with the 2022 Lathrop General Plan. The CLSP-2 Amendment will implement the 2022 General Plan policies and establish clear direction for the development of the CLSP-2 Plan Area. This land use change is consistent with the City's efforts to support the Mossdale Tract's provision of a 200-year urban level of flood protection.

The Central Lathrop Specific Plan (CLSP) Phase 2 Amendment will bring the CLSP into consistency with the recently adopted 2022 Lathrop General Plan. Specifically, the CLSP Phase 2 Amendment would implement Implementation Measure LU-5.f, which requires the City to update the CLSP to 1) bring the Specific Plan's land use map into consistency with the General Plan, 2) establish a circulation network; 3) establish site design standards for new industrial projects; 4) identify financing and cost-recovery methods to fund roadway and infrastructure improvements; 5) establish circulation design standards; 6) provide opportunities to provide employee-serving amenities on-site; and 7) include provisions that all development projects proposed north of Dos Reis Road and south of De Lima Road be required to obtain a Conditional Use Permit (CUP), which shall be subject to discretionary review by the City Council.

The Land Use and Development Plan is the primary implementing component of the CLSP-2 Amendment. The land use update designates the CLSP-2 Plan area Limited Industrial, consistent with the 2022 Lathrop General Plan, and would include a parks and open space buffer. Additionally, policy amendments are included throughout the CLSP for consistency with the land use plan and environmental impact minimization policies included in the 2022 Lathrop General Plan.

Prior to any future development within the CLSP-2 area, a site-specific development application would be required for projects proposed within the CLSP Phase 2 Project area. At that point, based on the details of a specific project, traffic and other utility analyses would be performed to identify appropriate project requirements, or mitigation measures and conditions of approval.

The proposed CLSP-2 Amendment is included as Attachment E.

### *C. WAREHOUSE PROJECT*

The Warehouse Project requires a Conditional Use Permit and Site Plan Review for the development of a new integrated, warehouse/light industrial/retail office development on an approximately 89.5-acre property located at the northwest corner of Dos Reis Rd and Manthey Road (the "warehouse site", or "project site").

The proposed Warehouse Project includes an approximately 1,486,607 square foot single or multi-tenant building with a mix of retail, office/call center, and warehouse and distribution uses. The primary mix of uses within the Project building include an up to 110,000 square foot retail showroom, a 24,000 square foot, 2-3 story office space consisting of call center and a regional office. Warehouse and distribution uses will comprise the balance of the 1,352,347 square feet. The proposed building's height is approximately 50 feet, with architectural features that may extend to approximately 60 feet.

The proposed Warehouse Project would generate up to 1,295 employees. There are three types of employment in this project; warehouse, office, and retail. It is expected that the warehouse use will generate 1,143 new employees, the office use will generate 98 employees, and the retail use will generate 54 employees.

**Warehouse Site Access and Circulation:** The site plan (included on Figure 3) orients the Warehouse Project to Manthey Rd. Public access to the Warehouse Site will be provided via Manthey and Dos Reis Roads in the locations shown on the site plan. These points of access and internal circulation provide access to users, employees, and customers. Generous landscaping along Dos Reis effectively screens the south elevation from Dos Reis Rd, while dense landscape accents the east elevation and the retail portion of the Warehouse Project.

Dedicated truck access located at the very northeast corner of the Warehouse Site is the only access point for ingress and egress of truck traffic. Trucks are restricted from going south of this access point and will come from and to the north towards the Roth Road/Interstate 5 (I-5) interchange only. Vehicular & Truck access to the Warehouse Site is proposed via four (4) access drives; one (1) access drive on Manthey Rd at the far northeast corner is dedicated for truck ingress/egress onto and from the Project. One (1) public and employee vehicular access mid-block on Manthey Rd is proposed for ingress/egress of the public and employees' access to the retail and office. Two (2) additional access points are proposed along Dos Reis Rd with the most eastern access proposed for public vehicular access to the retail and customer pick-up areas located at the southeast corner of the building. A fourth and final access is closed (gated) to the public and trucks and is reserved only for emergency vehicle access.

The Warehouse Project site plan identifies approximately 2,046 parking spaces provided throughout the development, 942 of which are proposed automobile spaces and 1,104 of which are proposed trailer parking spaces. Parking for trucks and employees is provided behind secured, gated access points as depicted on the site plan. Approximately 1,104 trailer parking spaces are provided behind secured, gated access points.

The proposed Warehouse Project is expected to generate 2,798 daily trips, including 203 a.m. peak hour trips (124 inbound, 79 outbound) and 255 p.m. peak hour trips (110 inbound, 145 outbound) for passenger vehicles, and is expected to generate 680 daily truck trips including 95 a.m. peak hour trips and 45 p.m. peak hour trips. Parking will include 943 vehicle spaces, and 1,104 trailer spaces/stalls.

**Site Improvements:** The developer will be required to widen Dos Reis Road and Manthey Road to their ultimate condition and in accordance with the Central Lathrop Specific Plan Phase 2 Amendment (CLSP 2). Landscape and sidewalk improvements beyond the back of curb along the southern portion of Dos Reis Road will be constructed by future developers of the adjacent properties.

The project proposes a 30-foot landscape buffer along the Dos Reis Road project frontage, in accordance with the Central Lathrop Specific Plan Phase 2 Amendment (CLSP 2). To further enhance screening for trailer parking areas, an 8-foot-tall community wall is proposed along the right-of-way of Dos Reis Road at the project frontage. Additionally, the project proposes an increased number of deciduous trees between the 8-foot paved sidewalk and the 8-foot-tall community wall. This condition will extend along the south boundary of the property until the first driveway east of the proposed Dos Reis Road and Golden Valley Parkway roundabout. Proceeding north along Manthey Road, the tree spacing, and landscape design will transition to a less dense arrangement typically found in retail areas.

**Grading and Drainage:** The grading and drainage plan for the Property will be required to comply with the City of Lathrop's drainage design standards and the Multi-Agency Post-Construction Stormwater Standards Manual. Storm drainage will be conveyed via internalized roof drains and downspouts, as well as overland flow across the parking lots and truck dock areas. This flow will be directed to curb openings at stormwater quality treatment areas distributed throughout the site. These treatment areas will effectively treat stormwater before it is discharged into the site's storm drain system. Ultimately the onsite storm drain system connects to the existing Watershed 4 storm drain line in Dos Reis Road where that storm water continues west to the existing storm drain pump station at Stanford Crossing and Spartan Way. The stormwater quality treatment areas and the underground storm drainpipe system have been sized to together accommodate a 100-year storm event.

**Utilities and Infrastructure:** The City of Lathrop will provide water to the Property via a 12-inch public waterline within Golden Valley Parkway. The project proposes new 12-inch public water lines in Manthey Road and Dos Reis Road. The City of Lathrop will provide storm sewer and wastewater treatment service. There is an existing sewer main

within Golden Valley Parkway. It is anticipated that the existing sewer main is to provide a gravity sewer connection to the Property

## **PROJECT OBJECTIVES**

The following are the objectives for the project:

- Implement the 2022 Lathrop General Plan and provide consistency between the General Plan and the CLSP, the Municipal Code, and the Zoning Map.
- Provide a new integrated, high-quality warehouse/light industrial/retail office development.
- Promote improvements that minimize impacts to the city and surrounding areas through master planning and sites design.
- Minimize potential site access and on-site and off-site circulation conflicts between drivers and pedestrians through designated routes and access points suited for the project area.
- Promote economic growth and diverse new employment, shipping, and retail opportunities for Lathrop residents.
- Contribute to the City's tax base.

## **REQUESTED ENTITLEMENTS AND OTHER APPROVALS**

- **Approval of Municipal Code and Zoning Map Amendments:** Amend the Lathrop Zoning Map, modify Title 10 (Vehicles and Traffic), and adopt various amendments to Title 17 (Zoning) of the Lathrop Municipal Code (LMC) for consistency with the 2022 Lathrop General Plan and Government Code Section 65860.
- **Approval of the Central Lathrop Specific Plan 2 Amendment.** The CLSP-2 Amendment includes various land use and development standard updates to bring the CLSP into consistency with the 2022 Lathrop General Plan.
- **Approval of a Conditional Use Permit.** The applicant is requesting a CUP for the development of the Warehouse Project, a new integrated, warehouse/light industrial/ retail and office development on the approximately 89.5-acre property located at the northwest corner of Dos Reis Rd and Manthey Road (Warehouse site).
- **Approval of Site Plan Review:** The Warehouse project is subject to site plan review by the City of Lathrop Planning Commission to ensure consistency with the applicable guidelines and standards for design contained in the 2022 Lathrop General Plan and CLSP Phase 2 Amendment.
- **Adoption of the CEQA Guidelines Section 15183 Exemption.**

The following agencies are considered Responsible or Trustee Agencies for this project, and may be required to issue permits or approve certain aspects of the project;

- Central Valley Regional Water Quality Control Board (CVRWQCB);
- San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP)
- San Joaquin Valley Air Pollution Control District (SJVAPCD)

## **PREVIOUS ENVIRONMENTAL ANALYSES OF THE PROPOSED PROJECT**

On September 19, 2022 the City of Lathrop adopted the 2022 Lathrop General Plan Update and certified the associated General Plan EIR (State Clearinghouse (SCH) #2021100139). The 2022 Lathrop General Plan EIR evaluated cumulative impacts associated with full development and buildout of the General Plan Area, including the proposed CLSP Phase 2 project area and warehouse site.

The proposed project would be consistent with the 2022 Lathrop General Plan's designation of Limited Industrial for the CLSP Phase 2 Project area and the warehouse site. Additionally, the 2022 Lathrop General Plan EIR assumed full development and buildout of the CLSP Phase 2 Area (inclusive of the warehouse site) with the types of uses and development standards proposed by the project. As such the cumulative impacts associated with buildout of the General Plan, including the CLSP Phase 2 area and warehouse project site, were fully addressed in the General Plan EIR.

### *CEQA GUIDELINES SECTION 15183 EXEMPTIONS*

CEQA Guidelines Section 15183 allows a streamlined environmental review process for projects that are consistent with the densities established by existing zoning, community plan or general plan policies for which an EIR was certified. As noted above, the proposed project is consistent with the 2022 Lathrop General Plan land use designations and densities applicable to the project area. The provisions contained in Section 15183 of the CEQA Guidelines are presented below.

#### **15183. Projects Consistent with a Community Plan or Zoning**

*(a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.*

*(b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:*

- (1) Are peculiar to the project or the parcel on which the project would be located,*
- (2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,*
- (3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or*
- (4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.*

*(c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.*

*(d) This section shall apply only to projects which meet the following conditions:*

*(1) The project is consistent with:*

- (A) A community plan adopted as part of a general plan,*
- (B) A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or*
- (C) A general plan of a local agency, and*

*(2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.*

*(e) This section shall limit the analysis of only those significant environmental effects for which:*

- (1) Each public agency with authority to mitigate any of the significant effects on the environment identified in the planning or zoning action undertakes or requires others to undertake mitigation measures specified in the EIR which the lead agency found to be feasible, and*
- (2) The lead agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken.*

*(f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the City or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR. Such development policies or standards need not apply throughout the entire City or county, but can apply only within the zoning district in which the project is located, or within the area subject to the community plan on which the lead agency is relying. Moreover, such policies or standards need not be part of the general plan or any community plan, but can be found within another pertinent planning document such as a zoning ordinance. Where a City or county, in previously adopting uniformly applied development policies or standards for imposition on future projects, failed to make a finding as to whether such policies or standards would substantially mitigate the effects of future projects, the decision-making body of the City or county, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the City or county decides to apply the standards or policies as permitted in this section.*

*(g) Examples of uniformly applied development policies or standards include, but are not limited to:*

- (1) Parking ordinances.*
- (2) Public access requirements.*
- (3) Grading ordinances.*
- (4) Hillside development ordinances.*
- (5) Flood plain ordinances.*
- (6) Habitat protection or conservation ordinances.*
- (7) View protection ordinances.*
- (8) Requirements for reducing greenhouse gas emissions, as set forth in adopted land use plans, policies, or regulations.*

*(h) An environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it.*

*(i) Where the prior EIR relied upon by the lead agency was prepared for a general plan or community plan that meets the requirements of this section, any rezoning action consistent with the general plan or community plan shall be treated as a project subject to this section.*

- (1) "Community plan" is defined as a part of the general plan of a City or county which applies to a defined geographic portion of the total area included in the*

*general plan, includes or references each of the mandatory elements specified in Section 65302 of the Government Code, and contains specific development policies and implementation measures which will apply those policies to each involved parcel.*

*(2) For purposes of this section, “consistent” means that the density of the proposed project is the same or less than the standard expressed for the involved parcel in the general plan, community plan or zoning action for which an EIR has been certified, and that the project complies with the density-related standards contained in that plan or zoning. Where the zoning ordinance refers to the general plan or community plan for its density standard, the project shall be consistent with the applicable plan.*

*(j) This section does not affect any requirement to analyze potentially significant offsite or cumulative impacts if those impacts were not adequately discussed in the prior EIR. If a significant offsite or cumulative impact was adequately discussed in the prior EIR, then this section may be used as a basis for excluding further analysis of that offsite or cumulative impact.*

## **PROJECT-SPECIFIC ENVIRONMENTAL REVIEW**

The attached Environmental Analysis includes a discussion and analysis of any peculiar or site-specific environmental impacts associated with adoption of the Municipal Code and Zoning Map Update, adoption of the CLSP Phase 2 Amendment, and construction and operation of the proposed warehouse project.

The Environmental Analysis identifies whether or not each CEQA Appendix G environmental checklist question, and its corresponding impacts, were adequately addressed in the 2022 Lathrop General Plan EIR, if there is a significant impact due to new information, or if the project would result in a significant impact peculiar to the project site that was not adequately addressed in the General Plan EIR. The Environmental Analysis identifies the applicable City of Lathrop development standards and policies that would apply to the proposed project during both the construction and operational phases, identifies applicable minimization measures from the General Plan EIR that must be implemented, identifies applicable state-level standards and requirements, and explains how the application of these uniformly applied standards and policies would ensure that no peculiar or site-specific environmental impacts would occur. Examples of uniformly applied standards and requirements include, but are not limited to, compliance with the California Building Code (to reduce impacts associated with seismic hazards) and preparation of a Stormwater Pollution Prevention Plan (to reduce impacts associated with surface water pollution during construction activities).



## **FUTURE DEVELOPMENT WITHIN THE CLSP PHASE 2 AREA.**

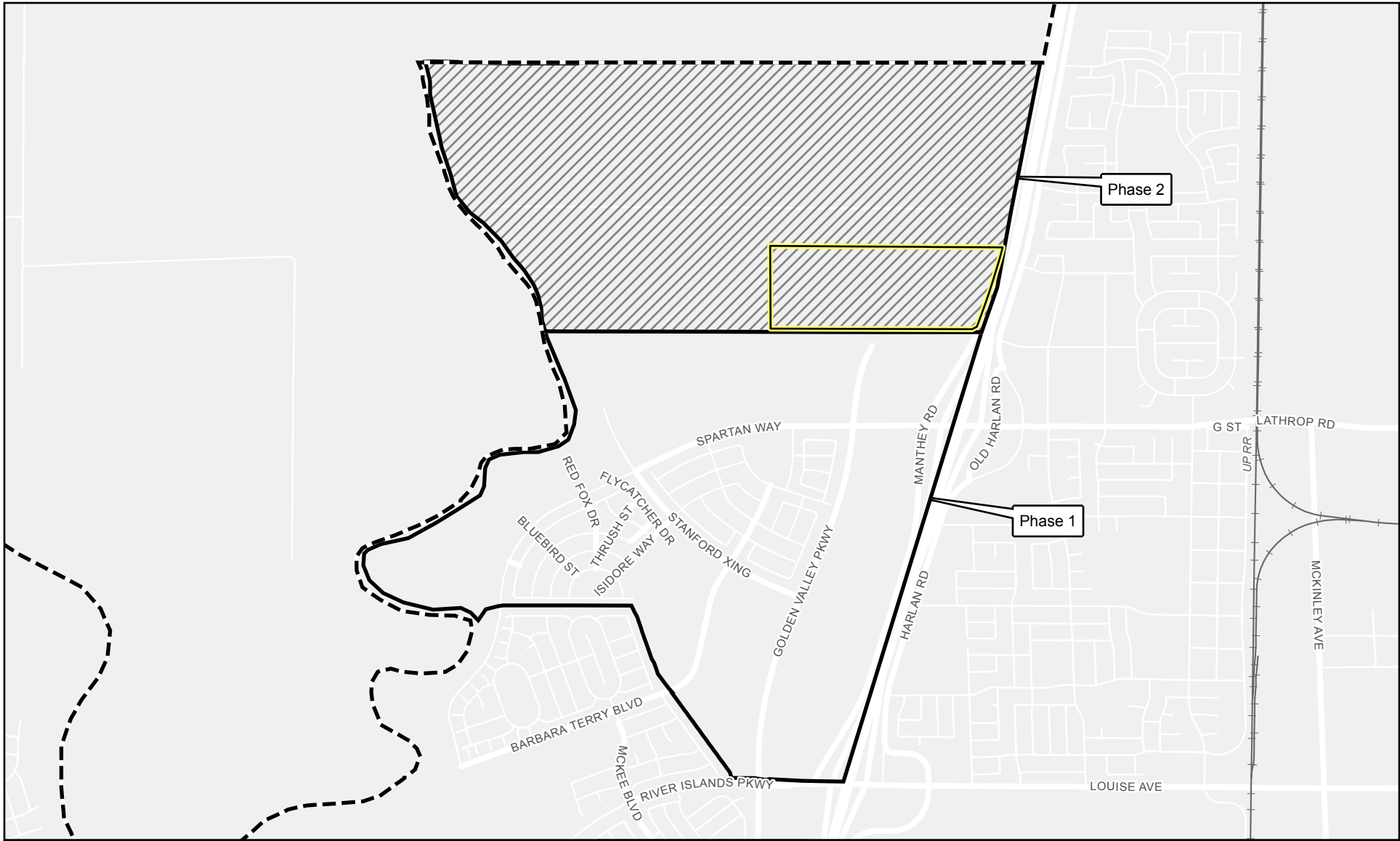
As described previously, prior to any future development within the CLSP-2, beyond the Ashley Warehouse project analyzed in this report, a site-specific development application would be required. At that point, based on the details of a specific project, traffic and other utility analyses would be performed to identify appropriate requirements, or mitigation measures and conditions of approval.

## **CONCLUSION**

As described above, the proposed projects (project) are consistent with the land uses and development intensities assigned to the project site by the General Plan. Impacts from buildout of the General Plan including cumulative impacts associated with development and buildout of the CLSP Phase 2 plan area and the warehouse Project site, as proposed, were fully addressed in the General Plan EIR (State Clearinghouse No. 2021100139), and implementation of the proposed project would not result in any new or altered impacts beyond those addressed in the General Plan EIR.

The analysis in the attached CEQA Environmental Checklist demonstrates that there are no site-specific or peculiar impacts associated with the project, and identifies uniformly applied standards and policies that would be applied to the project. The Project Requirements identified in the attached environmental analysis include requirements that must be implemented by the proposed project in order to ensure that any site-specific impacts or construction-related impacts are not significant. All Project Requirements identified in the attached Environmental Checklist shall be made a condition of project approval and shall be implemented within the timeframes identified. In addition, the project would also be subject to all applicable requirements identified under the General Plan and EIR.





*This page left intentionally blank.*



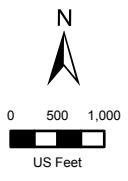
Phase 2

Phase 1

**LEGEND**

-  Ashley Warehouse Project Site
-  City of Lathrop Limits
- Central Lathrop Specific Plan Area**
-  Phase 1
-  Phase 2

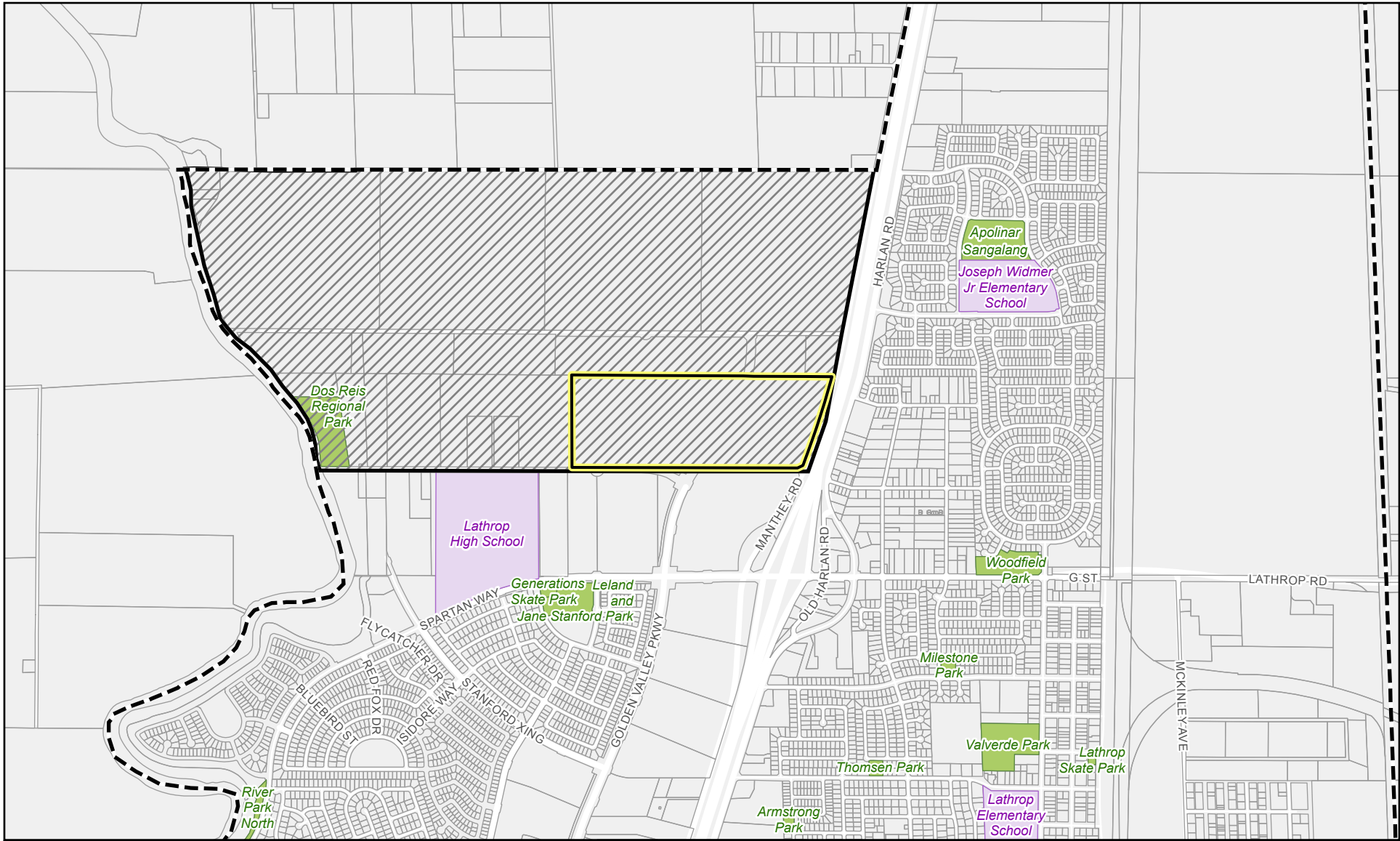
*Sources: City of Lathrop; San Joaquin County GIS. Map date: June 1, 2023.*



**ASHLEY WAREHOUSE AND CLSP PHASE 2**

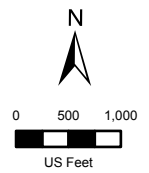
Figure 1. Central Lathrop Specific Plan

*This page left intentionally blank.*



**LEGEND**

- Ashley Warehouse Project Site
- Central Lathrop Specific Plan Phase 2
- City of Lathrop Limits
- Public Schools
- Parks

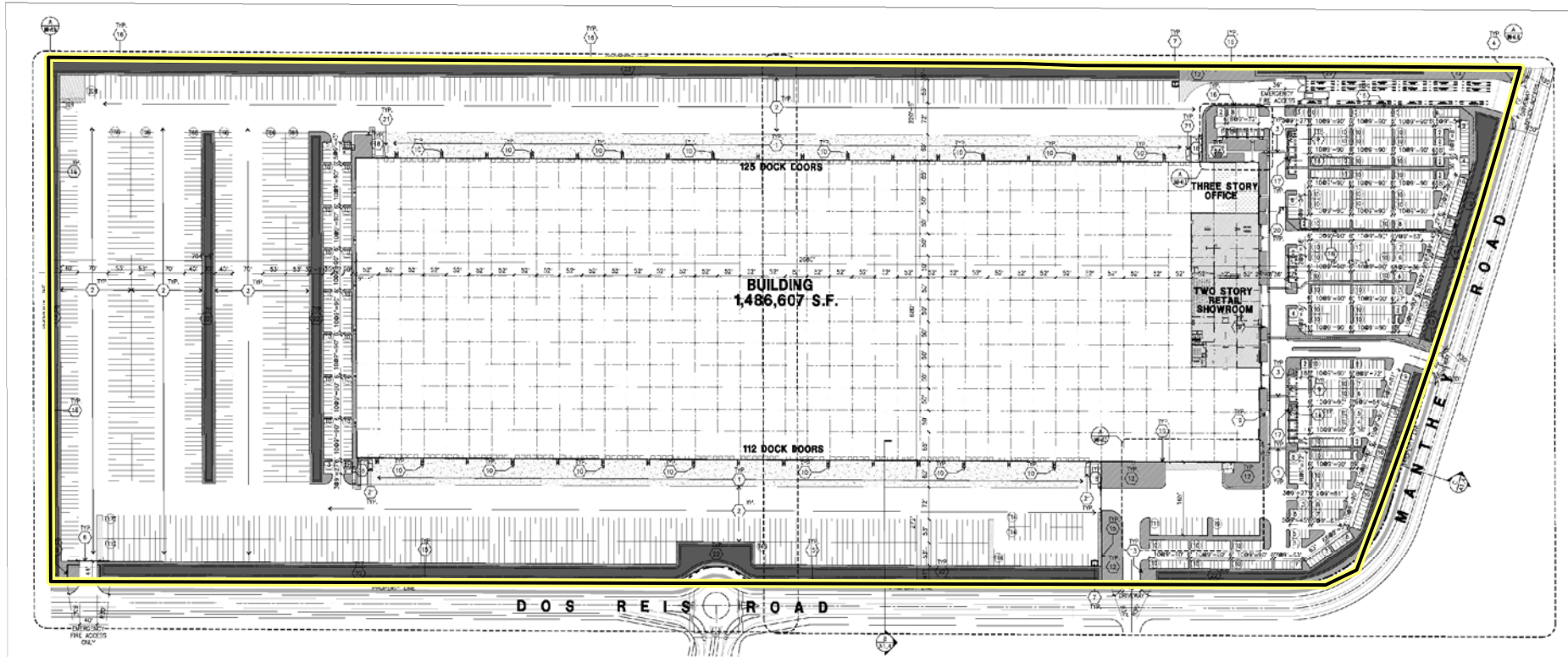


**ASHLEY WAREHOUSE AND CLSP PHASE 2**

Figure 2. Project Vicinity

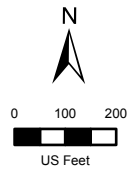
Sources: City of Lathrop; San Joaquin County GIS. Map date: July 13, 2023.

*This page left intentionally blank.*



**LEGEND**

 Ashley Warehouse Project Site



**ASHLEY WAREHOUSE AND CLSP PHASE 2**

Figure 3. Site Plan




Sources: HPA Architecture. Map date: July 13, 2023.

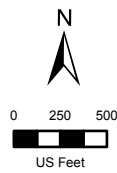
*This page left intentionally blank.*





**LEGEND**

-  Ashley Warehouse Project Site
-  Central Lathrop Specific Plan Phase 2
-  City of Lathrop Limits

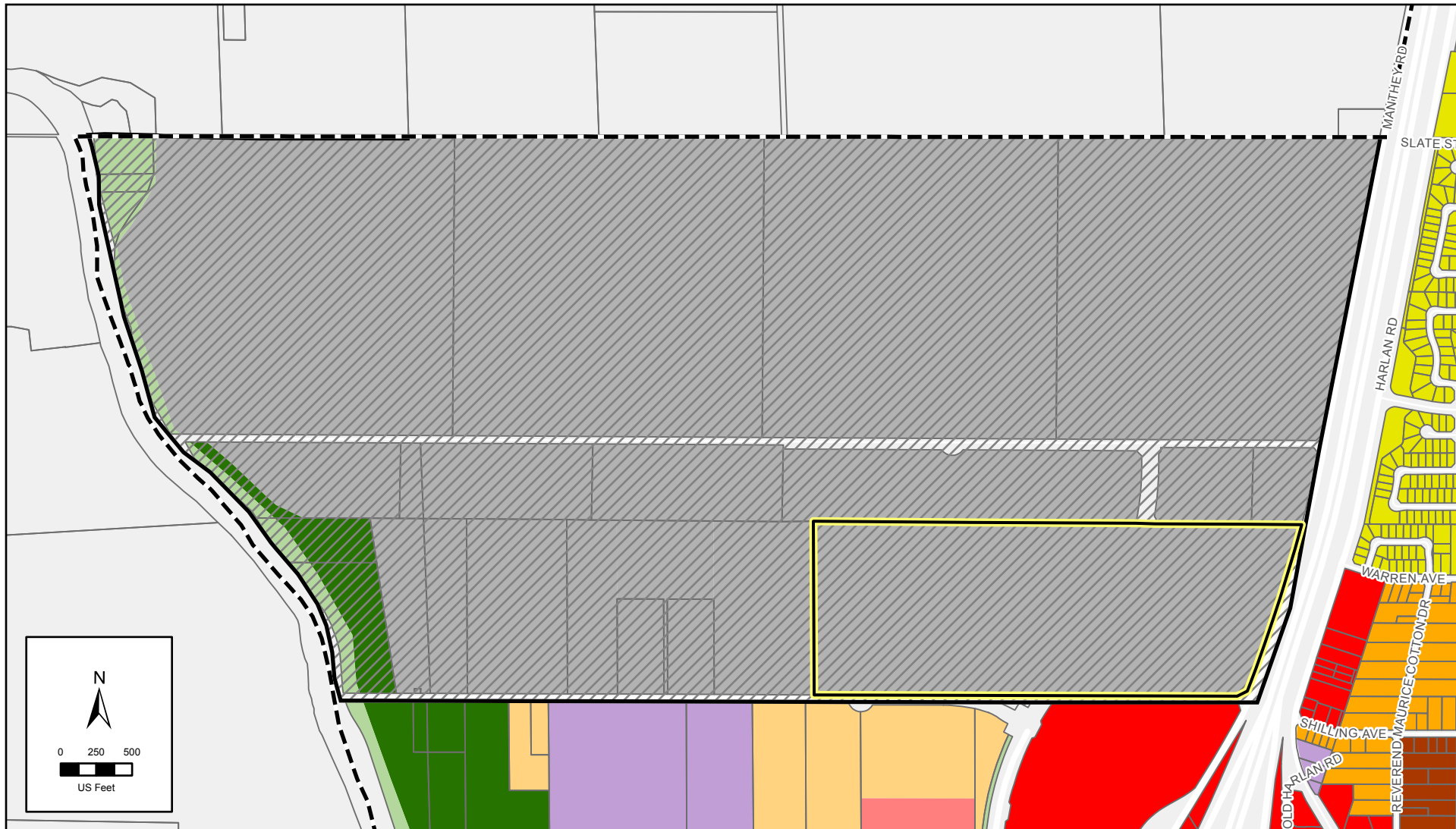


**ASHLEY WAREHOUSE AND CLSP PHASE 2**

Figure 4. Aerial Map

Sources: ArcGIS Map Service; San Joaquin County GIS. Map date: July 13, 2023.

*This page left intentionally blank.*



**LEGEND**

- City of Lathrop Limits
- Ashley Warehouse Project Site
- Central Lathrop Specific Plan Phase 2

- Lathrop General Plan Designation**
- Central Lathrop**
- R/MU-CL: Residential Mixed Use
  - OC-CL: Office Commercial
  - NC-CL: Neighborhood Commercial
  - LI-CL: Limited Industrial

- City Proper**
- P/QP-CL: Public/Quasi-Public
  - P-CL: Park
  - OS-CL: Open Space
  - LD: Low Density Residential
  - MD: Medium Density Residential

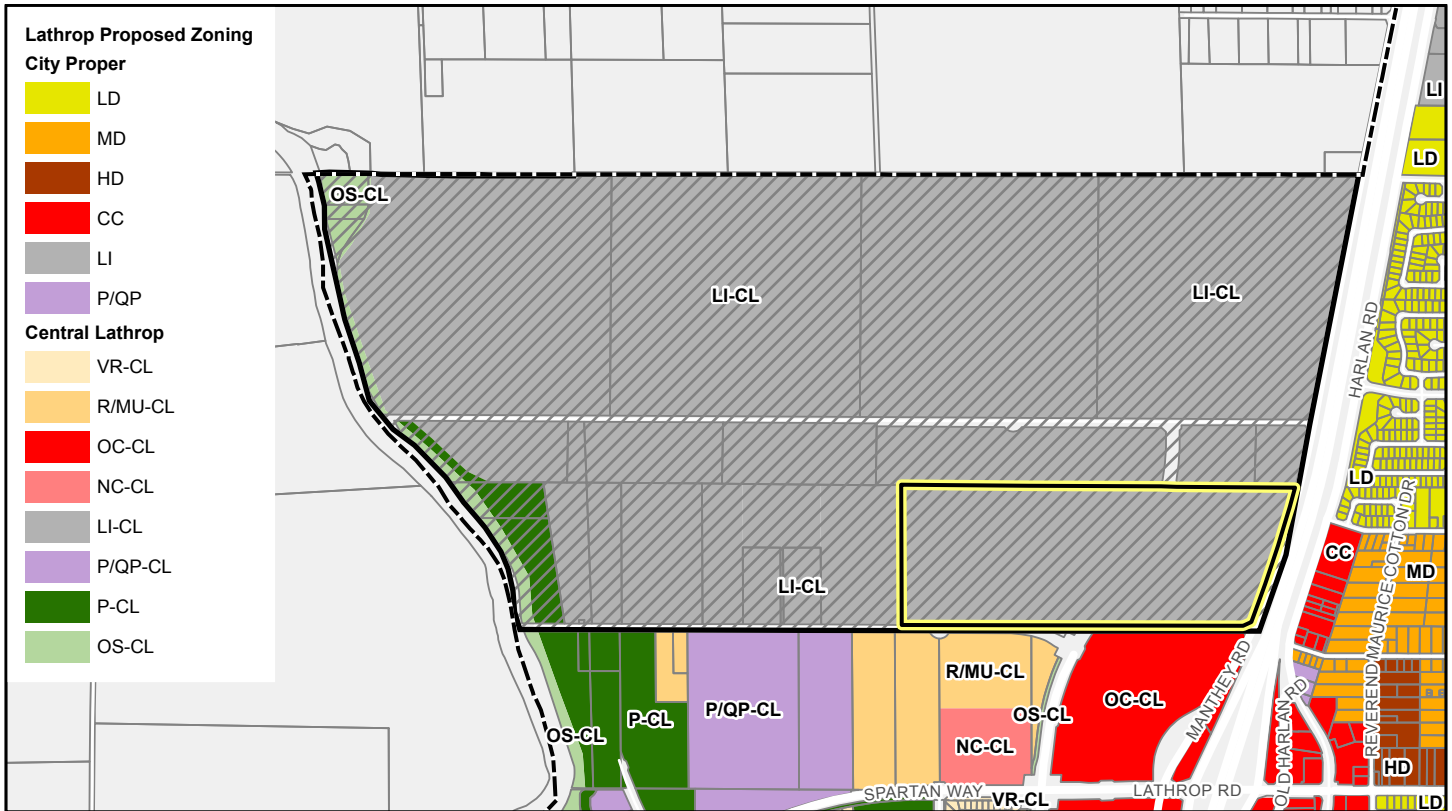
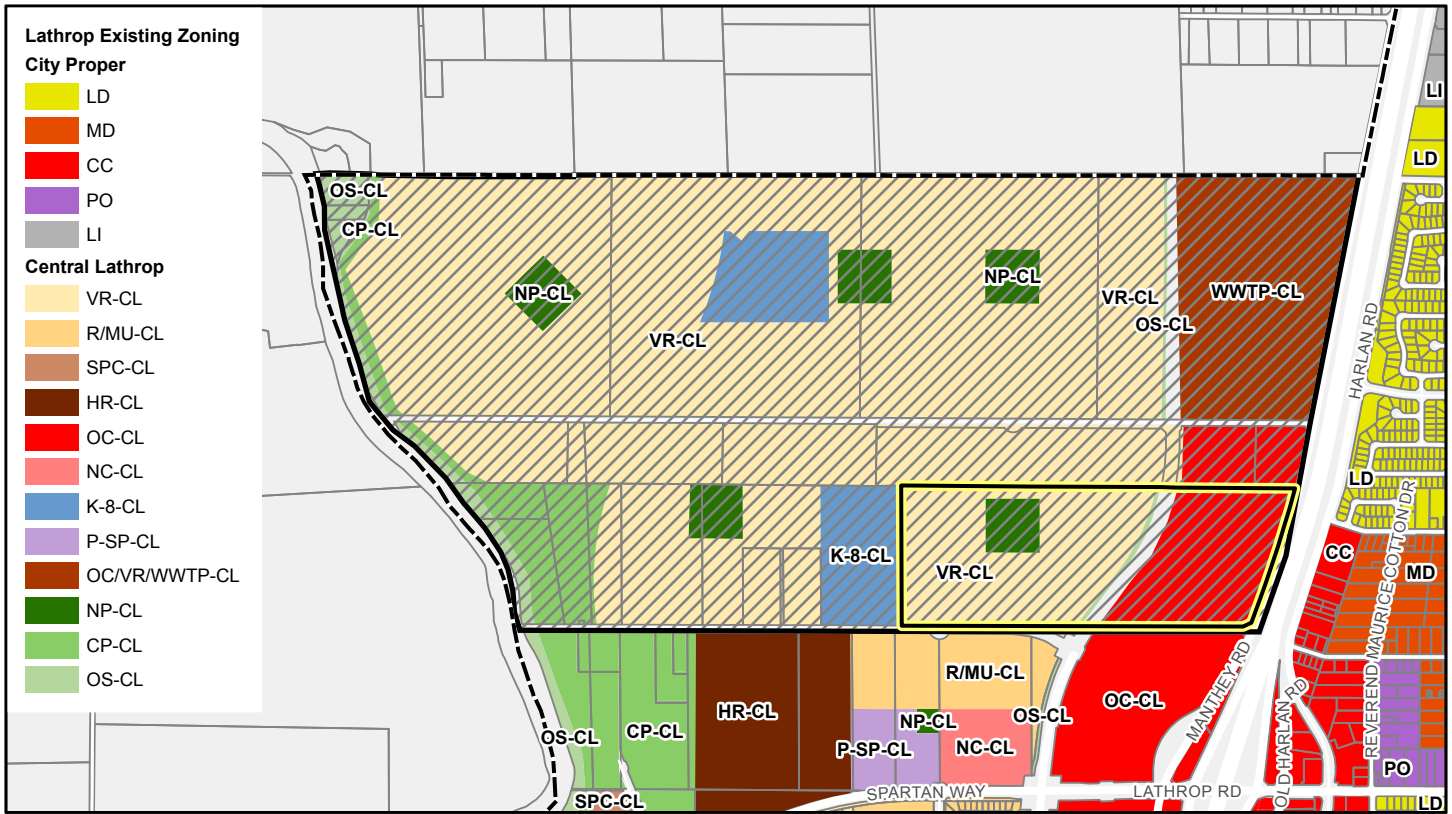
- HD: High Density Residential
- CC: Central Center
- LI: Limited Industrial
- P/QP: Public/Quasi-Public

**ASHLEY WAREHOUSE AND CLSP PHASE 2**

Figure 5. General Plan Land Use Map

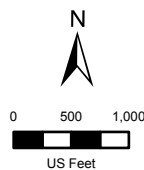
Sources: San Joaquin County GIS. Map date: July 13, 2023.

*This page left intentionally blank.*



**LEGEND**

- Ashley Warehouse Project Site
- City of Lathrop Limits
- Central Lathrop Specific Plan Phase 2



**ASHLEY WAREHOUSE AND CLSP PHASE 2**

Figure 6. Existing and Proposed Zoning

Sources: ArcGIS Map Service; San Joaquin County GIS. Map date: July 13, 2023.

*This page left intentionally blank.*

# ENVIRONMENTAL CHECKLIST

## I. AESTHETICS -- WOULD THE PROJECT:

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with the applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

### RESPONSES TO CHECKLIST QUESTIONS

#### **Response a): Adequately addressed in the General Plan EIR.**

##### *WAREHOUSE SITE*

A scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within the City of Lathrop for viewing and sightseeing.

While Lathrop contains numerous areas and viewsheds with scenic value, there are no officially designated scenic vista points in Lathrop. Therefore, implementation of the proposed project would not result in substantial adverse effects on a scenic vista.

Implementation of the proposed project would introduce new commercial and limited industrial uses to the project area, and would be consistent with the surrounding uses anticipated by the 2022 General Plan and analyzed in Chapter 3.1 of the 2022 General Plan EIR. As such, the proposed project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts beyond those that were already addressed in the General Plan EIR. There are no peculiar site specific conditions that would result in a significant impact related to this topic.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in Chapter 3.1 of the EIR. The proposed project would not result in a new or substantially more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As described previously, there are no scenic vistas located on or adjacent to the project area. The proposed project uses included in the CLSP Phase 2 Amendment and Municipal Code Update are consistent with the surrounding land uses and designations, and the uses anticipated by the 2022 Lathrop General Plan.

The 2022 Lathrop General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the prior EIR because there are no scenic vistas affected by development within the CLSP-2 Amendment area or in the City subject to the changes in land use designations and rezoning. The proposed project would not result in a new or substantially more severe impact than what was previously analyzed.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

As discussed in Chapter 3.1 of the General Plan EIR, no adopted State scenic highways are located in Lathrop. Only one highway section in San Joaquin County is listed as a Designated Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of Interstate 580 from Interstate 5 to Interstate 205 (generally located southwest of the City of Tracy). This route traverses the edge of the Coast Range to the west and Central Valley to the east. However, this officially designated scenic highway does not provide views of Lathrop or the immediate surrounding areas, and there are no sections of highway in the Lathrop vicinity eligible for Scenic Highway designation.

Given that no adopted State scenic highways are located within Lathrop or provide views of the Project site, no impact would occur. It is further noted that there are no scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings located on the Warehouse site that could potentially be impacted by the proposed project. The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As described in the General Plan EIR, there are no officially designated scenic highways located in the vicinity of Lathrop. Given that no adopted State scenic highways are located within Lathrop or provide views of the Project area, no impact would occur. The General Plan EIR determined that this impact was less than significant. This impact was



adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response c): Adequately addressed in General Plan EIR.**

*WAREHOUSE SITE:*

CEQA Guidelines Section 15387 defines an urbanized area as a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. The Project Area consists of lands in the northern portion of the City of Lathrop, which is an urbanized area. The project site is located in an area predominately containing developed uses and roadways to the south and east, and, and agricultural uses to the north and west.

As described in the General Plan EIR, implementation of the General Plan would lead to new and expanded urban and suburban development throughout the city, particularly in areas designated for residential, commercial, professional, industrial, mixed use, and public/ quasi-public uses by the Land Use Map (DEIR Figure 2.0-2). Policies in the General Plan are intended to complement and further the intent of these provisions regulating scenic quality and resources, and any development occurring under the General Plan would be subject to compliance with these guidelines, as well as the applicable regulations set forth in the Lathrop Municipal Code. The General Plan includes policies and actions to promote land use compatibility, ensure that new development is consistent with design guidelines and compatible with surrounding uses, protect and conserve open space, agricultural, riparian habitats, and other scenic and natural resources, ensure that in-fill development is designed to be sensitive to surrounding uses, and to strengthen the qualities of the city's neighborhoods, districts, and downtown. The City's Zoning Ordinance (City of Lathrop Municipal Code Title 17) is the primary tool meant to implement the General Plan. It consists of a zoning map defining the location of districts and code sections detailing requirements for each district. The Zoning Ordinance establishes specific, enforceable standards with which development must comply such as minimum lot size, maximum building height, minimum building setback, and a list of allowable uses. Zoning applies lot-by-lot, whereas the General Plan has a community-wide perspective. Provisions pertaining to visual resources such as site-specific design standards, preservation of open space, landscaping, trees, and signs, are addressed. State law requires the City's Zoning Code to be consistent with the General Plan.

As noted above under the Project Description, the project proposes a 30-foot landscape buffer along the Dos Reis Road project frontage, in accordance with the CLSP-2 Amendment. To further enhance screening for trailer parking areas, an 8-foot-tall community wall is proposed along the right-of-way of Dos Reis Road at the project

frontage. Additionally, the project proposes an increased number of deciduous trees between the 8-foot paved sidewalk and the 8-foot-tall community wall. This condition will extend along the south boundary of the property until the first driveway east of the proposed Dos Reis Road and Golden Valley Parkway roundabout. These perimeter improvements will provide visual screening of the project site and further reduce the potential for visual impacts to occur.

The General Plan EIR determined that this impact would be less than significant. The project is consistent with the General Plan's Limited Industrial land use designation. As such, the proposed project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or substantially greater impacts associated with visual resources, beyond those that were already addressed in the General Plan EIR.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The proposed CLSP Phase 2 amendment and Municipal Code updates are intended to bring each document into consistency with the City's General Plan, and would therefore not degrade the existing visual character or quality of public views beyond what was previously analyzed in the City's General Plan EIR. The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the General Plan EIR in Chapter 3.1. The proposed project would not result in a new or more severe impact than what was previously analyzed because it would allow for development types, densities, and intensities that are fully consistent with the analysis and assumptions used in the General Plan EIR.

#### **Response d): Adequately addressed in General Plan EIR.**

#### *WAREHOUSE SITE:*

The proposed project will create new sources of light and glare. Examples of lighting would include construction lighting, exterior building lighting, interior building lighting, and automobile and parking lighting. Examples of glare would include reflective building materials and automobiles. Development of the project site would be subject to all applicable local regulations and standards related to lighting.

The Project is required to be consistent with the General Plan, as well as lighting and design requirements in the City of Lathrop Municipal Code Title 17. Additionally, improvements to the warehouse site such as landscape and street lighting, are subject to Site Plan and Architectural Design Review. Design Review procedures will be conducted in compliance with 17.100 and 17.104 of the Lathrop Municipal Code. Additionally, as described in the Central Lathrop Specific Plan Phase 2 Amendment, all lighting should utilize cut-off type fixture to minimize visibility from adjacent areas and should be the appropriate size and height given the activities for which they are designed. Compliance

with these uniformly applied standards and requirements would ensure minimal light spillage from the warehouse site and would ensure that warehouse project impacts related to lighting and glare would be less than significant.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or substantially more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The proposed CLSP-2 Amendment and Zoning Code updates are intended to bring each plan into consistency with the City's General Plan. All future development within the CLSP-2 area would be required to be consistent with the General Plan, as well as lighting and design requirements in the City of Lathrop Municipal Code Title 17. Additionally, improvements such as landscape and street lighting, are subject to Site Plan and Architectural Design Review. Design Review procedures would be required to be conducted in compliance with 17.100 and 17.104 of the Lathrop Municipal Code. Additionally, as described in the Central Lathrop Specific Plan Phase 2 Amendment, all lighting should utilize cut-off type fixture to minimize visibility from adjacent areas and should be the appropriate size and height given the activities for which they are designed.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The CLSP-2 Amendment and the Zoning Code Update would not result in a new or substantially more severe impact than what was previously analyzed in the General Plan EIR.

**II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?			X	
d) Result in the loss of forest land or conversion of forest land to non-forest use?			X	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

**RESPONSES TO CHECKLIST QUESTIONS**

**Response a): Adequately addressed in the General Plan EIR.**

**WAREHOUSE SITE**

As shown in Lathrop General Plan EIR Figure 3.2-1. (Important Farmlands) the warehouse site is not underlain by soils that are considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation, Farmland Mapping and Monitoring Program and the USDA Soil Conservation Service. Portions of the site are identified as Farmland of Local Importance.

The proposed warehouse project is consistent with the adopted vision and uses identified within the General Plan for light industrial development, and would not result in any new or substantially greater impacts beyond those that were already addressed in the General Plan EIR. Furthermore, the proposed warehouse project would contribute fees toward the purchase of conservation easements on agricultural lands through the City’s agricultural mitigation fee program and the SJMSCP as a result in the conservation of farmland as discussed further below.

The General Plan EIR determined that the loss of agricultural resources was a significant and unavoidable impact. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

According to the California Department of Conservation Farmland Mapping and Monitoring Program, the CLSP Phase 2 area includes lands designated as: Prime Farmland, Farmland of Statewide Importance, and Unique Farmland as shown in Lathrop General Plan EIR Figure 3.2-1. Development of the Phase 2 Plan Area with light industrial uses and the subsequent removal of farmland was evaluated in the General Plan EIR. The General Plan EIR (EIR) determined that this impact was significant and unavoidable. The proposed CLSP Phase 2 Amendment and Zoning Code Update would not result in a new or substantially more severe impact than what was previously analyzed in the 2022 General Plan EIR.

The City of Lathrop adopted an agricultural mitigation program that includes the City's agricultural land mitigation requirements. In order to mitigate and offset the loss of agricultural and important farmland resources, the City requires that applicants pay an agricultural mitigation fee for those projects that permanently change agricultural land over one acre in size within the City's jurisdiction to non-agricultural uses. The in lieu fee, paid to the City, is placed in a trust account and used for farmland mitigation purposes. Additionally, the SJMSCP provides for the preservation of productive agriculture and is administered by the San Joaquin Council of Governments (SJCOG). In conformance with the SJMSCP, the General Plan recognizes that agricultural use in the CLSP Phase 2 Plan Area would be phased out as the Plan Area develops with industrial uses and requires that project applicants pay fees to SJCOG on a per-acre basis for designated agricultural lands that are converted to urban use. SJCOG will then use these funds to purchase conservation easements on agricultural and habitat lands in the project vicinity.

*Project Requirement(s)*

***Requirement AG-1:*** *Implement Lathrop Municipal Code Chapter 3.40 AGRICULTURAL MITIGATION FEE Section 3.40.030 Collection of Agricultural Mitigation Fee.*

*The Agricultural Mitigation Fee enacted pursuant to this chapter is to be collected by the city before the issuance of building permits, or at approval of any discretionary permit if no building permit is required. (Ord. 05-248 § 1)*

***Requirement AG-2:*** *Require all development to coordinate with and participate with SJCOG in the SJMSCP Agricultural Mitigation Fee program as required.*

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

As shown in the Lathrop General Plan EIR Figure 3.2-2, the warehouse site is not under a Williamson Act contract, or designated by the General Plan or Zoning Maps for agricultural uses. Therefore, implementation of the proposed project would not conflict with a Williamson Act Contract, and would not conflict with any agricultural zoning.

The proposed warehouse project is consistent with the adopted vision and uses identified in the General Plan, and would not result in a new or substantially more severe impact than what was previously analyzed in the 2022 General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The CLSP-2 plan area is not under a Williamson Act Contract, nor are any of the parcels immediately adjacent to the CLSP plan area under a Williamson Act Contract, or designated by the General Plan or Zoning Maps for agricultural uses. None of the parcels being updated on the Zoning Map are under Williamson Act Contract. Therefore, implementation of the proposed project would not conflict with a Williamson Act Contract, and would not conflict with any agricultural zoning.

The proposed CLSP-2 Amendment and the Zoning Code Update project is consistent with the adopted vision and uses identified within the General Plan, and would not result in a new or substantially more severe impact than what was previously analyzed in the 2022 General Plan EIR.

**Responses c) and d): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described in the General Plan EIR, the City of Lathrop does not contain parcels designated as forest land and the General Plan does not propose uses that would convert existing forest land to non-forest use. Therefore, the Project would result in no impact regarding the loss of forest land or conversion of forest land to non-forest use.

The proposed Project is consistent with the adopted vision and uses identified within the General Plan, and would not result in a new or substantially more severe impact than what was previously analyzed in the prior EIR.

**Response e): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

As described under Response (a) above, the warehouse site is designated as Farmland of Local Importance. Agricultural uses previously occurred on the warehouse site. However, the site is not currently used for agricultural purposes.

The proposed warehouse project is consistent with the adopted vision and uses identified within the General Plan for light industrial development, and would not result in any new or in a substantial increase in impacts beyond those that were already addressed in the General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR as discussed above regarding the treatment of agricultural resources. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

Future Development of the CLSP Phase 2 area for urban uses and the subsequent removal of Farmland was evaluated in the General Plan EIR. The General Plan designates the Project area for limited industrial urban land uses. As such, implementation of the CLSP-2 amendment and the Zoning Update would not create new impacts over and above those identified in the General Plan EIR, nor substantially increase previously identified impacts because the same areas proposed to be converted to limited industrial uses in the General Plan would be rezoned and designated in the CLSP-2 for limited industrial uses. However, as described previously under Response a, the Project area consists of land previously used for agricultural purposes, and contains Important Farmland. The Project is therefore subject to compliance with Requirement AG-1 to implement the Lathrop Municipal Code Chapter 3.40 Section 3.40.030 Collection of Agricultural Mitigation Fees. The Agricultural Mitigation Fee enacted pursuant to this chapter is to be collected by the city before the issuance of building permits, or at approval of any discretionary permit if no building permit is required. (Ord. 05-248 § 1). Additionally, the project and all future projects within the CLSP Phase 2 Planning area are also subject to Requirement AG-2: which requires all development to coordinate with and participate with SJCOG in the SJMSCP Agricultural Mitigation Fee program.

The proposed project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or substantially greater impacts beyond those that were already addressed in the General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.



*III. AIR QUALITY -- WOULD THE PROJECT:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

*EXISTING SETTING*

The Project site is located within the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

**Response a), b): Adequately addressed in General Plan EIR**

*WAREHOUSE SITE*

**Criteria Air Pollutant Emissions - Construction**

The SJVAPCD’s approach to analysis of construction impacts is to require implementation of effective and comprehensive control measures, rather than to require detailed quantification of emission concentrations for modeling of direct impacts. PM<sub>10</sub> emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making quantification difficult. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM<sub>10</sub> emissions from construction activities. The SJVAPCD has determined that, on its own, compliance with Regulation VIII for all sites and implementation of all other control measures indicated in Tables 6-2 and 6-3 of the SJVAPCD’s Guide for Assessing and Mitigating Air Quality Impacts (as

appropriate) would constitute sufficient mitigation to reduce construction PM<sub>10</sub> impacts to a level considered less than significant.

Construction of the warehouse project would result in numerous activities that would generate dust. The fine, silty soils in the region and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Impacts would be localized and variable. Construction impacts would last for a period of several months to several years. The initial phase of warehouse project construction would involve grading and site preparation activities, followed by building construction. Construction activities that could generate dust and vehicle emissions are primarily related to grading, soil excavation, and other ground-preparation activities, as well as building construction.

Development of the Phase 2 Plan Area with light industrial uses was evaluated in the General Plan EIR. As described in the Lathrop General Plan EIR, all future development and infrastructure projects within the General Plan Planning Area would be subject to the General Plan goals, policies, and actions, which were adopted to reduce emissions and air quality impacts, including during construction. For example, Policy RR-6.3 requires the City to require new construction to minimize fugitive dust and construction vehicle emissions.

Nevertheless, the proposed General Plan includes higher levels and rates of growth than those that would be facilitated under the existing Lathrop General Plan. As such, total emissions levels associated with Project buildout would increase, which may indirectly hinder the SJVAPCDs efforts to reduce total emissions of criteria pollutants. The General Plan EIR (EIR) determined that this impact was significant and unavoidable. The proposed CLSP Phase 2 Amendment and Zoning Code Update would not result in a new or substantially more severe impact than what was previously analyzed in the 2022 General Plan EIR.

In addition, control measures are required and enforced by the SJVAPCD under Regulation VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM<sub>10</sub> fugitive dust rules and equipment exhaust emissions controls are implemented. The proposed project would be required to comply with all applicable measures from SJVAPCD Rule VIII. The proposed project would have a less than significant impact related to construction activities on these potential impacts.

In addition, Table AIR-1 (below) provides the results of the construction-related emissions modeling results from CalEEMod in comparison to the SJVAPCD thresholds for criteria air pollutants. As shown in this table, the construction emissions for the proposed

warehouse project are less than the SJVAPCD thresholds for criteria air pollutants for construction.

**Table AIR-1: Project Unmitigated Construction Criteria Pollutant Emissions (tons/year)**

<i>Emissions Type</i>	<i>Proposed project Emissions</i>	<i>SJVAPCD Threshold</i>	<i>Above Threshold in Proposed project?</i>
ROG	0.46	10	N
NO <sub>x</sub>	4.44	10	N
CO	4.09	100	N
PM <sub>10</sub>	1.87	15	N
PM <sub>2.5</sub>	0.95	15	N
SO <sub>x</sub>	0.01	27	N

Source: CalEEMod, v. 2022.1

### **Criteria Air Pollutant Emissions - Operation**

For the purposes of this operational air quality analysis, actions that violate Federal standards for criteria pollutants (i.e., primary standards designed to safeguard the health of people considered to be sensitive receptors while outdoors and secondary standards designed to safeguard human welfare) are considered significant impacts. Additionally, actions that violate State standards developed by the CARB or criteria developed by the SJVAPCD, including thresholds for criteria pollutants, are considered significant impacts.

#### *SJVAPCD Rule 9510 Indirect Source Review*

District Rule 9510 requires developers of large residential, commercial and industrial projects to reduce smog-forming (NO<sub>x</sub>) and particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions generated by their projects. The Rule applies to many project types, including to projects which, upon full build-out, will include 25,000 square feet of light industrial space or more. Project developers are required to reduce:

- 20 percent of construction-exhaust nitrogen oxides;
- 45 percent of construction-exhaust PM<sub>10</sub>;
- 33 percent of operational nitrogen oxides over 10 years; and
- 50 percent of operational PM<sub>10</sub> over 10 years.

Developers are encouraged to meet these reduction requirements through the implementation of on-site mitigation; however, if the on-site mitigation does not achieve the required baseline emission reductions, the warehouse project applicant will mitigate the difference by paying an off-site fee to the District. Fees reduce emissions by helping to fund clean-air projects in the District. The proposed project would be required to

consult with the SJVAPCD regarding the applicability of Rule 9510 Indirect Source Review including the fees.

*Criteria Pollutant Emissions and Thresholds*

Project operational emissions are provided in Table AIR-2 (below) (further detail is provided in Appendix A), in comparison to the SJVAPCD criteria pollutant thresholds. As shown below, the proposed warehouse project would not exceed the applicable SJVAPCD thresholds associated with criteria pollutants during warehouse project operation.

**Table AIR-2: Project Unmitigated Operational Criteria Pollutant Emissions (tons/year)**

<i>Emissions Type</i>	<i>Proposed project Emissions</i>	<i>SJVAPCD Threshold</i>	<i>Above Threshold in Proposed project?</i>
ROG	1.97	10	N
NO <sub>x</sub>	1.82	10	N
CO	13.3	100	N
PM <sub>10</sub>	2.63	15	N
PM <sub>2.5</sub>	0.69	15	N
SO <sub>x</sub>	0.03	27	N

Source: CalEEMod, v.2022.1

The 2022 Lathrop General Plan EIR determined that cumulative increases in criteria air pollutants associated with General Plan buildout was significant and unavoidable. Consistent with SJVAPCD requirements, the 2022 Lathrop General Plan EIR evaluated air quality impacts associated with buildout of the General Plan and identified two mitigation measures to address significant air quality impacts. Implementing Measure RC-6a requires the review of development, infrastructure, and planning projects for consistency with SJVAPCD requirements during the CEQA review process, with project applicants being required to prepare Air Quality analyses to address SJVAPCD and General Plan requirements. (DEIR page 3.3-37.) Implementing Action RR-6b requires a review of all new industrial and commercial development projects for potential air quality impacts to sensitive receptors, and that mitigation measures and best management practices be implemented to reduce significant emissions of criteria pollutants. Individual projects are required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. (DEIR pages 3.3-37-3.3-38.)

The warehouse project impact was adequately addressed in the Lathrop General Plan EIR because the EIR evaluated the air quality impacts associated with buildout of the City, including development of Limited Industrial land uses on the warehouse project site. Consistent with the EIR mitigation measures, the warehouse project was evaluated for its specific air quality impacts. Thus, the proposed warehouse project is consistent with

the development assumptions and development intensities analyzed in the General Plan EIR. As such, the proposed warehouse project would not result in a new or substantially more severe impact than what was previously analyzed in the 2022 General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

Criteria pollutant emissions would occur because of construction equipment used for future development projects within the CLSP Phase 2 area and would include the following: site preparation, grading, paving, building construction, and architectural coating activities associated with development and infrastructure. GHG emissions would also result from worker and vendor trips to and from project sites and from soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. As such, SJVAPCD recommends in its draft threshold to amortize project-specific construction emissions over a 30-year operational lifetime of a project. This normalizes construction emissions so that they can be grouped with operational emissions to generate a precise project GHG inventory. However, the SJVAPCD does not have a current threshold of significance for construction-related GHG emissions for plan-level impacts (including General Plans and Specific Plans).

The 2022 RTP/SCS relied upon the existing Lathrop General Plan to determine population, employment, and VMT increases associated with General Plan buildout in Lathrop as part of the RTP/SCS's overall analysis of per capita GHG emissions throughout the region. As noted in the 2022 RTP/SCS, the Plan meets and exceeds the GHG targets established by the CARB. The Lathrop General Plan is supportive and complimentary of the policies and strategies included in the 2022 RTP/SCS, and does not conflict with implementation of this plan.

The 2022 Lathrop General Plan EIR determined that this impact was significant and unavoidable. This impact was adequately addressed in the EIR. The proposed CLSP-2 amendment and Zoning Code Update project would not result in a new or substantially more severe impact than what was previously analyze in the 2022 General Plan EIR.

*Project Requirement(s)*

***Requirement AQ-1: Comply with SJVAPCD Rule 9510 Indirect Source Review***

***Requirement AQ-2: Comply with SSJVAPCD Regulation VIII for all sites and implementation control measures indicated in Tables 6-2 and 6-3 of the SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts.***

**Response c): Adequately addressed in General Plan EIR.**

*WAREHOUSE SITE*

As previously discussed, warehouse project emissions would be less than significant and would not exceed Air District thresholds; refer to Table AIR-1 and Table AIR-2, above. The potential for the proposed warehouse project to expose sensitive receptors to substantial pollutant concentrations is analyzed below. A project-specific Health Risk Assessment (HRA) was prepared to assess potential public health risks that may be present at the proposed warehouse project in the City of Lathrop, San Joaquin County, California. This report analyzes the emissions of toxic air pollutants attributable to the project, and their impacts on public health. The HRA was prepared to meet the requirements established by the SJVPACD, including the Framework for Performing Health Risk Assessments, and Guidance for Air Dispersion Modeling. The HRA is included as Attachment G.

*Toxic Air Contaminants*

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

The proposed warehouse project has the potential to impact nearby sensitive receptors due to the generation of heavy-duty diesel truck trips during warehouse project operation. Heavy-duty diesel trucks are emitters of diesel particulate matter (DPM), which is emitted from on- and off-site truck vehicle circulation, as well as idling on-site. Combined, these sources have the potential to generate substantial TACs on nearby sensitive receptors, including those located nearest to the warehouse project site, such as Lathrop High School.

The significance criteria for TACs, based on guidance from the SJVPACD, is provided in Table AIR-3, below.

**Table AIR-3: Thresholds of Significance for Public Health Risks**

<b>Risk Metric</b>	<b>Significance Threshold</b>
Residential Cancer Risk	20 per million
Workplace Cancer Risk	20 per million
Chronic and Acute non-cancer hazard Indices	non-cancer health hazard exposure index of 1.0

SOURCE: SJVAPCD, 2015.

As shown in Table AIR-3, a project that contributes a cancer risk in excess of 20 new cases in a population of one million persons at identified receptors, or a non-cancer hazard index of greater than or equal to 1.0 would be considered to have a significant project-level impact.

Exposure assessment involves translating the emission rate (e.g., lbs/hr, g/hr) of individual toxic air contaminants into the concentration (e.g., grams/cubic meter g /sec m<sup>2</sup> or parts per million) of each toxic air contaminant. The key step in performing an exposure assessment is the application of an air dispersion model. The dispersion model incorporates the local meteorological data (wind speed, wind direction, local temperature, inversions, etc.), stack height, and exhaust flow characteristics, into the dispersion of individual air contaminant.

Modeling receptors were placed at locations of nearby sensitive receptors, including residential and workplace locations. Residential receptors were located at each of the nearby residential receptors, as previously described, as follows:

- A cluster of residences is located adjacent to the southwest portion of the warehouse project site, on the opposite side of Dos Reis Road;
- Several residences are located north of and adjacent to Lathrop High School (approximately 940 feet west of the warehouse project site);
- A rural residence is located northwest of the Project site (approximately 820 feet from the Project site);
- A cluster of residences is located north of the northeast portion of the warehouse project site (approximately 320 feet from the warehouse project site), as well as additional residences located along Manthey Road north of the warehouse project site;
- A large number of residences is located along the opposite side of Interstate 5, east of the warehouse project site (approximately 400 feet east and northeast of the warehouse project site).

Additionally, workplace receptors were placed at various locations within the warehouse project site. This allows for an analysis of the receptors that have the potential to be most affected by the TACs generated by the proposed warehouse project.

Once the emissions rates of individual air contaminants have been calculated, and an air dispersion model has been run through AERMOD, the next step in determining health risks is to determine the cancer risk, and acute and chronic incident rates. Period and 1-hour dispersion files were used in combination with HARP-2 risk modelling software to calculate risk scenarios for residential, and workplace cancer rates, as well as acute and chronic incidences. The Hotspots Analysis and Reporting Program (HARP) is a software suite used to assist with the programmatic requirements of the Air Toxics “Hot Spots” Program [Assembly Bill (AB) 2588]. HARP combines the tools needed to implement the requirements of AB 2588, such as reporting a facility’s emissions inventory, determining a facility’s prioritization score, conducting air dispersion modeling, and performing a facility health risk assessment. This study utilized the HARP-2 Air Dispersion and Risk Tool with dispersion plot files created in AERMOD. After the risk assessment was complete, HARP-2 plot files were then imported back into AERMOD for spatial and visual representation, and analysis of impact areas.

*Risk Assessment Results*

The results of the risk analysis indicate that cancer risks vary depending on the exposure scenario (residential or worker) and on location. As would be expected, locations nearest the warehouse project site have the greatest exposure and the associated risks are considerably lower as distance from the project site increases. Table AIR-4 displays the residential and workplace cancer risk, and acute and chronic incidence rate results at nearest receptors. Further detail can be found in Attachment G.

**Table AIR-4: Summary of Maximum Health Risks**

<i>RISK METRIC</i>	<i>MAXIMUM RISK</i>	<i>SIGNIFICANCE THRESHOLD</i>	<i>IS THRESHOLD EXCEEDED?</i>
Residential Cancer Risk (70-year exposure)	7.0	20 per million	No
Workplace Cancer Risk (40-year exposure)	1.3	20 per million	No
Chronic (non-cancer)	<0.01	Hazard Index ≥1	No
Acute (non-cancer)	0	Hazard Index ≥1	No

*SOURCES: AERMOD 11.2.0 (LAKES ENVIRONMENTAL SOFTWARE, 2023); AND HARP-2 AIR DISPERSION AND RISK TOOL.*

The TAC emissions from the warehouse project result from the on-site and off-site truck travel, and on-site idling of diesel-fueled vehicles. The nearest sensitive receptors are those that surround the warehouse project site, to the southwest, west, east, and northeast.

Overall, the results show that residential 70-year cancer risk would remain below the threshold of 20 in a million at areas for residential receptors located near the warehouse



project site. The wind patterns in the area generally blow from the northwest to the southeast. The modeling results show that the residence with the highest risk is the residence located north of the warehouse project site along Manthey Road, at 12965 Manthey Road. However, it is very unlikely any individual would remain at the same location for 70 years; therefore, this result represents a conservative estimate. Figure 4 provides a visualization of the residential cancer risk isopleths surrounding the warehouse project site.

The results also show that 40-year workplace cancer risk would remain below the threshold of 20 in a million (the SJVPACD threshold) at the warehouse project site, with a maximum value measured at approximately 1.3 per million (at the location of maximum cancer risk), in the northeastern portion of the warehouse project site. Separately, chronic or long-term exposures and acute exposure to DPM can result in non-cancer health effects. Chronic and Acute Non-Cancer Hazards results show that the acute and chronic risk on and near the project site would remain below the hazard index of  $\geq 1$ . As described above, the proposed warehouse project would not generate significant emissions of toxic air contaminants and would not result in substantial pollutant concentrations.

The 2022 Lathrop General Plan EIR determined that implementation and full buildout of the General Plan could result in significant and unavoidable impacts associated with exposing sensitive receptors to substantial pollutant concentrations. The proposed warehouse project is consistent with the uses and non-residential development intensities analyzed in the 2022 General Plan EIR. As such, the warehouse project's cumulative contribution to this impact was accounted for in the General Plan EIR. The analysis contained in the project-specific HRA (Attachment G) demonstrates that the proposed project would not exceed any applicable thresholds of significance for pollutant concentrations. As such, the warehouse project would not result in a significant site-specific impact peculiar to the project or the site. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

It is further noted that the General Plan Action LU-5.d requires the implementation of best management practices (BMPs) for warehouse projects located within 1,000 feet of existing or planned residential uses or other sensitive receptors. Action LU-5.d includes several examples of the types of BMPs that may be appropriate on a project-by-project basis. This General Plan action, and the corresponding BMPs, were based on guidance provided by the California Attorney General Office's publication: *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*. The proposed warehouse project has implemented the recommendations and BMPs noted in Action LU-5.d, including ample setbacks and vegetative buffers,

adequate onsite parking to prevent truck idling on public streets, orienting truck ingress/egress points away from sensitive receptors, screening dock doors from sensitive receptors, and integrating clear signage for truck routes and ingress/egress routes.

While the General Plan EIR determined that full buildout of the Lathrop General Plan could lead to significant and unavoidable impacts associated with exposure of sensitive receptors to substantial pollutant concentrations, the proposed warehouse project has implemented all of the required best practices to reduce this potential project-level impact to a less than significant level, as explained in greater detail above.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The proposed CLSP Phase 2 amendments and municipal and zoning amendments are intended to provide consistency with the General Plan. As such, the CLSP-2 Amendment and Zoning Code Update are consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts beyond those that were already addressed in the General Plan EIR. No additional development is proposed, or would be approved at this time. Any future projects proposed within the CLSP Phase 2 Project area would be reviewed for project-specific air toxics health impacts and individual project health risk assessments would be conducted for individual projects that have the potential to generate a significant level of TACs.

The General Plan EIR determined that this impact was significant and unavoidable. The proposed CLSP Phase 2 Project and Zoning Update would not result in a new or substantially more severe impact than what was previously analyzed.

**Response d): Adequately addressed in General Plan EIR.** Offensive odors rarely cause any physical harm; however, they still can be very unpleasant, leading to considerable distress among the public, and often generate citizen complaints to local governments and regulatory agencies. Major sources of odor-related complaints by the general public commonly include wastewater treatment facilities, landfill disposal facilities, food processing facilities, agricultural activities, and various industrial activities (e.g., petroleum refineries, chemical and fiberglass manufacturing, painting/coating operations, landfills, and transfer stations).

According to the CARB Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, auto body shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. None of the three project components propose any of the aforementioned uses.

### *WAREHOUSE SITE*

The proposed warehouse project consists of the development of a warehouse building with a footprint of approximately 1,486,607 square feet. Warehouse uses do not typically involve the types of uses that would emit objectionable odors affecting substantial numbers of people. The Project would not include any of the land uses that have been identified by the SJVAPCD as odor sources and operational impacts would be less than significant.

Construction activities associated with the warehouse project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon completion of the warehouse project. In addition, the Project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. The Project would also be required to comply with the all applicable SJVAPCD Rule and regulations pertaining odors. Any impacts to existing adjacent land uses would be short-term and are less than significant. Compliance with these rules would ensure that potential odors generated at the project site result in a less than significant impact.

The Lathrop General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or substantially more severe impact than what was previously analyzed.

### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The proposed CLSP Phase 2 amendments and municipal and zoning amendments are intended to provide consistency with the General Plan. As such, the CLSP Phase 2 amendment and zoning update projects are consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or substantially more severe impacts beyond those that were already addressed in the General Plan EIR. No additional development is proposed, or would be approved at this time. Any future projects proposed within the Phase 2 Project area would be reviewed for individual project-specific odor impacts.

The General Plan EIR determined that this impact was less than significant. The proposed CLSP Phase 2 amendments and municipal and zoning amendments would not result in a new or substantially more severe impact than what was previously analyzed.

*IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a: Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

Olberding Environmental, Inc. conducted a field reconnaissance survey of the warehouse project site on May 5, 2021, for the purpose of identifying sensitive plant and wildlife species, sensitive habitats, and biological constraints potentially occurring on the warehouse property. The technical report is available in Attachment A.

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database, California Natural Diversity Database (CNDDDB), and California Native Plant Society (CNPS) database were queried to create a list of special-status species with the potential to occur on the Property (Attachment 2, Table 2). After the May 5, 2021 site visit it was determined that many of these species had no potential to occur on the warehouse site. A total of nine species were determined to have a low to high potential of occurring on the warehouse site and are discussed in more detail. Due to the largely un-vegetated, ruderal/disturbed annual grassland habitat found on the Property, and the history of soil disturbance, it was determined that there is no potential for any special-status plants to be found on the warehouse site.

An elderberry shrub (*Sambucus* sp.) was identified along the western fence line of the warehouse site. Elderberry is the host plant of the Valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*). If the plant can be maintained on the warehouse site, then a 20 foot setback buffer will need to be established around its dripline. If the plant cannot be maintained on the warehouse site, then VELB exit hole surveys will need to be conducted as outlined in the USFWS protocol (USFWS 2017). Whether or not exit holes are identified will determine the required mitigation measures necessary under the SJMSCP (SJCOG 2000).

A total of two special-status reptile species were identified to have a low potential to occur on the warehouse project site. The California glossy snake (*Arizona elegans occidentalis*) and the San Joaquin coachwhip (*Masticophis flagellum*) may occur in a foraging capacity. While both species prefer the dry, open habitat found on the warehouse site for hunting, the regular disturbance of the site diminishes the potential for the species to utilize the warehouse site. Pre-construction surveys should be performed no more than 48 hours prior to ground disturbance or vegetation removal. Surveys would be required to determine presence/absence of these species.

A total of four special-status bird species were identified to potentially occur on the warehouse site in either a nesting or foraging capacity. The burrowing owl (*Athene cunicularia*) has a low potential to occur in a nesting and foraging capacity. The loggerhead shrike (*Lanius ludovicianus*) has a low potential to occur in a foraging capacity only; there is no potential nesting habitat on the warehouse project site. Both the Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*) were observed foraging on the warehouse site during the May 5, 2021 survey. The Swainson's hawk was observed using a nest immediately adjacent to the Property, across Dos Reis Road. Additionally, two red-tailed hawks (*Buteo jamaicensis*) were observed foraging on the warehouse site during the May 2021 survey. If project construction-related activities such as tree and vegetation removal or grading take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors are recommended.

No sign of bat use was observed on the warehouse site during the May 2021 survey; however, based on habitat suitability, it was determined that bats have a moderate potential to utilize the site in a foraging capacity. These bat species include pallid bat (*Antrozous pallidus*) and western mastiff bat (*Eumops perotis californicus*). As there is no potential roosting habitat on the warehouse site, no further action needs to be taken.

Four occurrences of special-status plants were identified within a five-mile radius of the point roughly representing the center of the warehouse site (Attachment A). However, it was determined that due to the regular disturbance of habitat present on the site, it is unlikely that any special-status plants will occur on the warehouse site.

### **Special-status Plants**

It was determined that there is no potential for any special status plants to occur on the warehouse site. Due to the ruderal nature of the habitat, the lack of any wetland features, and the long history of regular tilling of the soils, there is no suitable habitat for any special-status plants to occur on the warehouse site. Review of historic CNDDDB records and the site visit conclude that there is no potential for any special-status plants to occur on the warehouse site.

### **Special-status Wildlife**

Special-Status Invertebrates – Given the vegetation that was identified on the warehouse site; VELB has a moderate potential to occur on the warehouse site. A moderately sized, healthy elderberry shrub (host plant for the species) was identified on the western fence line of the warehouse site (Attachment A Figure 11). Additionally, there is one CNDDDB occurrence of this species (#158) located approximately 4.4 miles northwest the warehouse site. The presence of the elderberry shrub on the warehouse site in addition to the recent CNDDDB occurrence within five miles create the potential for VELB to occur on the warehouse site.

### **Special-Status Amphibians**

Due to the lack of any wetland or water features on the warehouse site, there is no potential for any amphibians to occur on the warehouse site.

### **Special-Status Reptiles**

Given the presence of suitable onsite habitat; the California glossy snake and San Joaquin coachwhip have a low potential to occur on the warehouse site. While the warehouse site does provide open, dry habitat for hunting with plenty of mammal burrows, the regular disturbance of the soil would likely preclude the California glossy snake from utilizing the warehouse site for reproduction. Also, while the warehouse site does fall within the range for the San Joaquin coachwhip, all nearby CNDDDB occurrences are found at

approximately 300 feet in elevation or higher, with the nearest occurrence in the Valley floor occurring nearly 100 miles south of the warehouse site. For this reason, the San Joaquin coachwhip has only a low potential to occur on the warehouse site.

### **Foraging or Nesting Raptor/Passerine Species**

A total of four special-status bird species were identified as having a potential to occur on the warehouse site, burrowing owl, Swainson's hawk, loggerhead shrike, and white-tailed kite. There are numerous ground squirrel and other mammal burrows among several raised berm areas on the warehouse site that could serve as burrows for burrowing owl. However, during the May 2021 survey there were no signs of any burrowing owls among these areas. During the survey, a Swainson's hawk was observed using a nest approximately 20 feet from the warehouse site, across Dos Reis Road. Due to the presence of the active Swainson's hawk nest among this small group of trees, it is unlikely that any other raptor or passerine species would nest in this immediate vicinity, and there are no other potential nesting locations on or immediately adjacent to the warehouse site. However, two red-tailed hawks and a white-tailed kite were observed foraging over the warehouse site, and it provides potential foraging habitat for the loggerhead shrike as well as other raptor species. A CNDDDB occurrence of yellow-headed blackbird (*Xanthocephalus xanthocephalus*) (Occurrence #5) intersects with the warehouse site, but it was determined that there is no potential habitat for the species on the warehouse site.

### **Special-Status Mammals**

Given the presence of suitable onsite habitat; the pallid bat and western mastiff bat have a moderate potential to occur on the warehouse site in a foraging capacity. However, due to the lack of any trees or other large structures on the site, there is no potential for any roosting habitat. While the western mastiff bat is a Covered Species under the SJMSCP (SJCOG 2000), all incidental take minimization and mitigation measures involve nursery sites, which are not located on the warehouse site. Therefore, no take authorizations will be needed for these species.

The 2022 Lathrop General Plan includes the following policies and actions to reduce impacts to special status species:

RR-4b: Require new development, infrastructure, long-range planning, and similar projects, to comply with the requirements of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.

RR-4e: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation

measures identified by *SJMSCP*, which may include, but are not limited to the following:

- A. Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;
- B. Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and
- C. Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.

Additionally, the following recommendations have been identified and are included in the Biological Resources Analysis Report (Attachment A):

- VELB Buffer and/or Survey – VELB is a species covered by the *SJMSCP* (SJCOG 2000), and the incidental take minimization and mitigation measures outlined in the document are as follows:

“In areas with elderberry bushes, as indicated by the *SJMSCP* Vegetation Maps or per a preconstruction survey identification or other sources indicated in Section 5.2.2.3, the following shall occur:

- A. If elderberry shrubs are present on the project site, a setback of 20 feet from the dripline of each elderberry bush shall be established.
- B. Brightly colored flags or fencing shall be placed surrounding elderberry shrubs throughout the construction process.
- C. For all shrubs without evidence of VELB exit holes which cannot be retained on the project site as described in A and B, above, the JPA shall, during preconstruction surveys, count all stems of 1" or greater in diameter at ground level. Compensation for removal of these stems shall be provided by the JPA within *SJMSCP* Preserves as provided in *SJMSCP* Section 5.5.4(B).
- D. For all shrubs with evidence of VELB exit holes, the JPA shall undertake transplanting of elderberry shrubs displaying evidence of VELB occupation to VELB mitigation sites during the dormant period for elderberry shrubs (November 1 - February 15). For elderberry shrubs displaying evidence of VELB occupation which cannot be transplanted, compensation for removal of shrubs shall be as provided in *SJMSCP* Section 5.5.4 (C).”



If the elderberry shrub can be maintained on the project site, then a 20 ft. setback will need to be established around the shrub (See Figure 11). If the shrub cannot be maintained on the project site, then VELB exit hole surveys consistent with the USFWS protocol (USFWS 2017) will be performed prior to any ground disturbance. Depending on the results of this survey, either mitigation measure C or D above will be used.

- Pre-construction Reptile Survey – Both California glossy snake and San Joaquin coachwhip have a low potential to occur on the Property and therefore a pre-construction survey should be performed no more than 48 hours prior to ground disturbance or vegetation removal. Surveys would be required to determine presence/absence of this species. If the species are found to occur on the project site, then passive relocation methods should be attempted before ground disturbance.
- Pre-Construction Avian Survey – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) in large trees adjacent to the project site should be conducted by a competent biologist 14 days prior to the commencement of the tree removal or site grading activities. Specific attention should be paid to the active Swainson’s hawk nest that was identified across Dos Reis Road from the project site. As per the Incidental Take Minimization Measures for Swainson’s hawk that are outlined in Section 5.2.4.11 of the SJMSCP (SJCOG 2000):

“If a nest tree becomes occupied during construction activities, then all construction activities shall remain a distance of two times the dripline of the tree, measured from the nest.”

The dripline for the tree where the Swainson’s hawk nest was observed is estimated to be 25 feet, making the required buffer for this nest 50 feet. The nest location and buffer are shown in Figure 11.

If any other birds listed under the Migratory Bird Treaty Act are found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 50 feet from the project activities for passerine birds, and a minimum of 250 feet for other raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are

flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).

- Burrowing Owl Surveys – Burrowing owls were not identified on the project site during May 2021 survey. However, a burrowing owl pre-construction survey should take place before any construction activities commence. It is recommended that they be conducted whenever burrowing owl habitat or sign is encountered on or adjacent to (within 150 meters) a project site. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the project site three additional protocol level surveys will be initiated. As per the incidental take minimization and mitigation measures outlined in the SJMSCO (SJCOG 2000): If burrowing owls are identified and work is to commence during the non-breeding season (September 1 through January 31), then the owls should be evicted from the project site by passive relocation as described in the CDFW’s report on burrowing owls (1995). If work occurs during the breeding season (February 1 through August 31) then the burrows shall not be disturbed and will be provided with a 75-meter protective buffer. However, if it is determined that the birds have not begun laying eggs, or the juveniles from the occupied burrows are foraging independently and are capable of independent survival, then the burrows can be destroyed.
- Erosion Control – Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the warehouse site could adversely surrounding habitats and cause increased particulate matter to enter the storm drain system. Implementation of appropriate mitigation measures would ensure that impacts to aquatic systems would be avoided or minimized. Mitigation measures may include best management practices (BMP’s) such as hay bales, silt fencing, placement of straw mulch and hydro seeding of exposed soils after construction as identified in the Storm Water Pollution Prevention Plan (SWPPP).

The warehouse project will be required to comply with the 2022 Lathrop General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and animals, including habitat. The 2022 Lathrop General Plan includes policies and actions intended to protect special-status plants and animals, including habitat, from adverse effects associated with future development and improvement projects. Additionally, per Project Requirement Bio-2, the development project would be subject to the mitigation recommendations included within Biological Resources Analysis Report (Attachment A) as (listed above), and those set forth by Project Requirement Bio-1 which ensures the project proponent seeks coverage under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) to mitigate for habitat

impacts to covered special status species. The 2022 General Plan EIR determined that cumulative impacts to biological resources would be less than significant.

As such, the proposed warehouse project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts associated with biological resources, beyond those that were already addressed in the 2022 Lathrop General Plan EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*Project Requirement(s)*

**Requirement BIO-1:** *Compliance with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP)*

**Requirement BIO-2:** *Compliance with the mitigation recommendations included within Biological Resources Analysis Report (Attachment A).*

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional developments are proposed or would be approved as part of the CLSP-2 amendments and Zoning Update that are required to bring these into consistency with the General Plan.

All future development projects will be required to comply with the 2022 Lathrop General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and animals, including habitat. The 2022 Lathrop General Plan includes policies and actions intended to protect special-status plants and animals, including habitat, from adverse effects associated with future development and improvement projects. Additionally, future projects would be required to comply with SJMSCP to mitigate for habitat impacts to covered special status species. As future development applications are received the City will review and analyze each for consistency with the General Plan and local habitat conservation plans as well as State and Federal requirements as described previously, and would also be reviewed at the time of application for potential site specific impacts.

As such, the proposed CLSP-2 amendments and Zoning Update are consistent with the adopted vision and uses identified within the 2022 Lathrop General Plan, and would not result in any new or increased impacts associated with biological resources, beyond those that were already addressed in the General Plan EIR. The CLSP-2 amendments and Zoning Update would not result in a new or substantially more severe impact than what was previously analyzed in the 2022 General Plan EIR.

**Response b), c): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

Riparian natural communities support woody vegetation found along rivers, creeks and streams. Riparian habitat can range from a dense thicket of shrubs to a closed canopy of large mature trees covered by vines. Riparian systems are considered one of the most important natural resources. While small in total area when compared to the state's size, they provide a special value for wildlife habitat.

Results of the initial reconnaissance survey indicate that the warehouse project site does not contain any wetlands/waters that might be considered jurisdictional by the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and/or the California Department of Fish and Wildlife (CDFW). Prior to completing the site survey for this report, site maps, topographic maps, and aerial photographs of the warehouse project site were obtained from several sources and reviewed. This information was used in association with the site visit to determine that there was no evidence of any wetland or water features. It is likely that the high sand content of the soil and regular tilling of the warehouse project site would facilitate in water draining quickly from the site.

As shown in (Attachment A Figure 7), the warehouse project site is located within the critical habitat unit V01 for Delta smelt (*Hypomesus transpacificus*). Critical habitat was established for this species on December 19, 1994 (Federal Register 59 No. 242, pp. 65256-65279). As there are no wetlands or waters located on the warehouse project site, the site does not meet primary constituent elements to support critical habitat. Consequently, there will be no impact to the designated critical habitat.

The proposed warehouse project is consistent with the adopted vision and uses identified within the 2022 Lathrop General Plan, and would not result in any new or increased impacts associated with riparian resources.

The General Plan EIR determined that this impact was less than significant. This impact to biological resources was adequately addressed in the EIR, because there is no wetland or riparian habitat present on the warehouse project site. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed in the 2022 General Plan.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional developments are proposed or would be approved as part of the updates to the CLSP and municipal code that are required to bring these into consistency with the General Plan.

All future development projects will be required to comply with the City's General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and habitat as well as waters of the U.S and wetlands. The City of Lathrop General Plan includes policies and actions intended to protect wetlands and riparian areas and habitats, from adverse effects associated with future development and improvement projects. Additionally, future projects would be required to comply with the SJMSCP to mitigate for habitat impacts. As future development applications are received the City will review and analyze each for consistency with the General Plan and local habitat conservation plans as well as State and Federal requirements as described previously, and would also be reviewed at the time of application for potential site specific impacts.

As such, the proposed project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts associated with riparian and wetland resources, beyond those that were already addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response d): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The Biological Resources Analysis Report (Attachment A) included a CNDDDB record search that did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to warehouse site.

The proposed warehouse project is consistent with the adopted vision and uses identified within the 2022 Lathrop General Plan, and would not result in any new or increased impacts associated with biological resources, beyond those that were already addressed in the 2022 Lathrop General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional developments are proposed or would be approved as part of the updates to the CLSP and municipal code that are required to bring these into consistency with the General Plan.

All future development projects will be required to comply with the City's General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and animals, and habitats. The City of Lathrop General Plan includes policies and actions intended to protect species and habitats from adverse effects associated with

future development and improvement projects. Additionally, future projects would be required to comply with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) to mitigate for habitat impacts. As future development applications are received the City will review and analyze each for consistency with the General Plan and local habitat conservation plans as well as State and Federal requirements as described previously, and would also be reviewed at the time of application for potential site specific impacts.

As such, the proposed CLSP phase 2 amendments and zoning code amendments project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts associated with riparian and wetland resources, beyond those that were already addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response e): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The warehouse site is within the boundaries of the SJMSCP. The plan was developed to provide a strategy for balancing the protection of Open Space and wildlife with the protection of local landowners and agricultural practices. The SJMSCP, in accordance with ESA Section 10(a)(1)(B) and CESA Section 2081(b) Incidental Take Permits, provides compensation for the Conversion of Open Space to non-Open Space uses which affect the plant, fish and wildlife species covered by the SJMSCP. Species that are covered by the SJMSCP that have the potential to occur within the Property include VELB, Swainson's hawk, burrowing owl, and the western mastiff bat.

The proposed warehouse project would comply with the SJMSCP requirements regarding special-status species, land conversion, development fees as applicable, per *Requirement Bio-1*. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

The 2022 Lathrop General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional developments are proposed or would be approved as part of the updates to the CLSP and municipal code that are required to bring these into consistency with the General Plan.

All future development projects will be required to comply with the City's General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and animals, and habitats. The 2022 Lathrop General Plan includes policies and actions intended to protect species and habitats from adverse effects associated with future development and improvement projects. Additionally, future projects would be required to comply with the SJMSCP to mitigate for habitat and species impacts. As future development applications are received the City will review and analyze each for consistency with the General Plan and local habitat conservation plans as well as State and Federal requirements as described previously, and would also be reviewed at the time of application for potential site specific impacts.

As such, the proposed project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts, beyond those that were already addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response f): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

As described in Response a, e, above the warehouse project will be required to comply with the City's General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and animals, including habitat. Additionally, future development projects within the CLSP-2 Specific Plan Area would be subject to the requirements included within and set forth by the SJMSCP as further explained in the 2022 Lathrop General Plan EIR Biological Resources chapter. As such, the proposed project is consistent with the adopted vision and uses identified within the General Plan, and would be required to be in compliance with the SJMSCP, and would not result in any new or increased impacts beyond the impacts identified in the General Plan EIR.

The 2022 Lathrop General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional developments are proposed or would be approved as part of the updates to the CLSP and municipal code that are required to bring these into consistency with the General Plan.

All future development projects will be required to comply with the 2022 Lathrop General Plan and adopted Federal, State, and local regulations for the protection of special-status plants and animals, and habitats as explained in the Lathrop General Plan

EIR Biological Resources chapter. The City of Lathrop General Plan includes policies and actions intended to protect species and habitats from adverse effects associated with future development and improvement projects. Additionally, future projects would be required to comply with SJMSCP to mitigate for habitat impacts. As future development applications are received the City will review and analyze each for consistency with the General Plan and local habitat conservation plans as well as State and Federal requirements as described previously, and would also be reviewed at the time of application for potential site specific impacts.

As such, the proposed CLSP-2 amendment and zoning update projects are consistent with the adopted vision and uses identified within the 2022 Lathrop General Plan, and would not result in any new or increased impacts, beyond those that were already addressed in the General Plan EIR. The proposed project would not result in a new or substantially more severe biological resources impacts than what was previously analyzed.



*V. CULTURAL RESOURCES -- WOULD THE PROJECT:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a), b), c): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

As described in the General Plan EIR, 172 previously recorded archaeological sites (18 prehistoric sites and 154 historic archaeological sites) identified by the CCIC are located in the City of Lathrop. Among these sites are a Native American village, historic railroad sites, and a host of historic buildings. The Sharpe facility contains the greatest number of building sites. The Native American village site is associated with the San Joaquin River which supports the increased likelihood of additional Native American sites being adjacent to the river. None of the recorded sites noted above occur within the warehouse project site.

Past uses and activities at the warehouse project site have disturbed the land and soils, including agricultural uses and tilling activities. A records search of the California Historical Resources Information System (CHRIS) was completed in July of 2023 and the search revealed no known resources on the site. The General Plan EIR does not identify the warehouse site as having prehistoric period, or cultural resources. Furthermore, neither the site, nor any structures, are designated as a historical resource as defined by Public Resources Code § 21084.1, or listed in, or eligible for listing in the California Register of Historical Resources. There are no known human remains located on the warehouse site, nor is there evidence to suggest that human remains may be present on the project site. However, as with most projects in California that involve grading and other ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and archeological, or cultural resource, or human remains.

The Lathrop General Plan includes policies and actions that both reduce impacts to and conserve cultural, historic, and archaeological resources. The warehouse project would be required to implement the following actions listed below:

- RR-3a: Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural, tribal, or archaeological resources. If significant cultural, tribal, or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource. If resources are known or reasonably anticipated to be encountered during construction, the City shall require a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, and provide a treatment plan for potential resources that may be encountered.
- RR-3b: Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:
- A. If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Community Development Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and
  - B. If human remains are discovered during any ground disturbing activity, work shall stop until the Community Development Director and the San Joaquin County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.

*Project Requirement(s)*

***Requirement CUL-1: Implement General Plan Action: RR 3b***

Given that the results of the above-referenced records search indicate that the warehouse project site is not sensitive for cultural, tribal, or archaeological resources, the project is not subject to the requirements of General Plan Action RR-3a.

***CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE***

As described previously the General Plan EIR identified various cultural and historic resources within the City. The CLSP-2 Amendment and municipal code amendments do not directly propose any changes that would include adverse impacts to historic, archaeological, or cultural resources. Future developments within the CLSP Phase 2 project area may occur which could affect both known and yet to be identified historic

and archaeological resources. The Lathrop General Plan includes policies and actions that would both reduce impacts to and conserve cultural, historic, and archaeological resources. Implementation of the policies and actions listed below, combined with CEQA review requirements, would ensure that impacts to historic and archaeological resources are less than significant. As the City considers future development and infrastructure projects, each project will be evaluated to ensure conformance with the City's General Plan, Municipal Code, and applicable State and local regulations. Development and infrastructure projects would also be analyzed individually for potential environmental impacts as required by CEQA.

All future development within the CLSP Phase 2 Project area would be subject to all relevant General Plan policies and actions that provide protections for cultural, historical, and tribal resources, including General Plan Actions RR 3A and RR 3B. As future developments are proposed within the CLSP Phase 2 area they would be developed under a Limited Industrial use category (consistent with the General Plan), and would be required to be analyzed for site specific impacts consistent with their project descriptions and site plans. Future projects would be required to be reviewed in compliance with the General Plan and municipal code requirements and the California Environmental Quality Act (CEQA). No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and vision described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur.

## VI. ENERGY

<i>Would the project:</i>	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

### *Responses to Checklist Questions*

#### **Responses a), b): Adequately addressed in the General Plan EIR.**

Appendix G of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix G of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered “wasteful, inefficient, and unnecessary” if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

As most recently amended by SB 100 (2018), California’s Renewables Portfolio Standard requires retail sellers of electric services and local publicly-owned electric utilities to increase procurement from eligible renewable energy resources to 50 percent of total retail sales by 2026, and 60 percent of total retail sales by 2030. SB 100 also established a State policy goal to achieve 100 percent renewables by 2045.

In March 2021, CEC, the California Public Utilities Commission (CPUC) and CARB released a joint-agency report evaluating the current feasibility of achieving the energy resource and GHG reductions goals of SB 100. The report finds that SB 100 is technically feasible when analyzed under scenarios of varying timelines, advancements in energy generation technology, and energy source portfolios. Under the SB 100 Core Scenario, it is anticipated that California will need to triple its current electricity power capacity.

Title 24, Part 6 of the California Code of Regulations regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The CEC's 2022 Building Energy Efficiency Standards (2022 Building Standards), which became effective January 1, 2023, are the currently applicable version of these standards. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), commonly referred to as CalGreen Building Standard (CalGreen), establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CalGreen standards are periodically updated, with increasing energy savings and efficiencies associated with each code update.

The new 2022 Energy Code improves upon the 2019 standards for construction of residential and non-residential buildings. The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the California Code of Regulations. The regulations establish water and energy efficiency standards for both federally-regulated appliances and non-federally regulated appliances. The regulations cover numerous categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions) and apply to appliances offered for sale in California.

## **Conclusion**

### *WAREHOUSE SITE*

The proposed warehouse project includes the construction of a limited industrial warehouse facility and associated infrastructure improvements to serve the project. Other sources of proposed project energy consumption during construction include fuel used by vehicle trips generated during project construction, and fuel used by off-road construction vehicles during construction activities.

The proposed warehouse project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, and from off-road construction activities associated with the proposed project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed warehouse project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing

per capita energy consumption to achieve this goal, including through Statewide and local measures.

The proposed warehouse project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. Project-related electricity use results in indirect emissions, due to electricity generation activities occurring at off-site power plant locations. For the warehouse project, electrical power will be supplied by PG&E. PG&E is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards (“part 6”), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. As a result, the proposed warehouse project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. The proposed warehouse project would comply with all adopted energy standards, including those adopted by the City of Lathrop, and would not result in significant adverse impacts on energy resources. For these reasons, the proposed warehouse would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix G of the CEQA Guidelines.

The proposed warehouse project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased energy-related impacts beyond those that were already addressed in the General Plan EIR.

The EIR determined that this impact was less than significant. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The proposed CLSP Phase 2 amendments and Zoning Update are intended to provide consistency with the General Plan. As such, the CLSP Phase 2 amendments and Zoning Update are consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts beyond those that were already addressed in the General Plan EIR. No additional development is proposed, or

would be approved at this time. Any future projects proposed within the CLSP-2 Amendments area, or citywide within the Zoning Map, would be reviewed for Project specific energy requirements including compliance with applicable standards such as the California Building Code as well as other local and state energy requirements.

The EIR determined that this impact was less than significant. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**VII. GEOLOGY AND SOILS - WOULD THE PROJECT:**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

**BACKGROUND**

Information included in the section is further detailed in Attachment B. Preliminary Geotechnical Engineering Report. Prepared by: Terracon Consultants, Inc. August 16, 2021.



## *RESPONSES TO CHECKLIST QUESTIONS*

### **Responses a.i), a.ii), a.iii: Adequately addressed in the General Plan EIR.**

There are no known active or potentially active faults, or Alquist-Priolo Earthquake Fault Zones, located within the City of Lathrop. However, there are numerous faults located in the region. The General Plan EIR Figure 3.6-2 illustrates the location of these faults. These include an unnamed fault east of the City of Tracy, the San Joaquin fault, the Midway fault, the Corral Hollow-Carnegie fault, the Greenville fault, the Antioch fault, and the Los Positas fault. Rupture of any of these faults, or of an unknown fault in the region, could cause seismic ground shaking.

While there are no known active faults located within Lathrop, the City, and areas within it, could experience ground shaking generated by faults outside Lathrop.

All projects would be required to comply with the provisions of the CBSC, which requires development projects to: perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. Subsequent development and infrastructure would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with seismic activity.

Additionally, a Preliminary Geotechnical Engineering Report has been prepared for the proposed warehouse project. The report identifies several geotechnical conditions that could impact design, construction and performance of the proposed structures, pavements, and other site improvements. These conditions will require particular attention in project planning, design and during construction and are discussed briefly below and are included in greater detail in the Preliminary Geotechnical Engineering Report (Attachment B).

### **Liquefaction Susceptibility**

As described in the Geotechnical Report a liquefaction analysis has been completed as part of the Geotechnical evaluation. Based on review of the calculations, the anticipated potential total liquefaction-induced settlement across the warehouse site varies from about 1 to 1½ inches. The Geotechnical Engineering Report estimates the differential liquefaction-induced settlement may be up to ¾ of an inch over 50 feet. With regards to the potential for lateral spreading, it is noted that the warehouse site and surrounding

area in the CLSP-2 Amendment area is relatively level. Given the relative flatness of the local topography and the variability in the layering of the soil lithology, the potential for lateral spreading to affect the warehouse site is low.

### **Low Strength Soils**

Loose granular soils were encountered at anticipated foundation bearing depths at this site. These materials present a risk for potential settlement of shallow foundations, floor slabs, pavements and other surficial improvements. These materials can also be susceptible to disturbance and loss of strength under repeated construction traffic loads and unstable conditions could develop.

### **Existing, Undocumented Fill Piles**

As described in the Geotechnical Report, existing undocumented fill piles were observed in several locations across the warehouse site. Information regarding the source of the fill was unavailable. Undocumented fill can present a greater than normal risk of post-construction movement of foundations, slabs, pavements and other site improvements supported on or above these materials. Consequently, the Geotechnical Evaluation recommended that the existing fill piles be removed from the warehouse site or if re-used, should be evaluated by Terracon prior to construction.

### **Preliminary Foundation and Floor System Recommendations**

As described in the Geotechnical Report loose granular soils were encountered at anticipated shallow foundation bearing depths. Due to the variable relative density of the near surface soils within the proposed building areas on the warehouse site, the foundations for the buildings should be supported on a minimum 2 feet of engineered fill in order to provide uniform support for the structure. Given the shallow groundwater, the engineered fill may be substituted with a minimum of 2 sack cement grout slurry mix or soil-cement stabilization. Additional site preparation recommendations, including subgrade improvement and fill placement, are provided in the Geotechnical Report (Attachment B).

### **Conclusion**

As described in the Geotechnical Evaluation, based on subsurface conditions encountered in the borings, the site appears suitable for the proposed construction from a geotechnical point of view provided certain precautions and design and construction recommendations described in the Geotechnical Evaluation report are followed. The Report has identified several geotechnical conditions that could impact design, construction and performance of the proposed structures, pavements, and other site improvements. These included existing, undocumented fill, shallow groundwater,

expansive soils, and loose granular soils. These conditions will require particular attention in project planning, design and during construction.

The General Plan policies and project review requirements require geotechnical investigations to be completed prior to approval of any buildings as a means to ensure that these facilities are constructed in a way that mitigates site-specific seismic and/or geological hazards. As described previously, a geotechnical study has been prepared to explore, assess, and recommend site planning requirements to address seismic safety issues and provide adequate recommendations for potential hazards identified. With the implementation of the recommendations required by the geotechnical study, as well as applicable State and City codes, potential impacts associated with a seismic event, including rupture of an earthquake fault, seismic ground shaking, and liquefaction would be less than significant.

The EIR determined that this impact was less than significant for the warehouse project. This impact was adequately addressed in the EIR based on the further project analysis contained in the Geotechnical Report. The proposed warehouse project would not result in a new or more severe impacts than what was previously analyzed in the General Plan EIR.

*Project Requirement(s)*

**Requirement GEO-1:** Implement recommendations presented in the Preliminary Geotechnical Engineering Report. Prepared by: Terracon Consultants, Inc. during the project design and construction.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

All projects developed pursuant to the CLSP Phase 2 Amendment and Municipal Code Update would be required to comply with the provisions of the CBSC, which requires development projects to: perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. Subsequent development and infrastructure would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with seismic activity.

The EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR in Chapter 3.6. The proposed CLSP Phase 2 Amendment

and Municipal Code Update would not result in a new or substantially more severe geotechnical impacts than what was previously analyzed.

**Response a.iv): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The warehouse site is essentially flat and there are no major slopes in the vicinity of the project site. As such, the warehouse site is exposed to little or no risk associated with landslides.

The EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR as demonstrated in Appendix B. The proposed warehouse project would not result in a new or more severe impact than the geotechnical impacts that were previously analyzed in the General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As described in the General Plan EIR the entirety of Lathrop, including the CLSP 2 Area, is essentially flat; therefore, the potential for a landslides is low. Future development and improvement projects would be required to have a specific geotechnical study prepared and incorporated into the improvement design, consistent with the requirements of the State and City codes. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to ensure that development projects address potential geologic hazards, at-risk buildings and infrastructure is evaluated for potential risks, and site-specific studies are completed for area subject to liquefaction.

The EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR for the CLSP Phase 2 Amendment and Municipal Code Update in Chapter 3.6. The proposed project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

Construction and site preparation activities associated with development of the warehouse site include grading for the construction of the proposed project. During the construction preparation process, existing vegetation would be removed to grade and compact the warehouse site, as necessary. As construction occurs, these exposed surfaces could be susceptible to erosion from wind and water. Effects from erosion include impacts on water quality and air quality. Exposed soils that are not properly contained or capped increase the potential for increased airborne dust and increased discharge of sediment and other pollutants into nearby stormwater drainage facilities. Risks

associated with erosive surface soils can be reduced by using appropriate controls during construction and properly revegetating exposed areas. Project Requirement HYDRO 1 would require the implementation of a storm water pollution prevention plan (SWPPP) which includes various best management practices (BMPs) that would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR in Chapter 3.6. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As evaluated in the General Plan EIR, as future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. In addition to compliance with City standards and policies, the Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area of one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion. The General Plan includes a range of policies and actions related to minimizing discharge of materials (including eroded soils) into the storm drain system, which would minimize the potential impacts related to erosion or the loss of topsoil. With the implementation of the policies and actions in the General Plan, as well as applicable State and City requirements, potential impacts associated with erosion and loss of topsoil would be less than significant.

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These plans are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for site specific studies, and policies and actions that limit erosion.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed CLSP Phase 2 Amendment and Municipal Code Update project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

## **Responses c), d): Adequately addressed in the General Plan EIR.**

### *WAREHOUSE SITE:*

#### **Expansive Soils**

Expansive soils are present on the warehouse site at depths of approximately 8 feet and below. These soils are unlikely to experience a change in moisture due to site development given the depth encountered and presence of shallow groundwater. However, the Geotechnical Report (Attachment B) provides recommendations to mitigate the effects of soil shrinkage and expansion. Even if these procedures are followed, some movement and cracking in the structures, pavements, and flatwork is possible. The severity of cracking and other damage such as uneven floor slabs and flat work will probably increase if modification of the site results in excessive wetting or drying of the expansive clays. Eliminating the risk of movement and cosmetic distress is generally not feasible, but it may be possible to further reduce the risk of movement if significantly more expensive measures are used during construction. The warehouse project will implement the recommendations described in section Grading and Drainage section of the Earthwork section of this report (Attachment B) in order to reduce potential movement.

#### **Low Strength Soils**

Loose granular soils were encountered at anticipated foundation bearing depths at the warehouse site. These materials present a risk for potential settlement of shallow foundations, floor slabs, pavements and other surficial improvements. These materials can also be susceptible to disturbance and loss of strength under repeated construction traffic loads and unstable conditions could develop.

#### **Lateral spreading**

Based on the geotechnical consultant's review of the calculations, the anticipated potential total liquefaction-induced settlement across the warehouse site varies from about 1 to 1½ inches. The geotechnical consultant estimates the differential liquefaction-induced settlement may be up to ¾ of an inch over 50 feet. With regards to the potential for lateral spreading, the site and surrounding area is relatively level. Given the relative flatness of the local topography and the variability in the layering of the soil lithology, it is our opinion that the potential for lateral spreading to affect this site is low.

The geotechnical report identifies recommendations for expansive soils and low strength soils and other site specific geologic conditions and include measures to stabilize soils. Requirement GEO-1 requires the recommendations presented in the geotechnical report

to be incorporated into the project design and construction. Final techniques would be determined during construction in consultation with Terracon Consultants. The project is subject to all requirements of the California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 requires specific geotechnical evaluation when a preliminary geotechnical evaluation determines that expansive or other special soil conditions are present, which, if not corrected, would lead to structural defects. As noted above, a geotechnical report has been prepared for the project site, and the warehouse project would adhere to the engineering requirements contained in the geotechnical report.

The EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR based on the further site specific evaluation contained in Appendix B. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the CLSP Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for site specific reviews. All future projects would be required to comply with the provisions of the CBSC, which requires development projects to: perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with seismic activity.

The EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed CLSP Phase 2 Amendment and Municipal Code Update project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

#### **Response e): Adequately addressed in the General Plan EIR.**

#### *WAREHOUSE SITE*

The warehouse project site would be served by public wastewater facilities and does not require an alternative wastewater system such as septic tanks.

The General Plan EIR determined this impact is less than significant. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As described in the General Plan EIR, all new wastewater generated from General Plan land uses will be collected and transmitted to the MWQCF and LCTF for treatment. There will be no septic tanks or alternative waste water disposal systems utilized for new development planned under the General Plan.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed CLSP Phase 2 Amendment and Municipal Code Update project would not result in a new or more severe impact than what was previously analyzed.

**Response f): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

Known paleontological resources or sites have not been identified on the warehouse site. Additionally, unique geologic features are not located on the warehouse site. The site is currently undeveloped. Should paleontological resources artifacts, such as fossils, or unusual amounts of bones or shells be uncovered during construction activities, a paleontologist should be consulted for an evaluation.

The warehouse project would be required to implement applicable policies and actions included in the General Plan and General Plan EIR.

The General Plan includes Policies, and Actions that minimize warehouse project impacts as listed below:

Policies

RR-3.1 Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Implementing Actions

RR-3a Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural, tribal, or archaeological resources. If significant cultural, tribal, or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource. If resources are known or reasonably



anticipated to be encountered during construction, the City shall require a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, and provide a treatment plan for potential resources that may be encountered.

RR-3b Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- A. If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Community Development Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and
- B. If human remains are discovered during any ground disturbing activity, work shall stop until the Community Development Director and the San Joaquin County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.

RR-3d Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of a paleontological resource:

- A. If construction or grading activities result in the discovery of significant prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Community Development Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director.

The warehouse project would be subject to all policies and actions included in the General Plan. The General Plan EIR determined that this impact was less than significant, this impact was adequately addressed in the EIR because there are no known

paleontological resources on the warehouse site. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As described in the General Plan EIR, as future development and infrastructure projects are considered by the City, each project will be evaluated. No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These plans are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for site specific reviews.

All future projects within the CLSP Phase 2 and Zoning Update area would be subject to applicable policies and actions included in the General Plan (as detailed above). The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*VIII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:*

	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR	Impact not Previously Addressed in General Plan EIR
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

*BACKGROUND DISCUSSION*

Various gases in the Earth’s atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth’s surface temperature. Solar radiation enters Earth’s atmosphere from space, and a portion of the radiation is absorbed by the Earth’s surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and ozone (O<sub>3</sub>). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (IPCC 2013)<sup>1</sup>.

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), ozone (O<sub>3</sub>), water vapor, nitrous oxide (N<sub>2</sub>O), and chlorofluorocarbons (CFCs).

<sup>1</sup> Intergovernmental Panel on Climate Change. 2013. “Climate Change 2013: The Physical Science Basis, Summary for Policymakers.” Available: <[http://www.climatechange2013.org/images/report/WG1AR5\\_SPM\\_FINAL.pdf](http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf)>.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors (California Air Resources Board 2023)<sup>2</sup>. In California, the transportation sector is the largest emitter of GHGs, followed by industrial energy consumption (California Air Resources Board 2023).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for 38% of total GHG emissions in the state. This category was followed by the industrial sector (23%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture & forestry sector (9%), the residential energy consumption sector (8%), and the commercial energy consumption sector (6%) (California Air Resources Board, 2023).

#### *EFFECTS OF GLOBAL CLIMATE CHANGE*

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. The snowpack portion of the supply could potentially decline by 70% to 90% by the end of the 21<sup>st</sup> century (Cal EPA 2006)<sup>3</sup>. This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state;

---

<sup>2</sup> California Air Resources Board. 2023. Current California GHG Emission Inventory Data. Available: <<https://ww2.arb.ca.gov/ghg-inventory-data>>.

<sup>3</sup> California Environmental Protection Agency, Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available: <[http://www.climatechange.ca.gov/climate\\_action\\_team/reports/](http://www.climatechange.ca.gov/climate_action_team/reports/)>.

however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (Cal EPA 2006). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (Cal EPA 2006). As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. According to the California Environmental Protection Agency, the impacts of global warming in California are anticipated to include, but are not limited to, the following.

### **Public Health**

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

### **Water Resources**

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from Northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

### **Agriculture**

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

### **Forests and Landscapes**

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

### **Rising Sea Levels**

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

### *RESPONSES TO CHECKLIST QUESTIONS*

#### **Response a), and b): Adequately addressed in the General Plan EIR.**

#### *WAREHOUSE SITE*

A warehouse project's GHG emissions are at a micro-scale relative to global emissions but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the proposed warehouse project would contribute to increases of GHG emissions that are associated with global climate

change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO<sub>2</sub> and other GHG pollutants, such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), from mobile sources and utility usage.

Development of the proposed warehouse project would include activities that emit greenhouse gas emissions over the short and long term. A summary of short- and long-term emissions and the analysis for each are included below.

It should be noted that the baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including worldwide GHG emissions from human activities that have increased by about 90 percent since 1970.<sup>4</sup> As a result, the study area for climate change and the analysis of GHG emissions is broad. However, the project site also limited by CEQA Guidelines Section 15064.4(b), which directs lead agencies to consider an “indirect physical change” only if that change is a reasonably foreseeable impact, which may be caused by the project.

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines Section 15064.4 does not establish a threshold of significance. CEQA Guidelines Section 15064.7 provides lead agencies the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, as long as any threshold chosen is supported by substantial evidence. The City of Lathrop has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SJVACPD, the Governor’s Office of Planning and Research, CARB, California Air Pollution Control Officers Association (CAPCOA), or any other State or applicable regional agency has yet to adopt a numerical significance threshold for assessing GHG emissions that is applicable to the project. The analysis has quantified the project’s GHG emissions herein for informational purposes only.

---

<sup>4</sup> U.S. EPA, Global Greenhouse Gas Emissions Data, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>, accessed July 14, 2022.



*Short-Term Emissions*

Short-term greenhouse gas emissions associated with the warehouse project would occur because of construction equipment used for the following: demolition, grading, paving, and building construction activities associated with development and infrastructure. GHG emissions would also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Proposed project construction-related GHGs are provided in Table GHG-1, below.

**Table GHG-1: Construction GHG Emissions (Unmitigated Metric Tons/Year)**

<i>Year</i>	<i>Bio-CO<sub>2</sub></i>	<i>NBio-CO<sub>2</sub></i>	<i>Total CO<sub>2</sub></i>	<i>CH<sub>4</sub></i>	<i>N<sub>2</sub>O</i>	<i>CO<sub>2</sub>e</i>
2023	0	163	163	<0.1	<0.1	163
2024	0	724	724	<0.1	<0.1	727
2025	0	235	235	<0.1	<0.1	236
<b>Maximum</b>	<b>0</b>	<b>724</b>	<b>724</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>727</b>
<b>Total</b>	<b>0</b>	<b>1,846</b>	<b>1,846</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>1,853</b>

*SOURCE: CALEEMOD (v.2022.1).*

As shown in Table GHG-1, the proposed warehouse project is anticipated to generate a maximum of approximately 727 MT CO<sub>2</sub>e per year, and a total of 1,853 MT CO<sub>2</sub>e over the full course of construction. As previously described, these emissions are provided herein for informational purposes only.

Development of the Phase 2 Plan Area with light industrial uses was evaluated in the General Plan EIR. As described in the Lathrop General Plan EIR, all future development and infrastructure projects within the General Plan Planning Area would be subject to the General Plan goals, policies, and actions, which were adopted to reduce emissions and greenhouse gas impacts. For example, Policy RR-6.9 requires the City to consider, and implement as feasible, new policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions.

Nevertheless, the proposed General Plan includes higher levels and rates of growth than those that would be facilitated under the existing Lathrop General Plan. As such, total emissions levels associated with project buildout would increase, which may indirectly hinder the SJVAPCDs efforts to reduce total emissions of greenhouse gases. The General Plan EIR (EIR) determined that this impact was significant and unavoidable. While the General Plan EIR determined that this impact was significant and unavoidable, the proposed project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

### Long-Term Emissions

Future development projects will result in continuous GHG emissions from mobile, area, and operational sources. Mobile sources, including vehicle trips to and from development projects, will result primarily in emissions of CO<sub>2</sub>, with minor emissions of CH<sub>4</sub> and N<sub>2</sub>O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by future development and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO<sub>2</sub> emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas inventory for the warehouse project.

As described in the Project Description, the proposed project includes the development of a new integrated, warehouse/light industrial/retail office development on approximately 89.5-acre property located at the northwest corner of Dos Reis Rd and Manthey Road (the “warehouse site”, or “project site”). The proposed development includes an approximately 1,486,607 square foot single or multi-tenant building with a mix of retail, office/call center, and warehouse and distribution uses. The warehouse project is anticipated to provide up to 1,295 jobs at full operation. The primary mix of uses within the warehouse building include an up to 100,000 square foot retail showroom, a 24,000 square foot office space consisting of call center and a regional office for up to 50 people. Warehouse and distribution uses will comprise the balance of the 1,352,347 square feet. Proposed warehouse project operation-related GHGs are provided in Table GHG-2, below.

**Table GHG-2: Operational GHG Emissions (Metric Tons/Year)**

<i>Category</i>	<i>Bio-CO<sub>2</sub></i>	<i>NBio-CO<sub>2</sub></i>	<i>Total CO<sub>2</sub></i>	<i>CH<sub>4</sub></i>	<i>N<sub>2</sub>O</i>	<i>CO<sub>2</sub>e</i>
Area	0	0.2	0.2	<0.1	0.1	0.2
Energy	0	19	19	<0.1	<0.1	19
Mobile	0	2,795	2,795	0.1	0.2	2,847
Waste	125	0	125	13	0	436
Water	109	104	213	11	0.3	573
<b>Total</b>	<b>234</b>	<b>2,918</b>	<b>3,151</b>	<b>24</b>	<b>0.4</b>	<b>3,875</b>

SOURCE: CALEEMOD (v.2022.1).

As shown, total operational GHG emissions are anticipated to be approximately 3,875 MT CO<sub>2</sub>e. Additionally, the warehouse project’s 15.43 daily VMT per employee is lower than the San Joaquin County VMT threshold of 16.2. As previously described, these emissions are provided herein for informational purposes only.

The Lathrop General Plan EIR determined that GHG impacts were significant and unavoidable. Cumulative impacts associated with GHG emissions from General Plan

buildout was analyzed in detail in Chapter 3.7 of the General Plan EIR. The potential GHG emissions resulting from warehouse project operations were accounted for the cumulative GHG analysis contained in the General Plan EIR. While the General Plan EIR determined that this impact was significant and unavoidable, the proposed project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

Short-term greenhouse gas emissions would occur because of construction equipment used for future development projects within the CLSP Phase 2 area and would include the following: demolition, grading, paving, and building construction activities associated with development and infrastructure. GHG emissions would also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. As such, SJVAPCD recommends in its draft threshold to amortize project-specific construction emissions over a 30-year operational lifetime of a project. This normalizes construction emissions so that they can be grouped with operational emissions to generate a precise project GHG inventory. However, the SJVAPCD does not have a current threshold of significance for construction-related GHG emissions for plan-level impacts (including General Plans and Specific Plans).

The 2022 RTP/SCS relied upon the Lathrop General Plan to determine population, employment, and VMT increases associated with General Plan buildout in Lathrop as part of the RTP/SCS's overall analysis of per capita GHG emissions throughout the region. As noted in the 2022 RTP/SCS, the Plan meets and exceeds the GHG targets established by the CARB. The Lathrop General Plan is supportive and complimentary of the policies and strategies included in the 2022 RTP/SCS, and does not conflict with implementation of this plan.

The Lathrop General Plan EIR determined that GHG impacts were significant and unavoidable. This impact was adequately addressed in the EIR based on the analysis provided in Chapter 3.7 of the General Plan EIR. The proposed CLSP Phase 2 Amendment and Municipal Code Update would not result in a new or more severe impact than what was previously analyzed.

**IX. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

**RESPONSES TO CHECKLIST QUESTIONS**

A Phase I Environmental Site Assessment Report, and Shallow Soil Investigation Report were prepared by Partner Engineering and Science, Inc. in 2021.

The full reports are available in Attachment C (Phase I Environmental Site Assessment Report) and (Attachment D) Shallow Soil Investigation Report.

**Responses a), b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

The proposed warehouse project would develop a new Limited Industrial warehouse in an area of the City that is designated by the General Plan for industrial site uses. Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel), and a variety of common chemicals including paints, cleaners, and solvents. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, Project Requirements included in the Hydrology Section of this Report (Hydrology and Water Quality) requires the project applicant to implement a stormwater pollution prevention plan (SWPPP) during construction activities, which would prevent contaminated runoff from leaving the project site during construction.

In addition to the requirements associated with Federal and State regulations and the Municipal Code, the City's General Plan includes policies and actions to address potential impacts associated with hazardous materials among other issues. Specifically, Policy PS-4.5 requires coordination with the Lathrop Manteca Fire District (LMFD) to ensure that businesses in the city which handle hazardous materials prepare and file a Hazardous Materials Business Plan (HMBP). The HMBP shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

A Phase I Environmental Site Assessment and Shallow Soil Investigation Report were prepared by Partner Engineering and Science, Inc. the findings are provided below;

**Phase I Environmental Site Assessment**

*A recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any recognized environmental conditions during the course of this assessment.

*A controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or

petroleum products allowed to remain in place subject to the implementation of required controls.

- Partner did not identify any controlled recognized environmental conditions on the warehouse site during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

- Partner did not identify any historical recognized environmental conditions on the warehouse site during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- According to a historical review, the subject property has been used for agricultural purposes from at least 1915 until 2006. Since portions of the subject parcel were historically used for agricultural purposes, there is a potential that agricultural related chemicals including pesticides, herbicides, and fertilizers may have been used and stored onsite. No evidence of pesticide or herbicide mixing areas or bulk storage areas was observed during the site reconnaissance or during Partner's review of historical aerial photographs. According to information provided by the client, the subject property is planned for commercial/warehouse development. The occupied areas of the subject property will either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil. Additionally, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely been present, if at all) will be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on planned development activities, Partner concludes that the possible use of agricultural chemicals does not represent a recognized environmental condition or a human health risk, and no additional investigation is required of the warehouse site. Additionally, based on this information,

vapor migration is not expected to represent a significant environmental concern at this time. Conclusions, Opinions, and Recommendations

Partner performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, San Joaquin County, California (the “subject property” or “warehouse site”).

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property; however, environmental issues were identified. Based on the conclusions of this assessment, Partner recommended no further investigation of the subject property.

### **Shallow Soil Investigation Report**

The purpose of the investigation was to evaluate the potential impact of organochlorine pesticides (OCPs), arsenic, and/or lead to shallow soil as a consequence of a release or releases from historical on-site agricultural-related uses on the warehouse site.

Partner collected 120 shallow soil samples on May 12, 2021, which were transported in an iced cooler under chain-of-custody protocol to SunStar Laboratories Inc., a state-certified laboratory [California Department of Public Health Environmental Laboratory Accreditation Program certificate number 2250] in the City of Lake Forest, California, for analysis. A total of 30 composite samples were analyzed for OCPs via Environmental Protection Agency (EPA) Method 8081. Additionally, 30 discrete soil samples were analyzed for arsenic and lead via EPA Method 6010B.

Based on the results, low concentrations of lead were detected in localized areas of the northern parcel (APN 192-020-140). Lead was detected in two discrete soil samples; however, the detections do not exceed residential or commercial screening criteria and are likely representative of background conditions. As such the identified lead impacts in soil do not represent a significant risk to human health or the environment associated with the development of the warehouse site.

### **Local Plan for Hazardous Materials**

Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In the event of an accidental release of hazardous materials, the local CUPA and emergency management agencies (e.g., Police and Fire) would respond. As described in the General Plan EIR, all future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to hazardous materials. As

future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA. Specifically, Policy PS-4.5 requires Coordination with the LMFDD to ensure that businesses in the city which handle hazardous materials prepare and file a Hazardous Materials Business Plan (HMBP). The HMBP shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

## **Conclusion**

Based on the results of the site investigations as described above, the site assessments have revealed no recognized environmental conditions in connection with the subject warehouse property. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed in the Lathrop General Plan EIR. Additionally, consistent with the General Plan Policy PS: 4-4 if the warehouse project will store, transport or handle hazardous materials a HMBP shall be prepared.

### *Project Requirement(s)*

***Requirement HAZ-1:*** *If the project will store, transport or handle hazardous materials the project shall be required to prepare and file a Hazardous Materials Business Plan (HMBP) with the City prior to issuance of Certificate of Occupancy.*

### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 amendment and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for site specific studies, and policies and actions that limit any exposure or upset of hazardous materials. Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In the event of an accidental release of hazardous materials, the local CUPA and emergency management agencies (e.g., Police and Fire) would respond. All future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to hazardous materials. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA.



This impact was adequately addressed in the EIR. The proposed CLSP Phase 2 Amendment and Municipal Code Update are consistent with the uses and standards identified in the General Plan and would not result in a new or more severe impact than what was previously analyzed in the Lathrop General Plan EIR.

**Response c): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

The proposed warehouse project has limited potential for the routine transport, use, or disposal of hazardous materials as discussed above. One school, is located within one-quarter mile of the warehouse site. The proposed site uses do not propose business activities that will result in hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste. Potential impacts from truck emissions and TACs are discussed in detail in the Air Quality portion of this report and were found to be less than significant.

All hazardous materials would be handled in accordance with Federal, State, local, and County requirements, which would limit the potential for a project to expose nearby uses, including schools, to hazardous emissions or an accidental release.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR based on the findings of the Phase I Environmental Assessment for the warehouse project. The proposed project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the CLSP Phase 2 Project area. Additionally, all future projects within the CLSP Phase 2 Plan area would be subject to the General Plan requirements for site specific studies, and policies and actions that limit any exposure or upset of hazardous materials. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA.

This impact was adequately addressed in the EIR. The proposed CLSP Phase 2 update and municipal code amendments are consistent with the uses and standards identified in the General Plan and would not result in a new or more severe impact than what was previously analyzed in the Lathrop General Plan EIR.

**Response d): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

According to the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or adjacent to the warehouse site. The warehouse site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR based on the results of the Phase 1 ESA. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed in the Lathrop General Plan EIR.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

According to the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, CLSP Phase 2 Project area. The site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These plans are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA.

This impact was adequately addressed in the EIR based on the analysis contained in Chapter 3.8. The proposed project is consistent with the uses and standards identified in the General Plan and would not result in a new or more severe impact than what was previously analyzed.

**Responses e): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The General Plan EIR (Chapter 3.12 Noise) determined the General Plan area is not located within two miles of a public or private airport. Therefore item “c” was not further discussed. The proposed warehouse project and the CLSP Phase 2 Amendment and Municipal Code Update would not expose people in the Project site or within the CLSP Phase 2 Plan Area to excessive noise levels from aircrafts. As such, this topic does not require further analysis. The proposed project would not result in a new or more severe impact than what was previously analyzed in the Lathrop General Plan EIR.

**Response f): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The proposed project does not include actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project involves the development of limited industrial land uses within an urbanized environment, and would not interfere with any emergency response or evacuation plans.

The warehouse project site has been designed to keep all truck traffic as far from residential areas, bicycle facilities, and pedestrian facilities as possible, in order to reduce potential conflicts and hazards, and in order to not interfere with emergency responders. The warehouse site also includes a dedicated emergency vehicle access drive on Dos Reis Road.

The CLSP-2 Amendment Plan Area includes several new roadways within an interconnected roadway system. These new roadways, along with improvements to existing roadways, provide the necessary access for the Plan Area. The roadway network is shown on the Vehicular Circulation Plan (Figure 3.4 in the CLSP-2 Amendment), while the locations of each individual street section are identified on the Street Sections Key Map (Figure 3.5 in the CLSP-2 Amendment).

The proposed CLSP-2 Amendment roadway system is based on a pattern of streets that provides safe and efficient access for vehicles, bicycles and pedestrians. The roadway system includes an extension of Golden Valley Parkway and Stanford Crossing, widening of Dos Reis Road, De Lima Road, and Manthey Road, and the construction of several new local industrial roads consistent with the 2022 Lathrop General Plan. The addition of traffic signals may be required at various intersections as determined for future specific project developments in the CLSP-2 Amendment Plan Area.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR based on the analysis contained in Chapter 3.8. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response g): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less

heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The City of Lathrop is not categorized as a “Very High” FHSZ and no cities or communities within San Joaquin County are categorized as a “Very High” FHSZ by CalFire. The majority of the Lathrop is located within a Local Responsibility Area (LRA). The portions of the Lathrop located in an LRA include: a developed area adjacent south of the Defense Depot San Joaquin Sharpe site and the Sharpe AAF Airport, a developed area near D’Arcy Parkway, an area along the San Joaquin River, just west of Interstate 5, and an undeveloped area along the San Joaquin River in the westernmost Planning Area. The Lathrop Planning Area is covered by two independent Fire Protection Districts: the Lathrop-Manteca Fire District (LMFD) and French Camp-McKinley Fire District (French Camp). The LMFD provides fire protection services for all lands within the City of Lathrop being primarily lands south of Roth Road. The French Camp provides fire protection for the rural area primarily south of Stockton and north of Roth Road both east and west of Interstate 5. French Camp service boundaries include some 16 square miles, including a small portion of Stockton. Approximately 805 acres of the French Camp Fire District is in the Lathrop Area of Interest and about 149 acres is in the Sphere of Influence.

Development of the warehouse project and development allowed under the CLSP Phase 2 update and municipal code amendments would not place people and/or structures in areas at significant risk of wildland fires.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR in Chapter 3.8. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**X. HYDROLOGY AND WATER QUALITY -- WOULD THE PROJECT:**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			X	
i) result in substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

Grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. Performance Standard NDCC-13 of the City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site. A SWPPP describes Best Management Practices (BMPs) to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project, including post-construction impacts. The City requires all development projects to use BMPs to treat runoff including standards included in the Multi-Agency Post-construction Standards (LID). The City of Lathrop, in collaboration with San Joaquin County, Tracy, Lodi, Manteca, and Patterson prepared a Multi-Agency Post-construction Stormwater Standards Manual to provide consistent guidance for municipal workers, developers and builders in implementing the requirements under the Statewide Small MS4 NPDES permit (2013-0001-DWQ).

The General Plan Public Services and Facilities Element includes policies and actions that require projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process. Specifically, Action PFS-4.5 includes development review requirements:

Action PFS-4.5 Development Review. Continue to require all development projects to:

- A. Demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the City's Small MS4 Phase 2 permit; and
- B. Analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

The warehouse project is required to submit detailed drainage plans, as well as the preparation of storm water plans including a SWPPP. The General Plan EIR determined that this impact was less than significant. The proposed development site is consistent with the General Plan light industrial uses, and would be required to implement all General Plan policies and actions relevant to storm water. This impact was adequately addressed in the EIR analysis contained in Chapter 3.9 of the General Plan EIR. The warehouse project has completed and submitted detailed water quality control plans that demonstrate consistency with the requirements of the Lathrop General Plan. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*Project Requirement(s)*

***Project Requirement Hydro-1:*** *The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that includes specific types and sources of stormwater pollutants, determine the location and nature of potential impacts, and specify appropriate control measures to eliminate impacts on receiving water quality from stormwater runoff. The SWPPP shall require treatment BMPs that incorporate, at a minimum, the required hydraulic sizing design criteria for volume and flow to treat projected stormwater runoff. The SWPPP shall comply with the most current standards established by the RWQCB, and the Lathrop Storm Water Program. Best Management Practices shall be subject to approval by the City Engineer and RWQCB.*

***Project Requirement Hydro 2:*** *Prior to approval of the building permit, the project applicant shall submit a detailed Stormwater Control Plan constant with General Plan Action PFS-4.5, and the criteria set forth in the Lathrop Stormwater Program.*

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for light industrial and open space land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for hydrological studies, and policies and actions that limit hydrological impacts as detailed in the General Plan. This impact was adequately addressed in the General Plan EIR in Chapter 3.9. The General Plan EIR determined that this impact was less than significant. The proposed development site is consistent with the General Plan light industrial and open space uses identified for the Central Lathrop Specific Plan area and would be required to implement all General Plan policies and actions relevant to storm water. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The proposed warehouse project would not result in the construction of new groundwater wells, nor would it increase the levels of groundwater pumping.

The City plans to utilize its existing groundwater wells to supply water in the future. As discussed in the City's UWMP the current estimated annual groundwater yield is 4,720 AFY and the City currently has no plans to install additional groundwater wells or expand

its groundwater production. Additionally, as described in the UWMP the City's ability to utilize groundwater wells will not be impacted by groundwater levels within the Tracy groundwater basin, and would not require the City to limit groundwater production to maintain a sustainable groundwater budget. Based on the available information, it is anticipated that 100% the City's current estimated groundwater yield is available for the planning horizon.

Development projects result in new impervious surfaces and could reduce stormwater infiltration and groundwater recharge. Infiltration rates vary depending on the overlying soil types. However, given the relatively large size of the groundwater basin, the areas of impervious surfaces added as a result of project implementation will not adversely affect the recharge capabilities of the local groundwater basin.

The General Plan EIR determined that impacts associated with groundwater and groundwater recharge would be less than significant. The proposed warehouse project is consistent with the uses and development intensities analyzed in the General Plan EIR, and would not result in any new or more severe impacts than those analyzed and disclosed in the General Plan EIR.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan policies and actions that support groundwater recharge and water conservation. For example, Policy RR-8.6 supports the sustainable yield and calls for the City to operate the City's well system in such a manner as to not exceed the sustainable yield of the local groundwater aquifers. While policy RR-8.7 supports groundwater recharge through the promotion of and the use of permeable surface materials and areas of open space, in order to decrease surface runoff and promote groundwater recharge. Subsequent development projects proposed within the CLSP-2 area would be subject to these policies as well as additional policies and actions listed below that support groundwater conservation and recharge.

The General Plan EIR determined that this impact was less than significant. The proposed CLSP-2 amendment and municipal code amendments propose light industrial and open space uses consistent with the uses intended by the General Plan and would be required to implement all General Plan policies and actions relevant to storm water. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.



**Responses c), e): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

There are no rivers, streams, or water courses located on or immediately adjacent to the project site. As such, there is no potential for the project to alter a water course, which could lead to on or offsite flooding. Drainage improvements associated with the project site would be located on the project site, and the project would not alter or impact offsite drainage facilities.

Development of the warehouse project site would potentially increase local runoff production, and would introduce constituents into storm water that are typically associated with urban runoff. These constituents include heavy metals (such as lead, zinc, and copper) and petroleum hydrocarbons. BMPs consistent with the Multi-Agency Post-construction Stormwater Standards Manual provide consistent guidance for municipal workers, developers and builders in implementing the requirements under the Statewide Small MS4 NPDES permit (2013-0001-DWQ) will be applied to the proposed site development to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels.

The warehouse project would be subject to all relevant General Plan policies and actions that aim to reduce water pollution from construction and new development, and protect and enhance natural storm drainage and water quality features. The policies include numerous requirements that would reduce the potential for implementation of the proposed project to result in increased water quality impacts. In addition, compliance with the Clean Water Act and regulations enforced by the RWQCB would ensure that construction-related impacts to water quality are minimized and projects comply with all applicable laws and regulations.

In order to ensure that stormwater runoff from the warehouse project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, Project Requirement Hydro 1 requires the preparation of a SWPPP. As described previously, the SWPPP would require the application of BMPs to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases of the project. Additionally, the warehouse project is subject to the project Requirement Hydro 2 that requires the project applicant to prepare and submit a Stormwater Control Plan. The warehouse project Stormwater Control Plan has been completed and submitted to the City for review as part of the entitlement application.

New development projects in the City of Lathrop are required to provide site-specific storm drainage solutions and improvements that are consistent with the overall storm

drainage infrastructure approach. The project applicant is required to submit a detailed storm drainage infrastructure plan to the City for review and approval. The warehouse project storm drainage infrastructure plans have been submitted to the City as part of the applicant's entitlement package. The warehouse project's storm drainage infrastructure plans demonstrate that there is adequate infrastructure capacity to collect and direct all stormwater generated on the project site within the on-site retention and detention facility to the City's existing stormwater conveyance system and demonstrate that the project would not result in on- or off-site flooding impacts.

The development of an onsite storm drainage system, the payment of all applicable development fees, and the implementation of Requirements Hydro 1 and Hydro 2 would ensure that this impact is constant with the City General Plan and stormwater requirements.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR based on the measures incorporated into the warehouse project site plan.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the CLSP Phase 2 Project area.

The General Plan EIR determined that this impact was less than significant. The proposed development site is constant with the uses intended by the General Plan and would be required to implement all General Plan policies and actions relevant to storm water. This impact was adequately addressed in the EIR because future development projects are required to incorporate stormwater treatment measures into the site plan design. The proposed CLSP Phase 2 Amendment and Municipal Code Update project would not result in a new or more severe impact than what was previously analyzed.

#### **Response d): Adequately addressed in the General Plan EIR.**

##### *WAREHOUSE SITE:*

Floodplain zones are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist cities in mitigating flooding hazards through land use planning. FEMA also outlines specific regulations for any construction, whether residential, commercial, or industrial within

100-year floodplains. The warehouse site is not located within the FEMA designated 100-year floodplain.

Tsunamis are defined as sea waves created by undersea fault displacement. A tsunami poses little danger away from shorelines. As Lathrop is miles inland, the warehouse site is not exposed to flooding risks from tsunamis and adverse impacts would not result.

A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir. The warehouse project is not located near a closed body of water.

The warehouse project site is not located within the FEMA designated 100-year floodplain, or within inundation areas from tsunami or seiche events.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR because there are no seiche or tsunami related effects on the warehouse project site. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area.

The project site is not located within the FEMA designated 100-year floodplain, or within inundation areas from tsunami or seiche events. The General Plan EIR determined that this impact was less than significant. The Project is constant with the uses intended by the General Plan and would be required to implement all General Plan policies. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*XI. LAND USE AND PLANNING - Would the project:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Physically divide an established community?			X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Response a): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The General Plan establishes the City’s vision for future growth and development. Goal LU-1 of the General Plan aims to accommodate a mix and distribution of uses that meet the needs of the community. The land uses allowed under the General Plan (GP EIR Figure 2.0-2) provide opportunities for cohesive new growth at in-fill locations within existing urbanized areas of the city, as well as new growth adjacent to existing urbanized areas within the existing City Limits, and would not create physical division within the community. In addition, the General Plan’s Goal LU-5 aims to ensure that new development is compatible with and well integrated with existing development. The General Plan Land Use Map designates sites for a range of urban and developed uses as well as open spaces. The General Plan determined it would have a less than significant impact associated with the physical division of an established community. The warehouse project site is designated Limited Industrial on the 2022 General Plan Land Use Map. The proposed warehouse project is consistent with this land use designation, and is the type of development contemplated for this site by the General Plan. The proposed uses are consistent with the vision for future growth and development established by the General Plan.

The proposed warehouse project does not include any new areas designated for urbanization or other features that would divide existing communities. The warehouse project includes new roadways, including those designated for trucks to prevent land use conflicts and provide direct routes for truck trips that do not traverse residential areas. Dedicated truck access located at the very northeast corner of the warehouse property is the only access point for ingress and egress of truck traffic. Trucks are restricted from going south of this access point and will come from and to the north towards the Roth Road/Interstate 5 (I-5) interchange only. This roadway and drive access configuration ensures that truck traffic would be limited to the stretch of Manthey Road, west of

Interstate 5, and north of Golden Valley Parkway. This roadway segment does not traverse any residential areas or established communities.

As such, the proposed warehouse project is consistent with the adopted vision, allowed uses, and standards identified in the General Plan for the CLSP-2 area, and would not result in any new or a substantial increase in the severity of impacts, beyond those that were already addressed in the General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR because the proposed warehouse project is consistent with the land use designation established for the project site and the CLSP-2 area. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The CLSP-Phase 2 project area is part of a master planned area within CLSP Specific Plan Area. The General Plan provides specific guidance regarding the planning and development goals for the CLSP Phase 2 area.

The land uses allowed under the adopted 2022 Lathrop General Plan provide opportunities for cohesive new growth within existing urbanized areas of the city, as well as new growth adjacent to existing urbanized areas, but would not create physical division within the community.

As such, the proposed CLSP Phase 2 Amendment and Municipal Code Update project is consistent with the adopted vision, allowed uses, and standards identified within the General Plan, and would not result in any new or increased impacts, beyond those that were already addressed in the General Plan EIR.

The General Plan EIR determined that the CLSP phase 2 and Zoning Update would not physically divide an established community because light industrial uses would be setback from any residential areas and thus would be less than significant. This impact was adequately addressed in the EIR because the proposed project is consistent with the General Plan. The proposed project would not result in a new or more severe impact than what was previously analyzed in the General Plan EIR.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The General Plan was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection.

Discussion of the General Plan’s consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, traffic, water quality, etc.) is provided in the relevant chapters of the General Plan EIR.

The proposed warehouse project is required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of development projects. The proposed warehouse project does not propose to amend or change any policy or action that has been adopted to mitigate an environmental impact.

The proposed warehouse project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts, beyond those that were already addressed in the General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR because the warehouse project is designed in a manner consistent with the applicable General Plan policies. The proposed project would not result in a new or more severe impact than what was previously analyzed.

#### *CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE*

As described above the General Plan was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection.

The proposed CLSP Phase 2 Amendment and Municipal Code Update project is required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of development projects. The proposed updates to the CLSP and municipal code are required to bring these documents into consistency with the General Plan do not involve changes in any policy or program that has been adopted to mitigate an environmental impact. The proposed CLSP Phase 2 Amendment and Municipal Code Update project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts, beyond those that were already addressed in the General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR because the CLSP Phase 2 amendments include policies designed to minimize land use incompatibility between the light industrial uses

and nearby residential uses. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*XII. MINERAL RESOURCES -- Would the project:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a), b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE AND CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE AREA*

According to the General Plan EIR, the most important mineral resources in the region are sand, and gravel and are located in the southwest portions of the city. There are no known mineral resources located in the CLSP Phase 2 Area, including the proposed warehouse site. As shown in Figure 3.11-1 (Mineral Resources Zones) of the City’s General Plan EIR, there are no mineral resources located in the CLSP Phase 2 Plan Area. Additionally, there is no land designated or zoned for mineral resources within the City limits or in the CLSP-2 Area. Given that no known mineral resources are located in the vicinity of the CLSP-2 Area, implementation of the proposed project would not result in the loss of availability of a known mineral resource or of a locally-important mineral resource recovery site.

The General Plan EIR determined that this impact was significant as the General Plan and development allowed under the Land Use Map would permanently convert undeveloped portions of Lathrop to urban uses and this may preclude the recovery of mineral resources from the southwestern portion of the city. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.



**XIII. NOISE -- WOULD THE PROJECT RESULT IN:**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

**BACKGROUND**

An Acoustical Assessment for the Project was prepared by Saxelby Acoustics May 15, 2023. This report documents the results of an Acoustical Assessment completed for the proposed warehouse Project. The purpose of this Acoustical Assessment is to evaluate the Project’s potential construction and operational noise and vibration levels associated with the Project and determine the level of impact the Project would have on the environment.

Results from the Acoustical Assessment are described below. The full acoustical assessment report and noise data is included as Attachment F.

**RESPONSES TO CHECKLIST QUESTIONS**

**Response a): Adequately addressed in the General Plan EIR.**

**EXISTING AMBIENT NOISE LEVELS**

To quantify the existing ambient noise environment in the warehouse project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements locations near the warehouse project site. Noise measurement locations are shown in Attachment F Figure 2. A summary of the noise level measurement survey results is provided in Attachment F and included in Table Noise 1 below. Complete results of the noise monitoring are included in Attachment F Appendix B.

**Table Noise 1: Summary of Existing Background Noise Measurement Data**

Site	Date	L <sub>dn</sub>	Daytime L <sub>eq</sub>	Daytime L <sub>50</sub>	Daytime L <sub>max</sub>	Nighttime L <sub>eq</sub>	Nighttime L <sub>50</sub>	Nighttime L <sub>max</sub>
LT-1: 660 Ft West of CL of Interstate 5	10/7/22	68	59	58	74	62	61	74
	10/8/22	66	59	57	72	60	59	71
	10/9/22	65	58	57	72	59	58	69
	<b>Average</b>	<b>66</b>	<b>59</b>	<b>57</b>	<b>73</b>	<b>60</b>	<b>59</b>	<b>71</b>
LT-2: 20 ft North of CL of Dos Reis Road	10/7/22	60	59	45	80	50	45	70
	10/8/22	59	56	42	80	52	45	67
	10/9/22	58	57	42	81	49	43	66
	10/10/22	59	55	43	80	52	47	72
	<b>Average</b>	<b>59</b>	<b>57</b>	<b>43</b>	<b>80</b>	<b>51</b>	<b>45</b>	<b>69</b>

*Notes:*

- All values shown in dBA
- Daytime hours: 7:00 a.m. to 10:00 p.m.
- Nighttime Hours: 10:00 p.m. to 7:00 a.m.
- Source: Saxelby Acoustics 2022

**REGULATORY CONTEXT**

***City of Lathrop General Plan N-1 POLICIES***

N-1.3 Indoor Residential Noise Level. Ensure that new development does not result in indoor noise levels exceeding 45 dBA Ldn for residential uses by requiring the implementation of construction techniques and noise reduction measures for all new residential development.

N-1.4 Acoustical Studies. For projects that are required to prepare an acoustical study, the following stationery and transportation noise source criteria shall be used to determine the significance of those impacts.

- A. Stationary and Non-Transportation Noise Sources – A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.
- B. Transportation Noise Sources -

1. Where existing traffic noise levels are less than 60 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +5 dB Ldn increase in roadway noise levels will be considered significant;
2. Where existing traffic noise levels range between 60 and 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +3 dB Ldn increase in roadway noise levels will be considered significant; and
3. Where existing traffic noise levels are greater than 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB Ldn increase in roadway noise levels will be considered significant.

N-1.15 Construction Noise. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified in Table N-3, or, if the criteria cannot be met, to the maximum extent feasible complying with Title 15 of the LMC (Building and Construction) and use best practices. Construction activities outside of the permitted construction hours identified in the LMC may be approved on a case by case basis by the Building Official.

**TABLE Noise 2: PERFORMANCE STANDARDS FOR STATIONARY NOISE SOURCES, INCLUDING AFFECTED PROJECTS**  
<sup>1,2,3,4</sup> (N-3)

Noise Level Descriptor	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
Hourly Leq, dB	55	45

1. Each of the noise levels specified above should be lowered by 5 dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered to be particularly annoying and are a primary source of noise complaints.
2. No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.
3. Stationary noise sources which are typically of concern include, but are not limited to, the following:
 

a) HVAC Systems	b) Cooling Towers/Evaporative Condensers
c) Pump Stations	d) Lift Stations
e) Emergency	f) Boilers
g) Steam Valves	h) Steam Turbines
i) Generators	j) Fans
k) Air Compressors	l) Heavy Equipment
m) Conveyor Systems	n) Transformers
o) Pile Drives	p) Grinder
q) Drill Rigs	r) Gas or Diesel Motors
s) Welders	t) Cutting Equipment
u) Outdoor Speaker	v) Blowers
4. The types of uses which may typically produce the noise sources described above include but are not limited to: industrial facilities, pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

## CONSTRUCTION

As described in the General Plan EIR (Chapter 3.12 – Noise), new development, maintenance of roadways, and installation of public utilities and infrastructure generally require construction activities. These activities include the use of heavy equipment and impact tools. Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction could result in periods of significant ambient noise level increases and the potential for annoyance. However, as described in the General Plan EIR the General Plan includes policies and actions that are intended to reduce noise associated with construction noise. Specifically, Policy N-1.15 would reduce noise associated with construction noise.

- N-1.15 Construction Noise. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified in Table N-3, or, if the criteria cannot be met, to the maximum extent feasible complying with Title 15 of the LMC (Building and Construction) and use best practices. Construction activities outside of the permitted construction hours identified in the LMC may be approved on a case-by-case basis by the Building Official.

Additionally, the City of Lathrop Noise Ordinance sets general limits for community noise exposure. The Noise Ordinance standards are contained in Section 8.20 of the Lathrop Municipal Code. Construction activities are exempt from these regulations, when conducted according to Section 8.20.110, as outlined below.

Lathrop Municipal Code Section 8.20.110 (Construction of buildings and projects) *“It shall be unlawful for any person within a residential zone or within a radius of five hundred (500) feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of ten p.m. of one day and seven a.m. of the next day, or eleven p.m. and nine a.m. Fridays, Saturdays and legal holidays, in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefore has been duly obtained from the office or body of the city having the function to issue permits of this kind. No permit shall be required to perform emergency work as defined in Sections 8.20.010 through 8.20.040. (Prior code § 99.40)”*

The General Plan EIR determined that Implementation of the proposed policies and actions of the General Plan will ensure noise impacts from construction are less than significant. The Proposed warehouse project is consistent with the uses and building intensities identified in the General Plan. There are no new or changed circumstances relevant to the warehouse as compared to the General Plan EIR that would result in a

new significant impact or a significant impact that is substantially more severe than significant impacts previously disclosed.

## **RESULTS AND ANALYSIS**

The City of Lathrop General Plan limits stationary noise increases to 3 dBA, or the General Plan's Table N-3 standards, whichever is greater. The nighttime (10:00 p.m. to 7:00 a.m.) average noise level standard is 45 dBA Leq, as shown in Table Noise-2. Table Noise 1 indicates that the average ambient noise level during nighttime hours at the closest sensitive receptors to the southwest is 51 dBA Leq. At the sensitive receptors to the southwest, a project-generated noise level of 51 dBA Leq would result in a total noise level of 54 dBA Leq, resulting in a 3 dBA increase. Therefore, the nighttime noise level standard applicable to the proposed warehouse project is 51 dBA Leq.

The primary noise source associated with operation of the warehouse project is truck and automobile circulation and loading docks. Single family residential land uses are located to the north, west, and south of the project, Lathrop High School is located to the west of the warehouse project, and Interstate 5 (I-5) is located directly east of the project. The warehouse project is located northwest of the intersection of South Manthey Road and Dos Reis Road.

The proposed warehouse project is projected to generate 2,798 daily automobile trips with 203 trips in the morning peak hour and 680 daily heavy truck trips with 95 trips in the morning peak hour (TJKM). Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. It was assumed that the morning peak hour could occur during nighttime (10:00 p.m. to 7:00 a.m.) hours.

Saxelby Acoustics conducted noise level measurements at the existing Ashley Facility located at 18290 S Harlan Road in Lathrop, California. Measurements were conducted of the loading dock area during a weekday peak hour of use. Activities during the peak hour include truck arrival/departures, truck idling, truck backing, air brake release, passenger vehicle trips to and from docks, and operation of forklifts. Loading dock activity was found to generate continuous average noise levels of approximately 57 dBA Leq at the edge of the truck maneuvering lanes, approximately 120 feet from the façade of the warehouse building at the center of the loading area. Loading dock activity was assumed to operate at this level continuously during nighttime (10:00 p.m. to 7:00 a.m.) hours.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed equipment, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-

2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. Figure 3 (in Attachment F) shows the noise level contours resulting from operation of the project.

As shown described in the Noise Report, (Attachment F) the proposed warehouse project is predicted to generate noise levels of up to 45 dBA Leq at the nearest residences to the southwest and 39 dBA Leq at the residences to the northeast, resulting in a maximum increase of 0.9 dBA at nearby residences. This complies with the adjusted nighttime noise level standard of 51 dBA Leq and limit of a 3 dBA increase. Therefore, no additional noise control measures are required to achieve compliance with the City of Lathrop noise level standards.

The proposed warehouse project is predicted to comply with the City of Lathrop noise level standards with no additional noise control measures. The proposed project is consistent with the adopted vision and uses identified within the General Plan, and would not result in any new or increased impacts, beyond those noise impacts that were already addressed in the General Plan EIR.

*Project Requirement(s)*

***Requirement N-1: Implement General Plan Policy N-1.15, and Lathrop Municipal Code Section 8.20.110 (Construction of buildings and projects).***

***CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:***

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and municipal code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for noise studies, and policies and actions that limit noise. This impact was adequately addressed in the EIR because any future development within the CLSP Phase 2 area would be required to conduct a site-specific noise analysis to ensure compliance with the standards established by the General Plan. The proposed CLSP Phase 2 Amendment and Municipal Code Update project is consistent with the uses and standards identified in the General Plan and would not result in a new or more severe impact than what was previously analyzed.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

As describe in the General Plan EIR Impact 3.12-5 construction activities facilitated by the General Plan may include demolition of existing structures, site preparation work, and excavation of below grade levels, foundation work, and new building erection. Demolition for an individual site may last several weeks and at times may produce substantial vibration. Excavation for underground levels may also occur on some project sites and vibratory pile driving could be used to stabilize the walls of the excavated area. Piles or drilled caissons may also be used to support building foundations.

No pile driving is proposed or would be anticipated for construction activities associated with the warehouse development, additionally no existing structures are located onsite so no demolitions are required.

The General Plan EIR (EIR) determined that this impact was less than significant. This impact was adequately addressed in the EIR because the project is consistent with the General Plan and is subject to all best practices related to construction noise included in the General Plan. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As describe in the General Plan EIR Impact 3.12-5 construction activities facilitated by the General Plan may include demolition of existing structures, site preparation work, and excavation of below grade levels, foundation work, pile driving, and new building erection. Demolition for an individual site may last several weeks and at times may produce substantial vibration. Excavation for underground levels may also occur on some project sites and vibratory pile driving could be used to stabilize the walls of the excavated area. Piles or drilled caissons may also be used to support building foundations.

No additional specific developments are proposed or would be approved as part of the CLSP Phase 2 update and Municipal Code amendments. These documents are being updated for consistency with the Lathrop General Plan and its vision for land uses within the Phase 2 Project area. Additionally, all future projects within the Phase 2 Plan area would be subject to the General Plan requirements for noise studies, and policies and actions that limit noise and vibration such as those presented above in General Plan Action N-2d. The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response c): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, AND CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described in the General Plan EIR (Chapter 3.9 – Hazards) the northernmost portion of the city is located within the airport influence area (AIA) for the Stockton Metropolitan Airport identified in the ALUCP. The lands within the City Limits that are located in the AIA are not within the Airport’s noise exposure contours.

The General Plan EIR (Chapter 3.12 Noise) determined the General Plan area is not located within two miles of a public or private airport. Therefore item “c” was not further discussed. The proposed project would not expose people in the Project site are or within the Phase 2 Plan Area to excessive noise levels from aircrafts. As such, this topic does not require further analysis. The proposed project would not result in a new or more severe impact than what was previously analyzed.



*XIV. POPULATION AND HOUSING -- WOULD THE PROJECT:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Response a), b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The proposed limited industrial land uses and the proposed warehouse site development would not directly induce population growth because no new housing units are proposed as part of the project, and does not includes any residential site uses. The proposed warehouse would create local jobs, however, they would not generate significant employment and would not expand the job base such that notable population growth may occur and would not result in growth over what has been planned by the Lathrop General Plan because the types of land uses proposed by the project are consistent with the uses analyzed in the General Plan EIR, at consistent densities and employment generation levels.

The employment growth that would occur as a result of approval and development of the proposed warehouse project was considered in the General Plan EIR. The proposed project is consistent with the land use designation that was addressed in the General Plan EIR, and the environmental effects of the employment growth generated by the project were considered in the analysis of buildout of the General Plan area. Additionally, as described in relevant sections of this document, employment growth attributable to the proposed warehouse project would not result in any significant site-specific environmental impacts related to other environmental topics. There are no aspects of the project as compared to the General Plan EIR that would result in a new significant impact or an impact that is more severe than disclosed in the EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described previously the employment growth that would occur as a result of future limited industrial project approvals was considered in the General Plan EIR. The proposed CLSP Phase 2 Plan Area is consistent with the land use designation that was addressed in the General Plan EIR, and the environmental effects of the employment growth generated by the project were considered in the analysis of buildout of the General Plan area. Additionally, as described in relevant sections of this document, employment growth attributable to the proposed project would not result in any significant site-specific environmental impacts related to other environmental topics. There are no aspects of the project as compared to the General Plan EIR that would result in a new significant impact or an impact that is more severe than disclosed in the EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*XV. PUBLIC SERVICES*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
A) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?			X	
iv) Parks?			X	
v) Other public facilities?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Response a): i) – v): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE AND CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

**i, ii) Police and fire protection**

Development of the warehouse site and CLSP-2 area for Limited Industrial uses was analyzed in the City’s General Plan EIR. The City’s General Plan EIR analyzed impacts to public services which may occur as a result of buildout of the General Plan.

The General Plan (Public Services and Facilities Element) includes a range of policies and actions to ensure that public services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development funds its fair share of services. Specifically, Action PFS-1e requires new development to pay its fair share of the cost of on and offsite community services and facilities that are necessary to serve the new development project.

The General Plan includes policies to ensure that fire protection and law enforcement services keep pace with new development. The proposed project is consistent with the uses envisioned for the project area by the General Plan. Development of the Project does not propose, and would not require the development of a new facility or modifications of an existing facility at this time. As such, there are no additional environmental impacts, beyond those disclosed in the relevant chapters of the General Plan EIR that are anticipated to occur.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR because potential new demand for these public services were analyzed. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**iii) Schools: Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE AND CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The Project would not require the construction of a new school facility and does not propose the construction of a new school facility which may cause substantial adverse physical environmental impacts. Development of the Project is expected to increase local employment, and some portion of these employees would have school-aged children that could attend either School District depending on where employees choose to live.

School Districts collect impact fees from new developments under the provisions of SB 50. Payment of the applicable impact fees by the project applicant, and ongoing revenues that would come from taxes, would fund capital and labor costs associated with school services. The adequacy of fees is reviewed on an annual basis to ensure that the fee is commensurate with the service.

The proposed warehouse project is consistent with the General Plan. Development of the project does not propose, and would not require the development of a new school facility or modifications of an existing facility at this time. As such, there are no additional environmental impacts, beyond those disclosed in the relevant chapters of the General Plan EIR.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**iv) Parks: Adequately addressed in General Plan EIR.**

*WAREHOUSE SITE AND CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described in the General Plan EIR, growth accommodated under the General Plan would include a range of uses that would increase the population of the city and also attract additional workers and tourists to the city. This growth would result in increased demand for parks and recreation facilities.

The warehouse project would result in the construction of a limited industrial warehouse building (consistent with the General Plan land use designation and standards) with no proposed recreational facilities. The warehouse project would not directly introduce new

residents to the City as no housing is proposed as part of the project; as such, the project would not be anticipated to result in new residents which would utilize nearby neighborhood parks, regional parks, or other recreational facilities. Employees of the warehouse are generally not anticipated to utilize nearby park areas. The proposed project would not significantly increase the use of existing parks such that substantial physical deterioration of the facility would occur or be accelerated.

The proposed warehouse project is consistent with the General Plan. Development of the Project does not propose, and would not require the development of a park facility or modifications of an existing facility at this time. As such, there are no additional environmental impacts, beyond those disclosed in the relevant chapters of the General Plan EIR that are anticipated to occur.

The EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR because potential new demand for these public services were analyzed. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**vi) Other Public Facilities: Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE AND CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described in the General Plan EIR (Chapter 3.13) development and growth facilitated by the General Plan would result in increased demand for public services, including, libraries, and other public and governmental services. The General Plan includes policies and actions to ensure that public services are provided at acceptable levels and that the City will maintain and implement public facility master plans, in collaboration with appropriate outside service providers and other agencies, to ensure compliance with appropriate regional, state, and federal laws and to provide efficient public facilities and services to Lathrop.

The proposed project would not directly lead to population growth and does not propose any residential uses. Additionally, the Project is consistent with the General Plan. Development of the project does not propose, and would not require the development of other public facilities or modifications of an existing facility at this time. As such, there are no additional environmental impacts, beyond those disclosed in the relevant chapters of the General Plan EIR that are anticipated to occur.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*XVI. RECREATION*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a), b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE*

The proposed warehouse project does not include any residential uses and would not directly lead to population growth. Demand for parks and recreational facilities within the City would not increase and the use of the City’s existing parks and recreation system would remain substantially the same compared to the existing conditions. Development of the project does not propose, and would not require the development of other recreation facilities or modifications of an existing facility. As such, there are no additional environmental impacts, beyond those disclosed in the relevant chapters of the General Plan EIR that are anticipated to occur. The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The CLSP Phase 2 Plan Area does not include any residential uses and would not directly lead to population growth. The CLSP-2 amendment would be consistent with the General Plan and would retain all open space and park uses identified by the General Plan within the CLSP-2 area. Demand for parks and recreational facilities within the City would not increase and the use of the City’s existing parks and recreation system would remain substantially the same compared to the existing conditions. The CLSP Phase 2 Amendment and Municipal Code Update does not propose, and would not require the development of other recreation facilities or modifications of an existing facility. However, it is noted that the CLSP-2 includes an extensive network of proposed bicycle and pedestrian facilities, and a proposed multi-use path adjacent to the San Joaquin River levee. As such, there are no additional environmental impacts, beyond those disclosed in

the relevant chapters of the General Plan EIR that are anticipated to occur. The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*XVII. TRANSPORTATION/TRAFFIC -- Would the project:*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Information included in the section is further detailed in Attachment H, Traffic Impact Analysis (TIA) Prepared by: TJKM, August 9, 2023.

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a): b): Impact adequately addressed in the General Plan EIR.**

***VMT Impacts***

Chapter 3.14 of the General Plan EIR includes a detailed analysis of VMT impacts associated with buildout of the Lathrop General Plan. The General Plan would result in increased VMT for employment-generating land uses and would also result in an increase in total VMT in comparison to the existing condition as well as in comparison to the baseline scenario. The General Plan is expected to result in VMT per employee exceeding 85 percent of baseline for employment-related land uses. This result is due to the change in the balance between jobs and housing in Lathrop that result from the General Plan, which is based upon the large increases in employment shown in Table 3.14-7 of the General Plan EIR.

*WAREHOUSE SITE:*

As described in the General Plan EIR, the General Plan goals, policies, and implementation measures will achieve meaningful reductions in VMT generated by land uses within the City however, this impact was found to be significant and unavoidable.

The warehouse project is located in TAZ #1744 of the SJCOG model. Currently, TAZ #1744 has five employees coded. The project will add a total of 1,295 employees. There



are three types of employment in this project; warehouse, office, and retail. From the project’s Site Plan, there are 1,400,000 square feet of warehouse, 25,000 square feet of office, and 100,000 square feet of retail. In order to make accurate employment estimates for the proposed warehouse project, the Traffic Study relied on information contained in the Southern California Council of Governments (SCAG) employment density study, which is considered an industry benchmark for employment ratios in California. The SCAG study finds that there are a median of 1,225 square feet per employee for warehouses, 466 square feet per employee for offices, and 1,023 square feet per employee for regional retail. Thus, it is expected that 1,143 new employees will come from the warehouse, 98 employees from the office, and 54 employees for the retail portion. 1,295 employees in the industrial land use category (which is what the SJCOG model uses for warehouses) was added in TAZ #1744 and the project year traffic model was rerun.

**Table Cir-1: VMT per Employee Comparison**

<b>TAZ</b>	<b>Base Year Average Daily VMT per Employee (per SJCOG Model)</b>	<b>Regional Average (per SJCOG Model)</b>	<b>15% Below Regional Average (per SJCOG Model)</b>	<b>Base Year <u>Plus</u> Project Average Daily VMT per Resident (per Model run)</b>
1744	10.48	19.1	16.2	15.43

TJKM TIA 2023.

As shown in Table Cir-1, the base year average daily VMT per employee for TAZ #1744 is 10.48. Adding in the project’s 1,295 employees brought the daily VMT per employee to 15.43, an increase of 4.95. The project’s 15.43 daily VMT per employee is lower than the San Joaquin County VMT threshold of 16.2. As such, the TIA found that the VMT impacts for the Ashley warehouse project are less-than-significant for the base year, and thus no mitigation is required for VMT impacts attributable to this warehouse project.

The proposed warehouse project is consistent with the uses and development intensities analyzed in the General Plan EIR. As such, the increase in per employee VMT that would result from project implementation was analyzed and accounted for in the General Plan EIR. The City determined that this was a significant and unavoidable impact, and adopted Findings of Fact and a Statement of Overriding Considerations.

Cumulative impacts associated with buildout of the General Plan Planning area were assumed in the General Plan EIR. The EIR prepared for the General Plan included limited industrial site uses consistent with what has been proposed by the warehouse project as well and these included in the CLSP Phase 2 update. The proposed project is consistent with uses identified for the project site by the Lathrop General Plan. This impact was

adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed. There are no peculiar or site specific impacts related to VMT that differ from the analysis and conclusions contained in the General Plan EIR.

### ***Relevant Plans, Policies, and Programs Related to the Transportation Network***

As described in the Lathrop General Plan EIR the City adopted a Bicycle Transportation Plan that establishes the City's goals and objectives for bicycle travel. The Bicycle Transportation Plan establishes standards for bicycle facilities and identifies planned bicycle network facilities to address the City's bicycle needs. The General Plan Circulation Element contains Policy CIR-2.1 and Implementation Actions CIR-2a and CIR-2g, which support bicycle and pedestrian routes and facilities and creating an active transportation plan supporting the development and funding of bicycle and pedestrian networks. Furthermore, the General Plan contains additional policies and implementing actions that support access to and the performance of transit, bicycle, and pedestrian facilities. Further, the Plan includes mixed-use development that is supportive of active transportation and transit.

The General Plan includes policies and actions that help make the circulation system, including transit, bicycle, and pedestrian facilities, consistent with applicable programs, plans, policies, and ordinances and address the needs of growth accommodated by the General Plan.

Although the General Plan policies and actions help make the circulation system, including transit, bicycle, and pedestrian facilities, consistent with applicable programs, plans, policies, and ordinances and address the needs of growth accommodated by the General Plan, increasing vehicle traffic may increase the number of collisions on Lathrop roadways, including collisions involving transit users, bicyclists, and pedestrians. The General Plan goals, policies, and implementation measures may achieve meaningful reductions in collisions within the City. The City at this time cannot demonstrate that collisions will be reduced to the degree that it meets these thresholds. Collision reduction also depends on factors such as user behavior, demographic change, household preferences for travel, the cost of fuel, and the competitiveness of other transportation modes relative to driving. Therefore, this impact was considered *significant and unavoidable* in the General Plan EIR.

The proposed warehouse project does not conflict with any of the City's adopted plans or programs related to the transportation network, nor would the project hinder ongoing or future efforts to implement transportation improvements throughout Lathrop. This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed. There are

no peculiar or site specific impacts that differ from the analysis and conclusions contained in the General Plan EIR.

### ***Pedestrian Impacts***

Pedestrian access to the warehouse project site is facilitated by new sidewalks along Dos Reis Road and Manthey Road, and paved walkways within the parking lot and crosswalks. The proposed warehouse project does not conflict with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is less than significant. The proposed project is consistent with uses identified for the project site by the Lathrop General Plan. This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

### ***Bicycle Impacts***

There are no existing bicycle facilities on De Lima Road, Manthey Road and Dos Reis Road. The project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is less than significant. The proposed project is consistent with uses identified for the project site by the Lathrop General Plan. This impact was adequately addressed in the General Plan EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

### ***Transit Impacts***

The project site is within a 3/4 mile of two San Joaquin RTD bus stops, located on the northwest corner of Lathrop Road/Harlan Road and in front of the Save Mart. Due to the lack of development north of Spartan Way, there are sidewalk gaps from the proposed project site to the bus stops. As development in the area increases, sidewalks should be installed to close the gap in pedestrian facilities. Impacts to transit service are expected to be less than significant. The proposed warehouse project is consistent with uses identified for the project site by the Lathrop General Plan. This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

### ***CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:***

No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and vision described in the General Plan and would be consistent with impacts previously identified. Cumulative impacts associated with buildout of the General Plan Planning area were assumed in the General Plan EIR. The EIR prepared for the General Plan evaluated the impacts of limited industrial site uses consistent with what has been proposed and

included in the CLSP Phase 2 update. The proposed project is consistent with uses identified for the project site by the Lathrop General Plan. This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Responses c, d): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

**Site Access & On-Site Circulation**

Vehicular & Truck access to the Property is proposed via four (4) access drives; one (1) access drive on Manthey Rd at the far northeast corner is dedicated for truck ingress/egress onto and from the Project. One (1) public and employee vehicular access mid-block on Manthey Rd is proposed for ingress/egress of the public and employees' access to the retail and office. Two (2) additional access points are proposed along Dos Reis Rd with the most eastern access proposed for public vehicular access to the retail and customer pick-up areas located at the southeast corner of the building. A fourth and final access is closed to the public and trucks and is reserved only for emergency vehicle access.

The warehouse site plan (included on Figure 3) orients the warehouse project to Manthey Rd. Public access to the Property will be provided via Manthey and Dos Reis Roads in the locations shown on the site plan. These points of access and internal circulation provide good access to users, employees, and customers, and serve to keep vehicle traffic and heavy truck traffic separated.

Dedicated truck access located at the very northeast corner of the property is the only access point for ingress and egress of truck traffic. Trucks are restricted from going south of this access point and will come from and to the north towards the Roth Road/Interstate 5 (I-5) interchange only.

The site plan identifies approximately 2,046 parking spaces provided throughout the development. Parking for trucks and employees is provided behind secured, gated access points as depicted on the site plan. Approximately 1,104 trailer parking spaces are provided behind secured, gated access points.

The proposed driveway locations, design, and sight distance are all adequate to ensure operational safety and emergency vehicle access.

The site plan shows all proposed pedestrian facilities on the project frontage and connectivity from Manthey Road to the retail showroom entrance. The project site plan does show four crosswalks connecting the passenger vehicle parking lot to the retail

showroom. The site plan shows two bike rack locations, one on the south side of the building and one on the east side. Sidewalks are planned to be provided within the passenger vehicle parking lot and along the eastern frontage of the building. Additionally, it appears that one sidewalk will front the Intersection #15 entrance (on the north side) that will connect the showroom to Manthey Road. The internal circulation on the project site is considered adequate and no specific site safety hazards have been identified by the TIA. The proposed project is consistent with uses identified for the project site by the Lathrop General Plan. This impact was adequately addressed in the General Plan EIR as demonstrated in the site specific traffic analysis. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and vision described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur.

*XVIII. TRIBAL CULTURAL RESOURCES*

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Responses a), b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

As described previously in the Cultural Recourse section of this report, as with any projects the include ground disturbing activities there is a potential for the discovery of prehistoric, ethnohistoric, or historic archaeological sites that may meet the definition of Tribal Cultural Resources (TCRs). Although no TCRs have been documented on the project site, the project is in a region where cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the TCR definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Due to the possible presence of undocumented TCRs within the project site, construction-related impacts on tribal cultural resources may occur.

The warehouse project would be required to implement all policies and actions included in the General Plan these include Action RR-3b that requires all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- a) If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all

work within 100 feet of the discovery shall cease, the Community Development Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and

- b) If human remains are discovered during any ground disturbing activity, work shall stop until the Community Development Director and the San Joaquin County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.

The implementation of these requirements would require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction activities, including human remains, and would be consistent with CEQA Guidelines Section 15064.5. The warehouse project would be subject to all applicable policies and actions included in the General Plan EIR intended to minimize and mitigate potential impacts to tribal resources. The General Plan EIR (EIR) determined that this impact was less than significant because any future accidental discovery of a tribal cultural resource would be protected via implementation of the General Plan policy requirements. This impact was adequately addressed in the EIR because there are no known tribal cultural resources on the warehouse project site, and protective measures for the inadvertent discovery of previously unknown resources are in place. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described previously the General Plan EIR identified various cultural and historic resources within the City.

Additionally, as described in the General Plan EIR the City of Lathrop conducted consultations with Native American Tribes under Senate Bill 18 (Chapter 905, Statutes of 2004), which requires local governments to consult with Tribes prior to making certain planning decisions. Senate Bill 18 (SB 18) also requires consultation and notice for a general and specific plan adoption or amendments with the purpose of preserving or mitigating impacts on cultural places that may be affected. The City also conducted Tribal consultations under the California Environmental Quality Act (CEQA) ((Public

Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as AB52, provisions which requires consulting for projects within the City of Lathrop's jurisdiction and that are within the traditional territory of the Tribal Organizations who have previously requested AB52 consultations with the City.

Tribal response during the General Plan EIR process included the California Miwok Tribe letter which emphasized that the City of Lathrop engage in government-to-government consultation with the Tribe. The letter also mentioned that there are significant Tribal cultural resources within the City. The Northern Valley Yokut/Ohlone/Bay Mewuk provided mitigation recommendations for when specific projects are implemented in the future and emphasized the need to hire Tribal monitors during construction activities. No further comments or response were received.

All future development projects within the CLSP-2 Area would be required to follow development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of tribal resources. Subsequent projects would be required to prepare site-specific project-level analysis to fulfill CEQA requirements.

The CLSP-2 Amendment and municipal code amendments do not directly propose any changes that would include adverse impacts to historic, archaeological, or cultural resources. Future developments within the CLSP Phase 2 project area may occur which could affect both known and yet to be identified historic and archaeological resources. The Lathrop General Plan includes policies and actions that would both reduce impacts to and conserve cultural, historic, and archaeological resources. Implementation of the policies and actions listed below, combined with CEQA review requirements, and would ensure that impacts to historic and archaeological resources are less than significant. As the City considers future development and infrastructure projects, each project will be evaluated to ensure conformance with the City's General Plan, Municipal Code, and applicable State and local regulations. Development and infrastructure projects would also be analyzed individually for potential environmental impacts as required by CEQA.

All future development within the CLSP Phase 2 Project area would be subject to all relevant General Plan policies and actions that provide protections for cultural, historical, and tribal resources. As future developments are proposed within the CLSP Phase 2 area they would be developed under a Limited Industrial use category (consistent with the General Plan), and would be required to be analyzed for site specific impacts consistent with their project descriptions and site plans. Future projects would be required to be reviewed in compliance with the General Plan and municipal code requirements and the California Environmental Quality Act (CEQA). No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and



vision described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur.

***XIX. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:***

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reductions goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

***RESPONSES TO CHECKLIST QUESTIONS***

**Responses a), Adequately addressed in the General Plan EIR.**

***WAREHOUSE SITE:***

**Water:** As described in the General Plan EIR, development and growth in the City under the General Plan would result in increased demand for water supplies, including water conveyance and treatment infrastructure. The General Plan includes policies and actions to ensure that water supplies are provided at acceptable levels and to ensure that development and growth does not outpace the provision of available water supplies.

The General Plan includes a range of policies designed to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. Projected water demands associated with General Plan buildout would not exceed the projected available water supplies during normal years, and the General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable source of clean potable water. Nevertheless, as described in the WSA prepared for the General Plan EIR, it is anticipated that the City, with implementation of the General

Plan, would have a slight deficiency in water supplies during multiple dry years 3 and 4 at buildout.

It is anticipated that water supply infrastructure will need to be extended to serve development of the site and these services are immediately available at the project boundary. All development in the city would be required to connect to existing water distribution infrastructure in the vicinity of each site, pay the applicable water system connection fees, and pay the applicable water usage rates. Future projects may be required to implement site specific and limited off-site improvements to the water distribution system in order to connect new project sites to the existing water infrastructure network. No new or expanded facilities are proposed or would be required from implementation of the proposed project. The project would include new employees and site uses consistent with the General Plan land uses and standards.

This impact was adequately addressed in the General Plan EIR because the infrastructure needed to serve buildout of the General Plan was fully analyzed in the General Plan EIR, and the proposed warehouse project is consistent with the development assumptions analyzed in the EIR. The proposed warehouse project would not result in a new or more severe impact than what was previously analyzed.

**Wastewater:** As described in the General Plan EIR, wastewater treatment facilities that serve the City include the MWQCF and the LCTF. These facilities are described below.

The City of Lathrop owns 14.7 percent of the MWQCF capacity by contract with the City of Manteca. The City does not participate in the operation of the facility, nor does it receive recycled water from the facility. As discussed in the City's Municipal Service Review and Sphere of Influence Plan, and as listed in Table Utilities 1-, the City is allocated 1.45 mgd of the total 9.87 mgd facility capacity. The MWQCF is permitted for future expansions of up to 26.97 mgd, of which the City would be allocated a maximum of 14.7 percent capacity or 3.97 mgd. Treatment at the MWQCF consists of primary sedimentation followed by roughing biotowers, conventional activated sludge, secondary clarification, tertiary filtration, and ultraviolet disinfection. Disinfected tertiary effluent is discharged to the San Joaquin River. A portion of the secondary effluent is not disinfected and is used to irrigate medians and agricultural fields.

**TABLE UTILITIES 1- FUTURE SEWER CAPACITY, MGD**

Year	2016	2020	2025	2030	2035	2040	BUILDOUT 2050
<i>DEMAND</i>							
<i>MWQCF Projected ADWF</i>	1.08	1.23	1.36	1.37	1.38	1.39	1.47
<i>LCTF Projected ADWF</i>	0.61	1.33	2.18	3.03	3.67	4.30	5.61
<b><i>ADWF Total</i></b>	<b>1.69</b>	<b>2.56</b>	<b>3.54</b>	<b>4.40</b>	<b>5.05</b>	<b>5.69</b>	<b>7.08</b>
<i>TREATMENT CAPACITY</i>							
<i>MWQCF</i>	1.45	1.45	1.45	1.45	1.45	1.45	1.45
<i>MWCQF Improvements</i>	0	0	0	0	0	0	0
<i>LCTF</i>	0.75	0.75	0.75	0.75	0.75	0.75	0.75
<i>LCTF Phase I</i>	0.25 <sup>(a)</sup>	0.25	0.25	0.25	0.25	0.25	0.25
<i>LCTF Phase II</i>	Not Complete <sup>(b)</sup>	1.33 <sup>(b)</sup>	1.0	1.0	1.0	1.0	1.0
<i>LCTF Phase III</i>		Not Complete <sup>(c)</sup>	2.0	2.0	2.0	2.0	2.0
<i>LCTF Phase IV(d)</i>					2.0	2.0	2.0
<b><i>Treatment Total</i></b>	<b>2.45</b>	<b>3.78</b>	<b>5.45</b>	<b>5.45</b>	<b>7.45</b>	<b>7.45</b>	<b>7.45</b>

SOURCE: LATHROP GENERAL PLAN EIR; WEST YOST ASSOCIATES, 2018. NOTES:

(A) COMPLETED IN 2017

(B) FACILITY IS SUBSTANTIALLY COMPLETED AS OF JUNE, 2018. FULL TREATMENT CAPACITY OF 1.5 MGD WILL BE AVAILABLE WHEN RIVER DISCHARGE BEGINS OPERATION IN LATE 2022, AS STORAGE AND DISPOSAL LIMITS WILL BE ELIMINATED, BUT WILL BE REDUCED TO 1.0 DUE TO HIGH BOD LOADING

(C) FACILITY IS UNDER DESIGN AND WILL BE AVAILABLE BY 2024

(D) LCTF PHASE IV IS EXPECTED TO BE AVAILABLE BY 2035

The LCTF is City-owned but operated by a private contractor, Veolia Water NA. The LCTF's treatment capacity was expanded to 2.5 mgd, with the completion of an expansion in 2018 and the capacity will be increased to 5.0 mgd with an expansion expected to be completed in 2025. The LCTF is planned to be expanded to a future permitted capacity of 6.0 mgd.

Wastewater treatment and disposal at the LCTF is regulated under the California Regional Quality Control Board Central Valley Region Waste Discharge and NPDES Requirements. LCTF applies the effluent to land for irrigation purposes as well as to the San Joaquin River through a recently constructed recycled water river discharge. The wastewater treatment processes at the LCTF includes secondary treatment, tertiary infiltration, and disinfection prior to storage and disposal. The LCTF produces disinfected

tertiary recycled water suitable for irrigation at parks, landscape strips, median islands, pond berms, and agricultural fields.

Wastewater treatment processes at the LCTF include secondary treatment, tertiary filtration, disinfection, and reuse for irrigation of agricultural and landscape use areas. The following major components make up the LCTF:

- Raw wastewater undergoes screening and grit removal prior to entering the influent pump station. A 0.95 MG steel tank provides diurnal flow equalization and short-term emergency storage. Wastewater in the tank is automatically returned to the influent pump station as treatment capacity becomes available.
- From the influent pump station, wastewater is distributed evenly to two Membrane Bioreactor treatment trains for a combined treatment capacity of 1.0 mgd. Each Membrane Bioreactor train includes an anoxic basin, recirculation mixers, an aeration basin, anoxic pumps, aeration and membrane blowers, membrane modules, a membrane tank, mixed liquor recycle pumps, and filtrate pumps.
- Disinfection is accomplished using sodium hypochlorite solution in a chlorine contact tank that provides more than 32 minutes of modal contact time. If disinfection fails, the effluent is rerouted back to the emergency storage basin and retreated.
- Tertiary treated effluent is discharged into Pond S5 for immediate storage, and is then transferred to off-site storage in Ponds S1, S2, S3, S6, S16, and the Crossroads Wastewater Treatment Effluent Storage Ponds A, B, and C.
- Waste activated sludge generated from LCTF is pumped to the solids handling facility located at the adjacent Crossroads Wastewater Treatment Facility. The solids handling facility includes a 0.19 MG aerobic sludge storage tank, two belt filter presses, and a concrete drying bed used for supplemental air drying of dewatered sludge when conditions permit. Air-dried sludge is temporarily stored on the drying bed until transportation to the City of Merced for land application.
- The City's existing recycled water system is governed by its NPDES permit and General Order through the California Regional Quality Control Board. The distribution system consists of three storage ponds; S5, S6 and S-28, and their associated pump stations. The City has approximately 30.3 miles of recycled water pipeline, as of 2018.

The RWQCB approved a San Joaquin River Discharge NPDES in 2020 and expires 31 March 2025. The City has constructed the required modifications to the LCTF to add required de-chlorination facilities and have constructed an outfall pipeline from the LCTF to the San Joaquin River. Developer Funding Agreements for the NPDES facilities return storage ponds and spray fields to the developers who funded the NPDES project, except

for Ponds S5, S6, A, B and C located at the LCTF plus Pond S16 on Stewart Tract which will all be retained as part of the permanent recycled water system.

As described in the General Plan EIR, Impact 3.15-3. The projected flows of the General Plan for the MWQCF and LCTF are not expected to exceed the treatment capacity available for treatment, under the General Plan. Given that projected wastewater generation volumes associated with General Plan buildout is not anticipated to exceed the capacity of the wastewater treatment provider to have adequate capacity, this impact was found to be less than significant.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Stormwater:** As described in the General Plan EIR, development under the General Plan would result in increased areas of impervious surfaces throughout the General Plan Planning Area, resulting in the need for additional or expanded stormwater drainage, conveyance, and retention infrastructure. The stormwater infrastructure necessary to serve the proposed project would involve development of some facilities on-site, extension of infrastructure to connect to existing facilities and connections to facilities within roadway rights-of-way. As part of the development review process the project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Project Requirement Hydro 2 requires the project applicant to submit a detailed Stormwater Control Plan constant with General Plan Action PFS-4.5, and the criteria set forth in the Lathrop Stormwater Program.

The General Plan EIR determined that this impact was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

**Water:** The City will supply potable water to the CLSP-2 Amendment Plan Area. The CLSP-2 Amendment Developers will fund the provision of water service. The City will provide potable groundwater from the City's existing well field and potable surface water from Phase 1 and/or the Phase 2 expansion of the South County Surface Water Supply Program (SCSWSP) by the South San Joaquin Irrigation District (SSJID).

The City has prepared a citywide 2020 Urban Water Management Plan (UWMP). The Plan reflects the City's existing and future water demands (including those of the Plan Area) compared to available water supplies to ensure that adequate water is, or will be, available to accommodate the CLSP-2 Amendment. The studies conclude that with the

combined groundwater and SCSWSP surface water sources adequate water supplies would be available to serve the CLSP-2 Amendment Plan Area.

This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Wastewater:** When the City adopted the CLSP in 2004, a public sewer system did not exist in the CLSP Plan Area. Existing rural residences and other developments disposed of their wastewater through private septic systems and/or leech fields. However, a public sewer system was installed with the CLSP Phase 1 development that was oversized for the CLSP Phase 2 Plan Area. New pipes and a new pump station will be required within the CLSP-2 Amendment Plan Area that will connect to the existing infrastructure within Phase 1. CLSP-2 Amendment Developers will fund or construct the new infrastructure through the payment of development impact fees.

This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Stormwater:** An existing levee along the San Joaquin River protects the Plan Area from flooding RD-17 operates and maintains the levee. The Federal Emergency Management Agency (FEMA) has categorized the Plan Area as being in Zone X as shown on Flood Insurance Rate Map (FIRM) panel numbers 06077C0605F and 06077C0610F. The Zone X definition relevant to the Plan Area is “areas protected by levees from 1% annual chance flood”.

The RD-17 levee system has been undergoing seepage berm and/or other improvement repair/\_upgrade projects to increase the resistance to under-seepage and through-seepage in order maintain compliance with applicable Federal, State, and local standards. A minimum 120 foot “no-build” buffer along the levee as measured from the levee toe is provided within the CLSP-2 Amendment Plan Area to allow adequate space for future improvements if/when needed.

RD-17 has been working with the Department of Water Resources (DWR) and the Central Valley Flood Protection Board (CVFPB) to evaluate options for providing 200-year protection for the Mossdale Tract including the CLSP-2 Amendment Plan Area. The 120’ “no-build” buffer within the CLSP-2 Amendment Plan Area provides sufficient area to accommodate any 100-year improvements and any additional incremental improvements to provide 200-year protection in the future in conjunction with the Mossdale Tract 200-year flood protection improvements to meet the urban level of flood protection criteria.

Using design standards developed in cooperation with the City, the CLSP drainage improvement program will provide for efficient discharge of runoff from a 10-year storm event while also protecting the site from flooding during a 100-year storm event. It is also desirable that a high degree of design flexibility be incorporated into the drainage program. This flexibility will allow sufficient latitude for each new development within the CLSP-2 Amendment Plan Area to design an internal system that meets its site-specific needs, so long as the design is consistent with the overall CLSP-2 Amendment Plan Area Drainage Plan.

The CLSP area is part of a larger watershed known as “the Northern Area” that includes areas both east and west of Interstate 5.

The CLSP-2 Amendment Plan Area is about 20 feet lower than the top of the adjacent San Joaquin River levee. Therefore, runoff must be pumped over/through the levee. To avoid adverse impact to the levees near the CLSP Plan Area, peak discharge is limited to 30% of the 100-year flow rate from the watershed as stated in the 2004 CLSP and CLSP EIR. Therefore, the CLSP-2 Amendment incorporates on-site detention to store excess runoff during periods of peak storm activity.

Two storm drain outfalls to the San Joaquin River exist within the CLSP Plan Area. One outfall is located within the Phase 1 area and the other is located within the Phase 2 area. The outfalls are sized to accommodate the development of the CLSP-2 Amendment Plan Area.

An existing storm drain force main is located within Dos Reis Road and connects existing development east of Interstate-5 to the existing outfall located at the end of Dos Reis Road.

When the City approved the 2004 CLSP, runoff from the CLSP Plan Area was collected in a system of shallow agricultural ditches, roadside ditches, and percolation basins with some small private agricultural pumps that discharged water to the San Joaquin River. However, public storm drain infrastructure is now available that was built with Phase 1 of the CLSP. Existing pipes are located at the northern end of Golden Valley Parkway just south of Dos Reis Road and at the northern end of Stanford Crossing.

Shallow groundwater exists throughout the CLSP-2 Amendment Plan Area and is influenced by both the water level in the river and sub-surface flow from areas of higher elevation to the east, as well as local irrigation practices. Even though the groundwater level may decline with a reduction in farming activities, it is expected that this high ground water condition will generally persist after development, impacting both construction and the future operation of the storm drain system. Infiltration into the



storm pipes through joints and underground structures can result in excessive pumping demands throughout the life of the project. This impact will be reduced by proper installation of pipes having rubber gasket sealed joints.

High groundwater levels can also impact the effectiveness of detention basins. To the extent that groundwater enters the basins, the storage available for the runoff is diminished. There are no detention basins proposed, however if a detention basin is proposed in-lieu of underground storage, the bottom of the basin will be designed to maintain a minimum of two feet of separation from groundwater or other design measures will be implemented such as impervious liners with sub drain systems.

Runoff from the CLSP-2 Amendment Plan Area is designed to discharge to the river through an existing outfall located near the southwest corner of the CLSP-2 Amendment Plan Area at the end of Dos Reis Road and the existing outfall within the Phase 1 area. The existing outfalls are regional facilities. As shown on Figure 6.7 in the CLSP-2, the CLSP-2 Amendment Plan Area will consist of a system having the following three integrated components.

- Gravity lines that collect and deliver surface runoff;
- “Watershed” detention facilities that hold the runoff; and
- A pump station and force main that conveys water to an existing San Joaquin River outfall structure.

The CLSP-2 Amendment Plan Area consists of two major drainage sheds with underground storage pipes to reduce the peak discharge from the Plan Area to the San Joaquin River. Watershed 4 is a part of both the Central Lathrop Specific Plan Phase 1 and this Phase 2 Specific Plan Amendment. The CLSP-2 Amendment proposes to modify the boundary of the existing Watershed 4 to better align with existing property boundaries.

The modification to the watershed 4 boundary will require additional storage which can be accomplished with large diameter storm drain pipes.

In addition to the added storage, a new 39cfs pump will need to be added to the existing Phase 1 storm drain pump station. The pump station is already set up to accept the additional pump so physical pump station modifications are not expected.

The remainder of the CLSP-2 Amendment Plan Area falls within Watershed 3. Large diameter storm drain pipes will be utilized to provide the required underground storage. The underground pipe storage system location will be dispersed throughout the CLSP-2 Amendment Plan Area, with individual developments responsible for a per acre

proportional share of the overall storage requirement. A new pump station and force main will be constructed that will connect to an existing outfall structure. The existing outfall structure will need to be retrofit to meet current design standards. The existing headwall is expected to remain in-place, but the existing pipes connecting to the headwall will need to be removed and replaced near to the top of the levees to increase the elevation of the pipes. New valves will also need to be added to the pipes as required by the current design standards.

The proposed stormwater collection system functions by discharging all runoff directly into the river up to the point where the runoff rate exceeds the capacity of the pump station. When the rate of runoff exceeds the pump station capacity, water “backs up” into the detention pipes until the runoff rate declines and once again equals the capacity of the pump station. The water level in the storage pipes then decreases, emptying completely.

Based on a preliminary design analysis the approximate volume of the underground storage and maximum allowable discharge rates are summarized in Table Utilities-2. Storage is based on the maximum discharge rate shown.

**TABLE UTILITIES-2: WATERSHED DETENTION FACILITIES AND PUMP STATION SIZES**

Watershed	Maximum Pumping Rate	Total Storage
	CFS	Acre-feet
3	176.7	1.53
4	78.6	17.36
<b>Total</b>	<b>255.3</b>	<b>18.89</b>

A key element of the CLSP-2 Amendment Plan Area storm drain system is its ability to handle the runoff that occurs during a high intensity storm. The drainage system provides multiple layers of protection based on the severity of storm events:

- 10-year Event - The underground system is designed with capacity to accommodate the drainage flows anticipated to occur as a result of a 10-year storm event.
- 10 to 100-year Event - When the capacity of the underground system is exceeded during an intense storm event (in excess of a ten-year event), water flows will be detained in underground storage pipes, designed for the 100-year storm event and distributed throughout the CLSP-2 Amendment Plan Area. This design method keeps the flow depth underground, within acceptable limits (i.e., one foot below floor elevations) and the threat of flooding posed to private property is minimized. An alternative design could be to allow the streets to flood and provide

overland release by means of a descending gradient directing surface flow towards a proposed detention basin. This type of design would require flow in the streets.

- 10 to 100-year Event with Pump Discharge limited – The CLSP-2 Amendment Plan Area storm drain system is also designed to provide flood protection in circumstances requiring a reduction in flow rates of the system pumps that discharge into the San Joaquin River. The Central Valley Flood Protection Board and the City may limit river discharge to pre-development levels whenever the river stage exceeds certain flood elevations. When pump discharge is limited, the CLSP-2 Amendment Plan Area must be able to accommodate the volume of a 100-year, 24-hour storm without flooding buildings. Under these extreme circumstances, the volume of water that must be stored in the Plan Area may exceed the capacity of the detention facilities and will be held in the streets, parking lots and/or other areas.

The CLSP-2 Amendment Plan Area grading concept preserves the elevation of the streets within the watershed at approximately the same elevation as existing conditions. During a rare condition, when the San Joaquin River is high and the stormwater pumps must be reduced, the underground storage allows runoff to be spread throughout the shed avoiding excessive depth of inundation in any one area.

The 2022 Lathrop General Plan amendment changing residential uses to Limited Industrial uses in the CLSP-2 Amendment Plan Area is consistent with the floodplain management strategy included in the San Joaquin Area Flood Control Agency (SJAFC) 200-year Fix-in-Place levee improvement project for the Mossdale Tract as limited industrial uses will occur in the CLSP-2 Amendment Plan Area instead of residential development.

This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

As described in the General Plan EIR, West Yost developed a WSA for the City of Lathrop General Plan Update. In the WSA, West Yost summarized the land uses in the General Plan Update, projected future demand at Buildout (projected in 2040) and compared the projected water demand to the water supply documented in the City's 2020 Urban Water Management Plan UWMP, and the SSJID 2020 UWMP. A comparison of the available water supply and projected demands at buildout of the General Plan is shown in the General Plan EIR Table 3.15-5.

As indicated in Table 3.15-5, based on the assumptions presented in the WSA, the City would have a 2 percent deficiency in water supplies to serve development of the proposed project land uses during some dry years (i.e during dry year 3 and dry year 4).

While the 2020 UWMP water use projections are the best available currently, water use projections will be re-evaluated in future UWMP updates, based on the new regulations. If the City’s growth projections and/or allocation of land use are updated based on the current General Plan, then the ability to serve new growth may need to be re-evaluated. The General Plan includes a range of policies and actions (listed below) to ensure that the City’s water supply plans are updated to address development and land use changes in order to ensure that future supply levels meet demands. For example, Policy PFS-2.1 requires the City to manage the water system to ensure that the water supply is adequate to meet the needs of existing and future development and is utilized in a sustainable manner. Nevertheless, based the available data, the City is anticipated to have a slight deficit of water supplies during dry years 3 and 4 if the levels of potential new growth analyzed in this EIR occur by 2040.

The proposed warehouse project would add limited industrial uses and would increase the city’s employment base. However, these site uses are generally not water intensive in comparison to agricultural, parks, Institutional, and residential use as shown in Table Utilities 2 below.

<b>TABLE UTILITIES 2. WATER USE FACTORS BY LAND USE TYPE</b>			
Land Use Designation	Water Use Factor		
	2021 Urban Water Management Plan <sup>(a)</sup>		Units
	City Wide	River Islands	
Low Density Residential (LDR)	330	315	gpd/du
Medium Density Residential (MDR)	250	235	gpd/du
High Density Residential (HDR)	135	--	gpd/du
General Commercial	860	--	gpd/ac
Industrial	1200	--	gpd/ac
Parks	2,450	--	gpd/ac
Public/Institutional	1500	--	gpd/ac

(a) Based on unit water demand factors used in the 2020 Urban Water Management Plan (EKI, June 2021). These factors were developed using unit water factors presented in the 2019 Water System Master Plan but updated based on additional water use data for 2017 to 2019.

The General Plan includes a range of policies designed to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. Projected water demands associated with General Plan buildout would not exceed the projected available water supplies during normal years, and the General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and

reliable source of clean potable water. Nevertheless, as described in the General Plans WSA, it is anticipated that the City, with implementation of the General Plan Update, would have a slight deficiency in water supplies during multiple dry years 3 and 4. Therefore, impacts associated with sufficient water supplies were determined to be significant and unavoidable in the General Plan EIR.

The proposed project is consistent with long range planning identified in the City's General Plan. This impact was adequately addressed in the General Plan EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The CLSP Phase 2 Plan Area does not include any residential uses and would not directly lead to population growth. No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and vision described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur.

**c): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

The City's wastewater collection system service area is generally contiguous with the city limits. The City currently provides wastewater service to approximately 6,100 residential, commercial, industrial and institutional/governmental properties.

As described in the General Plan EIR, Impact 3.15-3. The projected flows of the General Plan for the MWQCF and LCTF are not expected to exceed the treatment capacity available for treatment, under the General Plan. Given that projected wastewater generation volumes associated with General Plan buildout is not anticipated to exceed the capacity of the wastewater treatment provider to have adequate capacity, this impact was found to be less than significant.

The General Plan includes a range of policies designed to ensure an adequate wastewater treatment capacity for development. For example, Policy PFS-3.5 requires that the City review new development applications in order to ensure that new growth does not exceed the availability of adequate sewage treatment capacity or predate the presence of necessary infrastructure. Additionally, implementing action PFS-3a requires the City to update the IWRMP regarding wastewater collection and treatment every five years, or as needed; the update is also required to be reviewed annually for adequacy and consistency with the General Plan.

As described above, the City must also periodically review and update their applicable master plans, and as growth continues to occur within Lathrop, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. Given that projected wastewater generation volumes associated with General Plan buildout is not anticipated to exceed the capacity of the wastewater treatment provider to have adequate capacity, this impact was found to be less than significant, in the General Plan EIR.

The proposed warehouse project is consistent with the uses and policies identified in the General Plan. This impact was adequately addressed in the EIR because the wastewater generated by the proposed project was accounted for the EIR analysis. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The CLSP Phase 2 Plan Area does not include any residential uses and would not directly lead to population growth. No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and vision described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur.

**Responses d), e): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE:*

As described in the General Plan EIR, the development of land uses under the General Plan would increase solid waste disposal needs. The Forward Landfill serves the city and has a cease operation date of 2039 and has sufficient capacity to serve the City of Lathrop. Forward Landfill has a remaining landfill capacity of over 22,100,000 tons, and has a current maximum permitted throughput of 8,668 tons per day. It has a total maximum capacity of 59,160,000 cubic yards. The additional solid waste generation associated with buildout of the General Plan, approximately 196.4 tons per day at total buildout, to the Forward Landfill would not exceed the landfill's remaining and additional capacity until landfill closure in 2039. The City will need to secure a new location or expand existing facilities when the Forward Landfill is ultimately closed, if a new permit is not issued at a later date for a cease operation date beyond 2039. There are several options that the City will have to consider for solid waste disposal at that time, including the construction of new facilities or expansion of existing facilities.

As described above, there is adequate landfill capacity to serve the proposed project, and the project would be required to comply with all applicable statutes and regulations related to solid waste. The General Plan EIR determined that this impact was less than

significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

*CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The CLSP Phase 2 Plan Area does not include any residential uses and would not directly lead to population growth. No additional development is proposed or would be approved at this time. The proposed CLSP-2 Amendment and municipal code amendments are consistent with the land uses and vision described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur.

**XX. WILDFIRE**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

*Existing Setting*

The proposed project is not located within a State Responsibility Area (SRA), or area identified with wildland fire risks.

*Responses to Checklist Questions*

**Response a-d): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The City is not located in or near any State Responsibility Areas and there are no lands classified as very high fire hazard severity zones (VHFHSZ) within or near the Lathrop Planning Area. Therefore, as described in the General Plan EIR the General Plan would have no impact related to wildfire risks associated with lands in or near State Responsibility Areas or lands classified as very high fire hazard severity zones. The proposed project is consistent with the uses and policies identified in the General Plan. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.



**XXI. MANDATORY FINDINGS OF SIGNIFICANCE --**

	<i>Significant Impact Peculiar to the Project or the Project Site</i>	<i>Significant Impact due to New Information</i>	<i>Impact Adequately Addressed in the General Plan EIR</i>	<i>Impact not Previously Addressed in General Plan EIR</i>
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

*RESPONSES TO CHECKLIST QUESTIONS*

**Response a): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described throughout the analysis above, the proposed project would not result in any significant impacts that would substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal to the environment. The project would not result in impacts to known cultural, historical, archaeological or tribal resources.

All potentially significant impacts related to plant and animal species would be reduced to a less-than-significant level through the application of uniformly applied development policies and/or standards. The proposed project is required to implement a range of standard and uniformly applied development policies and standards, most of which are identified in the Lathrop General Plan and General Plan EIR. The cumulative impacts associated with development of the project were considered, analyzed and disclosed in the General Plan EIR. The project would not result in any cumulative impacts that were not contemplated in the General Plan EIR. The project would not result in any peculiar

site-specific impacts, impacts to biological resources or impacts to cultural and/or historical resources. All potentially significant impacts to cultural and/or historical resources would be reduced to a less than significant level through the implementation of minimization policies and actions contained in the Lathrop General Plan and through the application of other uniformly applied standards such as compliance with other local and state requirements, as described previously in this report.

The proposed project would implement requirements aimed at reducing stormwater pollutants and runoff, as well as through compliance of various state, regional and local standards. Specifically related to ensuring the continued sustainability of biological resources through adaptive management, Project Requirement Bio-1 ensures the project proponent seeks coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Through the application of uniformly applied development policies and/or standards, the project would not result in any cumulative impacts related to biological resources. The General Plan EIR determined that a Substantial Adverse Effects on Fish, Wildlife, and Plant Species was less than significant. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response b): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

The General Plan's environmental review assumed full development and buildout of the Project area, consistent with the uses and density proposed by the project. The cumulative impacts associated with buildout of the CLSP Phase 2 Plan Area, including the project site, were fully addressed in the General Plan EIR, and the cumulative conditions in and around Lathrop have not changed such that the cumulative analysis and conclusions in the General Plan EIR would be altered or invalidated. Additionally, as described throughout the analysis above, the proposed project would not result in any significant individual impacts with the application of uniformly applied development policies and/or standards. However as described in the Lathrop General Plan EIR several impacts were found to be cumulatively significant as described in the Lathrop General Plan Chapter 4.0. The proposed project is consistent with the uses and policies identified in the General Plan. This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

**Response c): Adequately addressed in the General Plan EIR.**

*WAREHOUSE SITE, CLSP PHASE 2 AMENDMENT AND MUNICIPAL CODE UPDATE:*

As described throughout the analysis above, the proposed project would not result in any significant impacts that would have environmental effects which will cause substantial adverse effects on humans. The analysis in the relevant sections above provides the application of uniformly applied development policies and/or standards to reduce impacts on humans. Compliance with the Lathrop General Plan, including the applicable policies and requirements identified throughout this document, and through the application of a variety of uniform standards and requirements including those related to air quality, biological resources, cultural resources, hazardous materials, geologic hazards, water pollution and water quality, and noise, ensure any adverse effects on humans are minimized to the extent feasible. However, the General Plan EIR determined that this impact was significant. As described throughout the General Plan's EIR analysis, the General Plan reduces environmental effects including effects that directly and indirectly impact humans through implementation of goals, policies and implementation measures provided in the City's General Plan. However, several environmental impacts would still be considered significant and unavoidable (listed in EIR Section 4.4). These impacts include increases in localized noise, considerable increases of criteria pollutants, reduced air quality, and visual degradation, which may cause substantial adverse effects on humans and the way humans interact with their environment.

This impact was adequately addressed in the EIR. The proposed project would not result in a new or more severe impact than what was previously analyzed.

## REFERENCES

- California Department of Conservation. California Important Farmlands Finder. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>.
- California Department of Conservation. 2016. San Joaquin County Williamson Act <https://maps.conservation.ca.gov>
- California Department of Forestry and Fire Protection. Fire Hazard Severity Zones in LRA. Accessed July 2023. Available at: <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/>
- California Department of Forestry and Fire Protection. Fire Hazard Severity Zones in State Responsibility Areas. Accessed July 2023. Available at: <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/>
- Lathrop General Plan Update EIR (City of Lathrop, 2022). August 2022.
- California Department of Resources Recycling and Recovery (CalRecycle). 2023. SWIS Facility/Site Activity Details.
- Biological Resources Analysis Report For The Dos Reis Ranch Property. Prepared by Olberding Environmental, Inc. May 2021.
- Preliminary Geotechnical Engineering Report. Prepared by: Terracon Consultants, Inc. August 16, 2021.
- Phase I Environmental Site Assessment Report. Prepared by: Partner Engineering and Science, Inc. Report Date: March 8, 2021.
- Shallow Soil Investigation Report. Prepared by: Partner Engineering and Science, Inc. Report Date: May 27, 2021
- Central Lathrop Specific Plan (CLSP) Phase 2 Specific Plan Update (2023).
- Acoustical Assessment Prepared by: Saxelby Acoustics May 15, 2023.
- Air Quality-Health Risk Technical Report Prepared by: De Novo Planning Group 7/19/23.
- Traffic Impact Analysis (TIA) Prepared by: TJKM. August 9, 2023

- California Air Resources Board. 2023. Current California GHG Emission Inventory Data. Available at: <https://ww2.arb.ca.gov/ghg-inventory-data>
- California Environmental Protection Agency, Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: [http://www.climatechange.ca.gov/climate\\_action\\_team/reports/](http://www.climatechange.ca.gov/climate_action_team/reports/)
- Intergovernmental Panel on Climate Change. 2013. "Climate Change 2013: The Physical Science Basis, Summary for Policymakers." Available at: [http://www.climatechange2013.org/images/report/WG1AR5\\_SPM\\_FINAL.pdf](http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf)

ATTACHMENT A. BIOLOGICAL RESOURCES ANALYSIS REPORT FOR THE DOS REIS RANCH  
PROPERTY. PREPARED BY OLBERDING ENVIRONMENTAL, INC. MAY 2021.

# **BIOLOGICAL RESOURCES ANALYSIS REPORT**

**FOR THE**

**DOS REIS RANCH PROPERTY**

**SAN JOAQUIN COUNTY, CALIFORNIA**



Prepared for:

**HODGDON GROUP REALTY, Inc.**

**HMC CONSTRUCTION, Inc.**

1461 E. Cooley Drive, Suite 230

Colton, California 92324

Prepared by:

**OLBERDING ENVIRONMENTAL, INC.**

Wetland Regulatory Consultants

193 Blue Ravine Road, Suite 165

Folsom, Ca 95630

Phone: (916) 985:1188 ~ Fax: (916) 985-2288

E-mail: [jeff@olberdingenv.com](mailto:jeff@olberdingenv.com)

Contact: Jeff Olberding

**May 2021**

---

## TABLE OF CONTENTS

---

SUMMARY .....	1
1.0 INTRODUCTION .....	2
2.0 LOCATION .....	3
3.0 PROPERTY DESCRIPTION .....	3
4.0 REGULATORY SETTING .....	4
4.1 Federal Regulatory Setting .....	4
4.1.1 Plants and Wildlife .....	4
4.1.2 Wetlands/Waters .....	4
4.1.3 Migratory Bird Treaty Act .....	5
4.1.4 Federal Bald and Golden Eagle Protection Act .....	6
4.2 State Regulatory Setting .....	6
4.2.1 Plants and Wildlife .....	6
4.2.2 Wetlands/Waters .....	7
4.2.3 California Environmental Quality Act .....	8
4.3 Local Regulatory Setting .....	9
4.3.1 San Joaquin County MSCP .....	9
5.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES .....	9
5.1 Soils Evaluation .....	11
5.2 Plant Survey Methods .....	11
5.2.1 Review of Literature and Data Sources .....	11
5.2.2 Field Surveys .....	11
5.3 Wildlife Survey Methods .....	12
5.3.1 Review of Literature and Data Sources .....	12
5.3.2 Field Surveys .....	12
6.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES .....	13
6.1 Soil Evaluation Results .....	13
6.2 Plant Survey Results .....	16
6.2.1 Floristic Inventory and Habitat Characterization .....	16
6.3 Wildlife Survey Results .....	17
6.3.1 General Wildlife Species and Habitats .....	17
6.3.2 Critical Habitat .....	24
7.0 CONCLUSIONS .....	24
7.1 Wetlands/Waters .....	24
7.2 Special-status Plants .....	25
7.3 Special-status Wildlife .....	25
8.0 RECOMMENDATIONS .....	26
9.0 LITERATURE CITED .....	29



---

## LIST OF ATTACHMENTS

---

### ATTACHMENT 1 FIGURES

Figure 1	Regional Map
Figure 2	Vicinity Map
Figure 3	USGS Topographic Map
Figure 4	Aerial Map
Figure 5	CNDDDB Wildlife Occurrences within 5 miles
Figure 6	CNDDDB Plant Occurrences within 5 miles
Figure 7	USFWS Critical Habitat
Figure 8	Soils Map
Figure 9	Photo Location Map
Figure 10	Habitat Map
Figure 11	Special-Status Species Observed Map

### ATTACHMENT 2 TABLES

Table 1	Plant and Wildlife Species Observed Within/Adjacent to the Survey Area
Table 2	Special-Status Species Occurring Within/Adjacent to the Survey Area

### ATTACHMENT 3 SITE PHOTOGRAPHS

---

This report should be cited as: Olberding Environmental, Inc. May 2021. *Biological Resources Analysis Report for the Dos Reis Ranch Property, San Joaquin County, California*. Prepared for Hodgdon Group Reality, Inc. and HMC Construction, Inc.

## SUMMARY

On May 5, 2021, Olberding Environmental, Inc. conducted a field reconnaissance survey of the Dos Reis Ranch property (Property) for the purpose of identifying sensitive plant and wildlife species, sensitive habitats, and biological constraints potentially occurring on the Property. The Property surveyed is comprised of approximately 127.28 acres located in Lathrop, San Joaquin County, California.

Results of the initial reconnaissance survey indicate that the Property does not contain any wetlands/waters that might be considered jurisdictional by the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and/or the California Department of Fish and Wildlife (CDFW). Prior to completing the site survey for this report, site maps, topographic maps, and aerial photographs of the Property were obtained from several sources and reviewed. This information was used in association with the site visit to determine that there was no evidence of any wetland or water features. It is likely that the high sand content of the soil and regular tilling of the Property would facilitate in water draining quickly from the Property.

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database, California Natural Diversity Database (CNDDDB), and California Native Plant Society (CNPS) database were queried to create a list of special-status species with the potential to occur on the Property (Attachment 2, Table 2). After the May 5, 2021 site visit it was determined that many of these species had no potential to occur on the Property. A total of nine species were determined to have a low to high potential of occurring on the Property and are discussed in more detail. Due to the largely unvegetated, ruderal/disturbed annual grassland habitat found on the Property, and the history of soil disturbance, it was determined that there is no potential for any special-status plants to be found on the Property.

An elderberry shrub (*Sambucus* sp.) was identified along the western fence line of the Property. Elderberry is the host plant of the Valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*). If the plant can be maintained on the Property, then a 20 foot setback buffer will need to be established around it's dripline. If the plant cannot be maintained on the Property, then VELB exit hole surveys will need to be conducted as outlined in the USFWS protocol (USFWS 2017). Whether or not exit holes are identified will determine the required mitigation measures necessary under the SJMSCP (SJCOG 2000).

A total of two special-status reptile species were identified to have a low potential to occur on the Property. The California glossy snake (*Arizona elegans occidentalis*) and the San Joaquin coachwhip (*Masticophis flagellum*) may occur in a foraging capacity. While both species prefer

the dry, open habitat found on the Property for hunting, the regular disturbance of the site diminishes the potential for the species to utilize the Property. Pre-construction surveys should be performed no more than 48 hours prior to ground disturbance or vegetation removal. Surveys would be required to determine presence/absence of these species.

A total of four special-status bird species were identified to potentially occur on the Property in either a nesting or foraging capacity. The burrowing owl (*Athene cunicularia*) has a low potential to occur in a nesting and foraging capacity. The loggerhead shrike (*Lanius ludovicianus*) has a low potential to occur in a foraging capacity only; there is no potential nesting habitat on the Property. Both the Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*) were observed foraging on the Property during the May 5, 2021 survey. The Swainson's hawk was observed using a nest immediately adjacent to the Property, across Dos Reis Road. Additionally, two red-tailed hawks (*Buteo jamaicensis*) were observed foraging on the property during the May 2021 survey. If project construction-related activities such as tree and vegetation removal or grading take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors are recommended.

No sign of bat use was observed on the Property during the May 2021 survey; however, based on habitat suitability, it was determined that bats have a moderate potential to utilize the site in a foraging capacity. These bat species include pallid bat (*Antrozous pallidus*) and western mastiff bat (*Eumops perotis californicus*). As there is no potential roosting habitat on the Property, no further action needs to be taken.

## **1.0 INTRODUCTION**

Olberding Environmental, Inc. has conducted a biological resources analysis (biological constraints assessment) of the Dos Reis Ranch Property, located in Lathrop, San Joaquin County, California. This biological resources analysis included a review of pertinent literature on relevant background information and habitat characteristics of the site. Our review included researching existing information in the California Natural Diversity Database (CNDDDB) maintained by the CDFW and the CNPS *Inventory of Rare and Endangered Vascular Plants of California*. Also included was a review of information related to species of plants and animals that could potentially utilize the described habitats identified on and immediately surrounding the Property. To assist in the assessment, a field reconnaissance investigation of the Property was conducted on May 5, 2021. This report documents the methods, results, and conclusions for the reconnaissance-level survey associated with the biological resources analysis for the Property.

## 2.0 LOCATION

The Property is located along the west side of Interstate 5 within the city limits of Lathrop, San Joaquin County, California. The Property is bordered by South Manthey Road on the east, Lathrop Road on the south, and Dos Reis Road bisects the Property from east to west. Attachment 1, Figure 1 depicts the regional location of the Property in San Joaquin County, and Attachment 1, Figure 2 illustrates the vicinity of the Property in relationship to the City of Lathrop. Attachment 1, Figure 3 identifies the location of the Property on the USGS 7.5 Quadrangle Map for Lathrop. An aerial photograph of the Property has been included as Attachment 1, Figure 4.

Access to the Property is provided from Interstate 5. Take the Lathrop Road exit and turn west onto Lathrop Road. Take an immediate right (north) onto South Manthey Road and take the first left (west) onto Dos Reis Road. Parking is along the shoulder of Dos Reis Road.

## 3.0 PROPERTY DESCRIPTION

The Property encompasses approximately 127.28 acres split into three parcels, shaped roughly like the number “7”. The north parcel is the largest and is roughly rectangular in shape. The southeast parcel is roughly trapezoidal in shape, while the southwest parcel is a small wedge shape. The Property only supports one habitat type, ruderal/disturbed annual grassland (Attachment 1, Figure 10). The property was historically used for dryland agriculture but has been graded and regularly disked for over a decade. During the May survey, most of the Property was unvegetated due to disking. However, some vegetation was present and included crabgrass (*Digitaria sanguinalis*), ripgut brome (*Bromus diandrus*), black mustard (*Brassica nigra*), wild radish (*Raphanus raphanistrum*), and fiddleneck (*Amsinckia* sp.) with small amounts of other grasses and herbaceous species. A complete list of species observed is included in Attachment 2, Table 1.

The topography of the Property is extremely flat. There are several large, shallow, gradual topographic depressions scattered throughout the property. Additionally, within the north parcel there are 4 raised berm areas that consist of rocky to sandy soil and rising 8 – 10 feet from the surrounding terrain.

## **4.0 REGULATORY SETTING**

### **4.1 Federal Regulatory Setting**

#### ***4.1.1 Plants and Wildlife***

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq., as amended) prohibits federal agencies from authorizing, permitting, or funding any action that would result in biological jeopardy to a plant or animal species listed as Threatened or Endangered under the Act. Listed species are taxa for which proposed and final rules have been published in the Federal Register (USFWS 2021a). If a proposed project may jeopardize listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. Federal Proposed species (USFWS 2021b) are species for which a proposed listing as Threatened or Endangered under ESA has been published in the Federal Register. If a proposed project may jeopardize proposed species, Section 7 of the ESA affords consideration of those species through informal conferences with USFWS. The USFWS defines federal Candidate species as “those taxa for which we have on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded by other higher priority listing actions” (USFWS 2021b). Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning.

#### ***4.1.2 Wetlands/Waters***

The federal government, acting through the Corps and the Environmental Protection Agency (EPA), has jurisdiction over all “waters of the United States” as authorized by §404 of the Clean Water Act (CWA) and §10 of the Rivers and Harbors Act of 1899 (33 CFR Parts 320-330). Properties that cause the discharge of dredged or fill material into waters of the United States require permitting by the Corps. Actions affecting small areas of jurisdictional waters of the United States may qualify for a Nationwide Permit (NWP), provided conditions of the permit are met, such as avoiding impacts to threatened or endangered species or to important cultural sites. Properties that affect larger areas or which do not meet the conditions of an NWP require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Waters of the United States are defined as territorial seas and traditionally navigable waters, tributaries, lakes and ponds, and impoundments of jurisdictional waters, and adjacent wetlands. Under federal regulation, wetlands are defined as areas that are inundated or saturated by surface

of groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (33 CFR Part 328.3(c)(16)). Wetlands generally include swamps, marshes, bogs, and similar areas. In addition, portions of the riparian habitat along a river or stream may be a wetland where the riparian vegetation is at or below the ordinary high water mark and thus also meets the wetland hydrology and hydric soil criteria.

Navigable waters include all waters subject to the ebb and flow of the tides, including the open ocean, tidal bays, and tidal sloughs. Navigable waters also include some large, non-tidal rivers and lakes, which are important for transportation in commerce. The jurisdictional limit over navigable waters extends laterally to the entire water surface and bed of the waterbody landward to the limits of the mean high tide line. For non-tidal rivers or lakes, which have been designated (by the Corps) to be navigable waters, the limit of jurisdiction along the shoreline is defined by the ordinary high water mark. “Other waters” refer to waters of the United States other than wetlands or navigable waters. Other waters include streams and ponds, which are generally open water bodies and are not vegetated. Other waters can be perennial or intermittent water bodies and waterways. The Corps regulates other waters to the outward limit of the ordinary high water mark. Streams should exhibit a defined channel, bed and banks to be delineated as other waters.

The Corps does not generally consider “non-tidal drainage and irrigation ditches excavated on dry land” to be jurisdictional waters of the United States (and such ditches would therefore not be regulated by the Corps (33 CFR Parts 320-330, November 13, 1986). Other areas generally not considered jurisdictional waters include: 1) artificially irrigated areas that would revert to upland habitat if the irrigation ceased; 2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; 3) waste treatment ponds; 4) ponds formed by construction activities including borrow pits until abandoned; and 5) ponds created for aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3). However, the preamble also states “the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories” can be regulated as jurisdictional water. The EPA also has authority to determine jurisdictional waters of the U.S. on a case-by-case basis. Riparian habitat that is above the ordinary high water mark and does not meet the three-parameter criteria for a wetland would not be regulated as jurisdictional waters of the United States.

#### ***4.1.3 Migratory Bird Treaty Act***

Raptors are migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR. Part 10, including

feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that Property-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (generally February 1 – September 1, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend, is considered “taking” and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

#### ***4.1.4 Federal Bald and Golden Eagle Protection Act***

In addition to protection under the MBTA, both the bald eagle and the golden eagle are also protected by the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c). The Bald and Golden Eagle Protection Act, and amended several times since being enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald or golden eagles, including their parts, nests, or eggs (USFWS 2007). The Act provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof.” The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” (USFWS 2007).

For purposes of these guidelines, “disturb” means: “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (USFWS 2007).

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment (USFWS 2007).

## **4.2 State Regulatory Setting**

### ***4.2.1 Plants and Wildlife***

Property permitting and approval requires compliance with California Environmental Quality Act (CEQA), the 1984 California Endangered Species Act (CESA), and the 1977 Native Plant Protection Act (NPPA). The CESA and NPPA authorize the California Fish and Game Commission to designate Endangered, Threatened and Rare species and to regulate the taking of these species (§§2050-2098, Fish & Game Code). The California Code of Regulations (Title 14, §670.5) lists animal species considered Endangered or Threatened by the State.

The Natural Heritage Division of the CDFW administers the state rare species program. The CDFW maintains lists of designated Endangered, Threatened, and Rare plant and animal species (CDFW 2021b and 2021c). Listed species either were designated under the NPPA or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFW can afford interim protection to candidate species while they are being reviewed by the Fish and Game Commission.

The CDFW also maintains a list of animal species of special concern (CDFW 2021c), most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends considering them during analysis of proposed property impacts to protect declining populations and avoid the need to list them as endangered in the future.

Under provisions of §15380(d) of the CEQA Guidelines, the CEQA lead agency and CDFW, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFW considers plant species on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994) as qualifying for legal protection under §15380(d). Species on CNPS Lists 3 or 4 may, but generally do not, qualify for protection under this provision.

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDDB working list of “high priority” habitats (i.e., those habitats that are rare or endangered within the borders of California) (Holland 1986).

#### **4.2.2 Wetlands/Waters**



The RWQCB regulates activities in wetlands and other waters through §401 of the Clean Water Act. Section 401 requires a state water quality certification for properties subject to 404 regulations. Requirements of the certification include mitigation for loss of wetland habitat. In the San Francisco Bay region, the RWQCB may identify additional wetland mitigation beyond the mitigation required by the Corps. California Fish and Game Code §§1600-1607 require the CDFW be notified of any activity that could affect the bank or bed of any stream that has value to fish and wildlife. Upon notification, the CDFW has the discretion to execute a Streambed Alteration Agreement. The CDFW defines a stream as follows:

*“... a body of water that flows at least periodically...through a bed or channel having banks and supporting fish and other aquatic life. This includes watercourses having a subsurface flow that supports or has supported riparian vegetation.”*

(Source: Streambed Alteration Program, California Department of Fish and Wildlife, 2016).

In practice, CDFW authority is extended to any “blue line” stream shown on a USGS topographic map, as well as unmapped channels with a definable bank and bed. Wetlands, as defined by the Corps, need not be present for CDFW to exert authority.

#### **4.2.3 California Environmental Quality Act**

According to Appendix G of the CEQA (CEQA 2021) Guidelines, a proposed project would have a significant impact on biological resources if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW and USFWS?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

### **4.3 Local Regulatory Setting**

#### ***4.3.1 San Joaquin County Multi-Species Habitat Conservation and Open Space Plan***

In November of 2000, San Joaquin County implemented the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) (SJCOG 2000). The plan was developed to provide a strategy for balancing the protection of Open Space and wildlife with the protection of local landowners and agricultural practices. The SJMSCP, in accordance with ESA Section 10(a)(1)(B) and CESA Section 2081(b) Incidental Take Permits, provides compensation for the Conversion of Open Space to non-Open Space uses which affect the plant, fish and wildlife species covered by the SJMSCP. Species that are covered by the SJMSCP that have the potential to occur within the Property include VELB, Swainson's hawk, burrowing owl, and the western mastiff bat. The survey and minimization procedures for these species are discussed in Section 8.0 of this report.

### **5.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES**

A special-status plant and wildlife species database search and review was conducted using the CNDDDB and other sources. An additional search was conducted for special-status plants using CNPS *Inventory* on-line. Special-status species reports were accessed by searching the CNDDDB database for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon USGS 7.5-minute quadrangles which surround the Property, and by examining those species that have been identified in the vicinity of the Property. These quadrangles will be henceforth noted as surrounding quads. The database report identified special-status species known to occur in the region or those that have the potential to occur in the vicinity of the Property. The CNDDDB report was used to focus special-status species analysis of the site prior to the reconnaissance surveys.

An Olberding Environmental biologist conducted a reconnaissance-level survey of the Property on May 5, 2021. The survey consisted of walking throughout the Property and evaluating the site and adjacent lands for potential biological resources. Existing conditions, observed plants and wildlife, adjacent land use, soils and potential biological resource constraints were recorded

during the visit. Plant and wildlife species observed within and adjacent to the Property during the reconnaissance survey are listed in Attachment 2, Table 1. Site photographs are provided in Attachment 3 of this document. Attachment 1, Figure 9 shows where each site photo was taken.

The objectives of the field survey were to determine the potential presence or absence of special-status species habitat listed in the CNDDDB database report and to identify any wetland areas that could be potentially regulated by the Corps, RWQCB, and/or CDFW (CDFW 2021a). In addition, the Olberding Environmental biologist looked for other potential sensitive species or habitats that may not have been obvious from background database reports or research. Surveys conducted after the growing season or conducted outside of the specific flowering period for a special-status plant cannot conclusively determine the presence or absence of such plant species; therefore, site conditions and habitat type were used to determine potential for occurrence. When suitable habitat was observed to support a special-status plant or animal species, it was noted in the discussion for that particular species. Regulatory agencies evaluate the possibility of occurrence based on habitats observed on-site and the degree of connectivity with other special-status animal habitats in the vicinity of the Property. These factors are discussed in each special-status plant or animal section. Potential for occurrence of each special-status or protected plant and animal species was evaluated using the following criteria.

- **Present:** The species has been recorded by CNDDDB or other literature as occurring on the Property and/or was observed on the Property during the reconnaissance survey or protocol surveys.
- **May Occur:** The species has been recorded by CNDDDB or other literature as occurring within five miles of the Property, and/or was observed within five miles of the Property, and/or suitable habitat for the species is present on the Property or its immediate vicinity.
- **Not Likely to Occur:** The species has historically occurred on or within five miles of the Property, but has no current records. The species occurs within five miles of the Property but only marginally suitable habitat conditions are present. The Property is likely to be used only as incidental foraging habitat or as an occasional migratory corridor.
- **Presumed Absent:** The species will not occur on the Property due to the absence of suitable habitat conditions, and/or the lack of current occurrences. Alternatively, if directed or protocol-level surveys were done during the proper occurrence period and the species was not found, it is presumed absent.

Sources consulted for agency status information include USFWS (2021a) for federally listed species and CDFW (2021c) for State of California listed species. Based on information from the

above sources, Olberding Environmental developed a target list of special-status plants and animals with the potential to occur within or in the vicinity of the Property (Attachment 2, Table 2).

## **5.1 Soils Evaluation**

The soils present on a property may determine if habitat on the site is suitable for certain special-status plants and animals. The host plants of some special-status invertebrates may also require specific soil conditions. In the absence of suitable soil conditions, special-status plants or animals requiring those conditions would be presumed absent. Information regarding soil characteristics for the Property was obtained by viewing the Natural Resources Conservation Service (NRCS) Web Soil Survey report for the Property (NRCS 2021).

## **5.2 Plant Survey Methods**

The purposes of the botanical surveys were (1) to characterize the habitat types (plant communities) of the study area; (2) to determine whether any suitable habitat for any special-status plant species occurs within the study area; and (3) to determine whether any sensitive habitat types (wetlands) occur within the study area. Site conditions and plant habitat surveys are important tools in determining the potential occurrence of plants not recorded during surveys (e.g., special-status plants) because presence cannot conclusively be determined if field surveys are conducted after the growing season or conducted outside a specific flowering period.

### ***5.2.1 Review of Literature and Data Sources***

The biologist conducted focused surveys of literature and special-status species databases in order to identify special-status plant species and sensitive habitat types with potential to occur in the study area. Sources reviewed included the CNDDDB occurrence records (CDFW 2021a) and CNPS *Inventory* (CNPS 2021) for the surrounding quads; and standard flora (The Jepson Manual 2012). From the above sources, a list of special-status plant species with potential to occur in the Property vicinity was developed (Attachment 2, Table 2).

### ***5.2.2 Field Surveys***

A biologist from Olberding Environmental conducted a reconnaissance-level survey to determine habitat types and the potential for special-status plants based on the observed habitat types. All vascular plant species that were identifiable at the time of the survey were recorded and identified using keys and descriptions in The Jepson Manual (2012).

The habitat types occurring on the Property were characterized according to pre-established categories. In classifying the habitat types on the site, the generalized plant community classification schemes of *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, and Evens 2009) were consulted. The final classification and characterization of the habitat types of the study area were based on field observations.

### **5.3 Wildlife Survey Methods**

The purposes of the wildlife survey were to identify special-status wildlife species and/or potential special-status wildlife habitats within the study area.

#### ***5.3.1 Review of Literature and Data Sources***

A focused review of literature and data sources was conducted in order to determine which special-status wildlife species had potential to occur in the vicinity of the Property. Current agency status information was obtained from USFWS (2021a) for species listed as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal ESA; and from CDFW (2021b, 2021c) for species listed as Threatened or Endangered by the state of California under the CESA, or listed as “species of special concern” by CDFW. From the above sources, a list of special-status wildlife species with potential to occur in the Property vicinity was developed (Attachment 2, Table 2).

#### ***5.3.2 Field Surveys***

**General Wildlife Survey** – An Olberding Environmental biologist conducted a survey of species habitat within the entire study area, including visible portions of the adjacent properties. The purpose of the habitat survey was to evaluate wildlife habitats and the potential for any protected species to occur on or adjacent to the Property.

**Reconnaissance-Level Raptor Survey** – A reconnaissance-level raptor survey was conducted on the Property. Observation points were established on the periphery of the site to view raptor activity over a fifteen- to thirty-minute time period. This survey was conducted with the use of binoculars and notes were taken for each species occurrence. Additionally, utility poles and perch sites in the vicinity of the Property were observed. All raptor activity within and adjacent to the Property was recorded during the reconnaissance-level observation period.

**Reconnaissance-Level Burrowing Owl (*Athene cunicularia*) Survey** – A reconnaissance-level burrowing owl survey was also conducted on the Property to identify potential burrow sites or burrowing owl use of on-site habitat. The general presence and density of suitable burrow sites (e.g., rodent burrows) was evaluated for the Property.

## **6.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES**

The search and review of the CNDDDB database reports revealed the occurrence of special-status plant and wildlife species that occur in the habitats found within the Property boundaries (CDFW 2021a). The CNDDDB database and background data were reviewed for the surrounding quads. Animal occurrences shown on Attachment 1, Figure 5 and plant occurrences shown on Attachment 1, Figure 6 are located within 5 miles of the Property and were reviewed for their potential to occur on the Property based on general habitat types. Results of the species review is tabulated on Attachment 2, Table 2. Critical habitat within the surrounding quads is shown on Attachment 1, Figure 7.

### **6.1 Soil Evaluation Results**

The NRCS (2021) reports four soil types within the Property. A map of this soil type can be found in Attachment 1, Figure 8. The soil type mapped included the following:

- **Bigani loamy coarse sand, partially drained, 0 to 2 percent slopes** – The Bigani series consists of poorly drained soils on low alluvial fans, formed from alluvium derived from granitic sources. These soils are artificially drained and very deep and typically found between 20 and 35 feet in elevation. The composition of this soil type within the Property consists of 85 percent Bigani and similar soils and 15 percent of minor components including Grangeville (5%), Manteca (4%), Veritas (4%), and Artens, stratified (2%).

The permeability of the soil is high while the runoff is very slow. The soil is subject to rare flooding, and is typically used for irrigated crops. Its stratified layers consist of the following (colors are for dry soil unless otherwise stated):

**Ap** – 0 to 11 inches; loamy, coarse sand, very dark gray when moist; weak, fine, granular structure; loose, non-sticky, and non-plastic; few fine and common very fine and medium roots; many very fine interstitial and few very fine tubular pores; moderately alkaline; clear wavy boundary.

**C1** – 11 to 20 inches; light gray, loamy coarse sand, dark gray when moist; common fine distinct olive brown mottles when moist; massive; loose, non-sticky and non-

plastic; few very fine roots; many very fine interstitial pores; moderately alkaline; clear smooth boundary.

**C2** – 20 to 40 inches; light brownish gray loamy coarse sand, dark gray when moist; common fine distinct dark gray/brown mottles when moist; massive; loose, non-sticky and non-plastic; many very fine interstitial pores; moderately alkaline; gradual wavy boundary.

**C3** – 40 to 60 inches; light brownish gray loamy coarse sand, olive gray when moist; common fine distinct yellowish brown mottles, olive brown when moist; massive; loose, non-sticky and non-plastic; many very fine interstitial pores; slightly effervescent; disseminated lime; moderately alkaline.

- **Dello clay loam, drained, 0 to 2 percent slopes, overwashed** – The Dello series consists of poorly drained soils on flood plains and old slough remnants. These soils are artificially drained and very deep. They formed in alluvium derived from granitic rock sources. The composition of this soil type within the Property consists of 85 percent Dello and similar soils and 15 percent of minor components including Columbia (4%), Egbert (4%), Merrit (4%), and Unnamed stratified substrate (3%).

The permeability of the soil is rapid in the upper part of the soil profile, but slow in the clayey substratum. Runoff is slow and the hazard of erosion is slight. Its stratified layers consist of the following (colors are for dry soil unless otherwise stated):

**Ap** – 0 to 7 inches; light yellowish brown loamy sand, dark yellowish brown when moist; single grained; loose, non-sticky and non-plastic; common very fine and fine roots; neutral; clear wavy boundary.

**C** – 7 to 32 inches; pale brown sand, grayish brown when moist; many fine and medium distinct yellowish red mottles, reddish brown when moist; single grained; loose, non-sticky and non-plastic; few very fine roots; moderately alkaline; clear wavy boundary.

**Cg** – 32 to 60 inches; light gray sand, variegated light brownish gray and grayish brown when moist; many fine distinct strong brown mottles, dark brown when moist; single grained; loose, non-sticky and non-plastic; moderately alkaline.

- **Timor loamy sand, 0 to 2 percent slopes** – The Timor series consists of moderately well drained soils on low fan terraces or alluvial fans. These soils are deep to hardpan and formed in alluvium derived from granitic rock sources. The composition of this soil type within the Property consists of 85 percent Timor and similar soils and 15

percent of minor components including Bisgani (3%), Grangeville (4%), Veritas (4%), and Artens, stratified (2%).

Permeability is rapid and the soil is moderately well drained. Runoff is slow and the hazard of erosion is slight. The soil is subject to rare flooding. Its stratified layers consist of the following (colors are for dry soil unless otherwise stated):

**Ap** – 0 to 14 inches; grayish brown loamy sand, very dark grayish brown when moist; weak medium subangular blocky structure; soft, very friable, non-sticky and non-plastic; few fine and common very fine roots; many very fine interstitial pores; neutral; clear smooth boundary.

**A** – 14 to 31 inches; grayish brown loamy sand, very dark grayish brown when moist; weak medium subangular blocky structure; soft, very friable, non-sticky and non-plastic; few fine and common very fine roots; many very fine interstitial pores; neutral; clear wavy boundary.

**Bk** – 31 to 56 inches; brown loamy sand, dark brown when moist; common medium distinct light brown mottles, dark brown when moist; massive; soft, very friable, non-sticky and non-plastic; few very fine roots; many very fine interstitial pores; strongly effervescent; few fine soft masses and seams of lime; moderately alkaline; abrupt wavy boundary.

**2Bkqm** – 56 to 60 inches; light gray, strongly cemented duripan, grayish brown when moist; common medium distinct reddish yellow mottles, dark brown when moist; massive; brittle; continuous indurated laminar cap 1 to 2 millimeters thick; strongly cemented in 75 percent of the matrix; strongly effervescent; common fine soft masses of lime; moderately alkaline.

- **Tinnin loamy coarse sand, 0 to 2 percent slopes** – The tinnin series consists of well drained soils on low fan terraces and alluvial fans. These soils are very deep and formed in alluvium derived from granitic rock sources.

Permeability is rapid and well drained. These soils are very deep and formed on nearly level alluvial fans. Runoff is slow and the hazard of water erosion is slight. Its stratified layers consist of the following (colors are for dry soil unless otherwise stated):

**Ap** – 0 to 14 inches; grayish brown loamy coarse sand, very dark grayish brown when moist; weak fine subangular blocky structure; soft, very friable, non-sticky and non-



plastic; few fine and common very fine roots; many very fine interstitial pores; 2 percent rounded pebbles; mildly alkaline; diffuse smooth boundary.

**A** – 14 to 28 inches; grayish brown loamy coarse sand, very dark grayish brown when moist; weak fine subangular blocky structure; soft, very friable, non-sticky and non-plastic; few fine and common very fine roots; many very fine interstitial pores; 2 percent rounded pebbles; neutral; diffuse wavy boundary.

**C1** – 28 to 53 inches; brown loamy coarse sand, dark brown when moist; common medium distinct light brown mottles, dark brown when moist; massive; soft, very friable, non-sticky and non-plastic; many very fine interstitial pores; 2 percent rounded pebbles; slightly acid; diffuse wavy boundary.

**C2** – 53 to 75 inches; pale brown loamy coarse sand, brown when moist; common medium distinct light brown mottles, dark brown when moist; massive; slightly hard, friable, non-sticky and non-plastic; many very fine interstitial pores; 2 percent rounded pebbles; neutral.

## **6.2 Plant Survey Results**

### ***6.2.1 Floristic Inventory and Habitat Characterization***

The Property only supports one habitat type, ruderal/disturbed annual grassland. In classifying the habitat on the Property, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). The final classification and characterization of the habitat type of the Property was based on field observations. Special-status plant species that occurred within 5 miles of the Property are shown in Attachment 1, Figure 6.

The habitat type and a description of the plant species present within the habitat type are provided below. The habitats found on the Property are mapped on Attachment 1, Figure 10. Dominant plant species are also noted. A complete list of plant species observed on the Property can be found within Attachment 2, Table 1.

#### **Ruderal/Disturbed Annual Grassland**

The Property entirely consists of ruderal/disturbed annual grassland. The Property was historically used for dryland agriculture, however it has remained fallow and regularly disked for over a decade. Because of this, the Property was largely unvegetated (75% or more bare ground) during the May 2021 site visit. The dominant vegetation that was observed included crabgrass, ripgut brome, black mustard, wild radish, and fiddleneck with small amounts of other grasses

and herbaceous species. A complete list of the plant species identified are included in Attachment 2, Table 1.

### **Special-Status Plant Species**

Special-status plant species include species listed as Rare, Threatened, or Endangered by the USFWS (2021a) or by the State of California (CDFW 2021b). Federal Proposed and Candidate species (USFWS, 2021b) are also special-status species. Special-status species also include species listed on List 1A, List 1B, or List 2 of the CNPS Inventory (Skinner and Pavlik, 1994; CNPS 2021). All species in the above categories fall under state regulatory authority under the provisions of CEQA, and may also fall under federal regulatory authority. Considered special-status species are species included on List 3 (Plants About Which We Need More Information—A Review List) or List 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventory*. These species are considered to be of lower sensitivity and generally do not fall under specific state or federal regulatory authority. Specific mitigation considerations are not generally required for List 3 and List 4 species.

Attachment 2, Table 2 includes a list of special-status plants with the potential to occur within or in the immediate vicinity of the Property based on a review of the surrounding quads. The special-status plant species identified by the CNDDDB as potentially occurring on the Property are known to grow only from specific habitat types. The specific habitats or “micro-climate” necessary for many of the plant species to occur are not found within the boundaries of the Property. Additionally, the Property has been disked annually for more than a decade, inhibiting the establishment of a developed plant stratum. Because of this, the annual grassland habitat that occurs on the Property is unlikely to support any special-status plant species.

Four occurrences of special-status plants were identified within a five-mile radius of the point roughly representing the center of the Property (Attachment 1, Figure 6). However, it was determined that due to the regular disturbance of habitat present on the site, it is unlikely that any special-status plants will occur on the Property.

## **6.3 Wildlife Survey Results**

### **6.3.1 General Wildlife Species and Habitats**

A complete list of wildlife species observed within the Property can be found in Attachment 2, Table 1. Wildlife species commonly occurring within habitat types present on the Property are discussed below:

## **Ruderal/Disturbed Annual Grassland**

Due to the heavily disturbed nature of the Property there were a limited number of wildlife species observed during the survey. A coyote (*Canis latrans*) was observed crossing the site and other signs of coyotes (paw prints, scat, and possible dens) were observed throughout the northern parcel of the Property. There are several raised berms scattered throughout the northern parcel that contained vast networks of California ground squirrel (*Otospermophilus beecheyi*) burrows and several squirrels were observed during the survey. It is likely that other “urban” mammals such as racoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), or other burrowing rodents would utilize the habitat on the Property. Additionally, bat species such as the pallid bat (*Antrozous pallidus*) and western mastiff bat may use habitat on the property for foraging.

Several raptors were observed foraging over the northern parcel including a pair of red-tailed hawks (*Buteo jamaicensis*), a white-tailed kite (*Elanus leucurus*), and a Swainson’s hawk that was nesting immediately adjacent to the Property. Other common avian species that may utilize habitat on the property include American crow (*Corvus brachyrhynchos*) and turkey vulture (*Cathartes aura*). Due to the presence of mammal burrows and friable soil, there is also the potential for burrowing owl to occur on the Property.

Numerous western fence lizards (*Sceloporus occidentalis*) were observed throughout the property, and other reptile species such as the California glossy snake (*Arizona elegans occidentalis*) and San Joaquin coachwhip (*Masticophis flagellum*) may occur on the Property. An elderberry shrub (*Sambucus* spp.) was also identified on the property. As elderberry is the host plant for VELB, there is the potential for this species to occur on the Property.

## **INVERTEBRATES**

### **Valley Elderberry Longhorn Beetle (VELB) (*Desmocerus californicus dimorphus*), Federally Threatened.**

People often call this species “VELB” to avoid saying the whole name. Longhorn beetles (family Cerambyidae) are characterized by long tube-like bodies with long antennae, often more than  $\frac{2}{3}$  of the body length. VELB are stout-bodied. Males range in length from about 2 cm (about  $\frac{1}{2}$  to nearly 1 inch), measured from the front of the head to the end of the abdomen, with antennae about as long as their bodies. Females are slightly broader than males and have shorter antennae. Adult males have red-orange elytra (wing covers) with four elongate spots. The red-orange fades to yellow on some museum specimens. Adult females have dark colored elytra.

Adults eat elderberry leaves and flowers. Larvae eat the inside of elderberry stems. The species is nearly always found on or close to its host plant, red or blue elderberry (*Sambucus* species),

along rivers and streams. Females lay their eggs on the bark. Larvae hatch and burrow into the stems. Stems need to be at least about one inch in diameter.

There is one CNDDDB occurrence within five miles of the Property. Occurrence #158 is located approximately 4.4 miles northeast of the Property along the Middle River. One adult beetle was collected along the levee road in 1984 and other shrubs had exit holes.

There is one elderberry shrub on the Property, along the northeast fence line. The shrub is approximately 6 feet tall by 15 feet wide. The shrub is not in a riparian area and there are no other elderberry shrubs anywhere in the vicinity. Given the above information, there is a moderate potential for VELB to occur on the Property due to the presence of its host plant.

## **REPTILES**

### **California Glossy Snake (*Arizona elegans occidentalis*). State Species of Special Concern.**

This medium sized (3-4 feet) muscular snake has smooth, glossy scales with a faded or bleached out appearance and a short tail. This subspecies is generally darker in color than other glossy snake subspecies with a tan or light brown ground color, dark brown blotches with dark edges on the back and sides, with a pale unmarked belly. This subspecies occurs from the eastern part of the San Francisco Bay Area southwards to Baja California, Mexico. However, this species is absent from the central coast. The two other subspecies of glossy snakes found in California, the desert glossy snake (*Arizona elegans eburnata*) and Mojave glossy snake (*Arizona elegans candida*) occur in arid regions in the southeast of the state.

The California glossy snake is nocturnal and hides underground in the daytime under rocks, existing burrows, or they can dig their own burrows. They are typically active from late February until November with peak activity in May and being less active in the summer. This species actively hunts lizards, small snakes, terrestrial birds, and nocturnally-active mammals by direct swallowing or constriction. The California glossy snake inhabits arid scrub, rocky washes, grasslands, and chaparral. They typically prefer microhabitat areas that consist of open areas with soil loose enough for easy burrowing.

There are no CNDDDB occurrences of California glossy snake within five miles of the Property. The nearest CNDDDB occurrence (#17) is located approximately 15 miles southwest of the Property, southwest of Tracy. A juvenile snake was collected at this location in 1986. Given the above information, there is a low potential for California glossy snake to occur on the Property.

**San Joaquin Coachwhip (*Masticophis flagellum*). State Species of Special Concern.**

This slender, long snake can grow to 5.5 feet in length, making it the second longest snake in California. The San Joaquin coachwhip is fast moving with smooth scales, a large head, a thin neck, and a long tail. Their color is tan, olive brown, or yellowish brown with a braided pattern along their tail, which gives the species its name. This species lacks the very dark head and neckbands of other subspecies found in California.

The San Joaquin coachwhip is active during the daytime and is able to tolerate high temperatures. Because of their affinity to higher temperatures, they typically emerge from winter sites in April or May, later than many other snakes. This species is a good climber, and their diet typically includes bats, birds, bird eggs, lizards, snakes, amphibians, and carrion. This species is endemic to California and occurs from the northern Central Valley southward to the Grapevine in Kern County. There the species integrates with the subspecies red racer (*Masticophis flagellum piceus*). The San Joaquin coachwhip occurs in open, dry, treeless areas with little or no cover including valley grasslands habitat. They avoid dense vegetation where they can not move quickly and take refuge in rodent burrows, under shaded vegetation, and under surface objects.

There are no CNDDDB occurrences of San Joaquin coachwhip within five miles of the Property. The nearest occurrence (#2) is located approximately 15 miles southwest of the Property, southwest of Tracy. Multiple specimens have been collected at this location, with the most recent in 1991. The hot, dry, barren nature of the ruderal/disturbed annual grassland habitat on the Property could provide hunting habitat, while the abundance of rodent burrows could provide refuge habitat. While the property does fall within the range of the species, all CNDDDB occurrences are found higher in elevation among the foothills, or much further south in the San Joaquin valley. Given the above information, there is a low potential for San Joaquin coachwhip to occur on the Property.

**BIRDS**

**Red-Tailed Hawk (*Buteo jamaicensis*). State Protected.**

The red-tailed hawk is a large *Buteo* that is distinct due to the red color of its tail feathers in contrast to the brown color of its body. Not all red-tailed hawks exhibit the distinct coloration on their tail and gradations may occur especially in young birds. Red-tailed hawks hunt rodents by soaring over grassland habitat. Nest trees for red-tailed hawks are usually tall trees with a well-developed canopy that includes a strong branching structure on which to build a nest.

The CNDDDB does not track occurrences of red-tailed hawk. However, a pair of red-tailed hawks were observed foraging on the Property during the May 2021 survey. There are no large trees on

the Property that would provide nesting habitat, and the only large trees adjacent to the property already contain an active Swainson's hawk nest, so it is extremely unlikely that another raptor species would nest in that area. However, there are numerous large trees in the surrounding landscape that may provide appropriate nesting habitat. Given the information above, it is unlikely that the red-tailed hawk will nest on the Property, but it is present in a foraging capacity.

**White-tailed Kite (*Elanus leucurus*). Federal Species of Concern, CDFW: Fully Protected.**

The white-tailed kite is falcon-shaped with a long white tail. This raptor has black patches on the shoulders that are highly visible while the bird is flying or perching. White-tailed kites forage in annual grasslands, farmlands, orchards, chaparral, and at the edges of marshes and meadows. They are found nesting in trees and shrubs such as willows (*Salix sp.*), California sycamore (*Platanus racemosa*), and coast live oak (*Quercus agrifolia*) often near marshes, lakes, rivers, or ponds. This raptor often hovers while inspecting the ground below for prey. The White-tailed Kite eats mainly small mammals, as well as some birds, lizards, and insects. Annual grasslands are considered good foraging habitat for white-tailed kites, which will forage in human-impacted areas.

A white-tailed kite was observed foraging on the Property during the May 2021 survey. The nearest CNDDDB occurrence of this species (#110) is located approximately 6.9 miles to the northeast of the Property in the City of Stockton. There are no large trees on the Property that would provide nesting habitat, and the only large trees adjacent to the property already contain an active Swainson's hawk nest, so it is extremely unlikely that another raptor species would nest in that area. However, there are numerous large trees in the surrounding landscape that may provide appropriate nesting habitat. Given the information above, it is unlikely that the white-tailed kite will nest on the Property, but it is present in a foraging capacity.

**Burrowing Owl (*Athene cunicularia*). Federal Species of Special Concern, California Species of Special Concern.**

The U.S. Fish and Wildlife Service has identified the burrowing owl as a "candidate" species. Candidate species are animals and plants that may warrant official listing as threatened or endangered, but there is no conclusive data to give them this protection at the present time. As a candidate species, burrowing owls receive no legal protection under the Endangered Species Act (ESA). However, this species does receive some legal protection from the U.S. through the Migratory Bird Treaty Act, which forbids the destruction of the birds and active nests. In California, the burrowing owl is considered a "species of special concern."

Burrowing owls are ground dwelling members of the owl family and are small brown to tan colored birds with bold spots and barring. Burrowing owls generally require open annual

grassland habitats in which to nest, but can be found on abandoned lots, roads, airports, and other urban areas. Burrowing owls generally use abandoned California ground squirrel holes for their nesting burrow, but are also known to use pipes or other debris for nesting purposes. Burrowing owls prefer annual grassland habitats with low vegetative cover. The breeding season for burrowing owls occurs from March through August. Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to twelve eggs from mid-May to early June. The female incubates the clutch for about 28 days, while the male provides her with food. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at six weeks old.

CNDDDB listed seven occurrences of burrowing owl within five miles of the Property. The closest occurrence (Occurrence #342) was observed less than one mile east of the Property on the Sharpe Facility, part of the San Joaquin Depot. Numerous pairs have been observed nesting on the site since 1981, however there has been a sharp decline in their population starting in 2013. While there are numerous ground squirrel burrows on the Property, the intense annual disturbance of disking would likely preclude the species from establishing burrows. For this reason, the burrowing owl has a low potential to occur on the Property in nesting and foraging capacity and is not likely to occur.

**Loggerhead Shrike (*Lanius ludovicianus*). Federal Species of Special Concern, California Species of Special Concern.**

The loggerhead shrike is a black and white perching bird with a black face mask that extends over the bill. A common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. It occurs only rarely in heavily urbanized areas, but is often found in open cropland. This species hunts large insects, small rodents and even small birds. Loggerhead shrikes are known for their habit of impaling their food on thorns or barb wire for future consumption. The range and habitat for the loggerhead shrike has steadily shrunk due to human development within grasslands; however, this species is often found on lands grazed by cattle that are fenced with barb wire. These birds use shrubs, dense trees, and thickets of vegetation for nesting sites.

CNDDDB listed one occurrence of loggerhead shrike within five miles of the Property. Occurrence #112 is located approximately 2 miles south of the Property at the southern end of Lathrop. In 2016 a pair of birds were observed feeding 4 fledglings. While the property where the siting occurred has since been developed, the occurrence is presumed extant. There are no trees or shrubs on the Property that would provide nesting habitat. However, foraging habitat is

present throughout the Property. Given the information above the loggerhead shrike has low potential to occur in a foraging capacity only.

### **Swainson's Hawk (*Buteo swainsoni*). State Threatened.**

The Swainson's hawk is a raptor that is slightly smaller than the red-tailed hawk with wings that taper slightly toward the outer wing tip. This hawk has a brown bib that covers its head and extends down the chest. The leading portion of the wing is light in color. In flight, this bird has an inverse color pattern in comparison to a red-tailed hawk. This hawk has three potential color morphs---light, intermediate and dark. Swainson's hawks are summer migrants to the Central Valley and Delta region where they nest within larger-sized trees.

Commonly, the Swainson's hawk builds platform nests in tall mature trees, often in the first fork of the tree---built with sticks, twigs and branches with green leaves. (blue gum, valley oak, live oak, pine, or other tall tree stands) These raptors require nearby foraging habitat such as annual grasslands, alfalfa fields, grain fields, and row crops.

Males perform aerial acrobatics to impress females. Maneuvers include soaring over nest, diving up to 50 feet and rapid wing beats. Breeding occurs late March to late August, with peak activity late May through July. Clutch size 2-4, usually 2 or 3 eggs. Incubation lasts 25-28 days and is done by male and female. Hatchings fledge 28-30 days after hatching. Males hunt and bring food to female who feeds the chicks. Chicks learn to hunt by watching and copying parents.

A Swainson's hawk was observed foraging on the Property and flew to a nest approximately 20 feet from the Property, in a large cottonwood tree (*Populus fremontii*) on the other side of Dos Reis Road. In addition, CNDDDB has 51 records of Swainson's hawk within five miles of the Property. Given the information above, Swainson's hawk is known to forage on the Property and nest immediately adjacent to the Property.

## **MAMMALS**

### **Special-status Bats**

Bats (Order – *Chiroptera*) are the only mammals capable of “true” flight. They are nocturnal feeders and locate their prey, which consists of small to medium sized insects by echolocation. Bats consume vast amounts of insects making them very effective pest control agents. They may eat as much as their weight in insects per day. Maternity roosts comprised of only females, may be found in buildings or mine shafts with temperatures up to 40 degrees Celsius and a high percentage of humidity to ensure rapid growth in the young. Female bats give birth to only one



or two young annually and roost in small or large numbers. Males may live singly or in small groups, but scientists are still unsure of the whereabouts of most males in summer.

Special-status bats with the potential to occur on the Property are listed below:

- Pallid bat (*Antrozous pallidus*)
- Western mastiff bat (*Eumops perotis californicus*)

There are no CNDDDB occurrences of either of these species within five miles of the Property. The nearest occurrence of pallid bat (#279) is located approximately 16 miles northeast of the Property in Farmington. Several specimens were collected in 1951. The nearest occurrence of western mastiff bat (#17) is located approximately 16.8 miles southwest of the Property at Castle Rock, east of Tracy. Two individuals were observed flying near the cliff face in 1991. The ruderal/disturbed grassland habitat on the Property could provide foraging habitat for both species, however there are no trees, rocks, or other structures that the bats may use for roosting. Given the above information, both bats have a moderate potential to occur on the Property in a foraging capacity only.

### **6.3.2 Critical Habitat**

As shown in Figure 7, the Property falls within the critical habitat unit V01 for Delta smelt (*Hypomesus transpacificus*). Critical habitat was established for this species on December 19, 1994 (Federal Register 59 No. 242, pp. 65256-65279). As there are no wetlands or waters located on the Property, there will be no impact to the designated critical habitat.

## **7.0 CONCLUSIONS**

### **7.1 Wetlands/Waters**

Results of the biological resource analysis survey conducted by Olberding Environmental indicate that the Property likely does not contain wetlands or waters that would be considered jurisdictional by the Army Corps of Engineers, RWQCB, or CDFW. There are several areas on the Property that are slight topographic depressions. However, during the May 2021 survey there was no sign of any water ponding in these areas and a review of historic aerial imagery does not show any regular inundation. It is likely that the high sand content of the soil and regular tilling of the Property would facilitate these areas draining quickly after a rain event. Given the conditions present at the time of the site visit, there are no jurisdictional wetland or water features on the Property.

## 7.2 Special-status Plants

It was determined that there is no potential for any special status plants to occur on the Property. Due to the ruderal nature of the habitat, the lack of any wetland features, and the long history of regular tilling of the soils, there is no suitable habitat for any special-status plants to occur on the Property. Review of historic CNDDDB records and the site visit conclude that there is no potential for any special-status plants to occur on the Property.

## 7.3 Special-status Wildlife

**Special-Status Invertebrates** – Given the vegetation that was identified on the Property; VELB has a moderate potential to occur on the Property. A moderately sized, healthy elderberry shrub (host plant for the species) was identified on the western fence line of the Property (Figure 11). Additionally, there is one CNDDDB occurrence of this species (#158) located approximately 4.4 miles northwest the Property. The presence of the elderberry shrub on the Property in addition to the recent CNDDDB occurrence within five miles create the potential for VELB to occur on the Property.

**Special-Status Amphibians** – Due to the lack of any wetland or water features on the Property, there is no potential for any amphibians to occur on the Property.

**Special-Status Reptiles** – Given the presence of suitable onsite habitat; the California glossy snake and San Joaquin coachwhip have a low potential to occur on the Property. While the Property does provide open, dry habitat for hunting with plenty of mammal burrows, the regular disturbance of the soil would likely preclude the California glossy snake from utilizing the Property for reproduction. Also, while the Property does fall within the range for the San Joaquin coachwhip, all nearby CNDDDB occurrence are found at approximately 300 feet in elevation or higher, with the nearest occurrence in the Valley floor occurring nearly 100 miles south of the Property. For this reason, the San Joaquin coachwhip has only a low potential to occur on the Property.

**Foraging or Nesting Raptor/Passerine Species** – A total of four special-status bird species were identified as having a potential to occur on the Property, burrowing owl, Swainson's hawk, loggerhead shrike, and white-tailed kite. There are numerous ground squirrel and other mammal burrows among several raised berm areas on the Property that could serve as burrows for burrowing owl. However, during the May 2021 survey there were no signs of any burrowing owls among these areas. During the survey, a Swainson's hawk was observed using a nest approximately 20 feet from the Property, across Dos Reis Road. Due to the presence of the active Swainson's hawk nest among this small group of trees, it is unlikely that any other raptor or

passerine species would nest in this immediate vicinity, and there are no other potential nesting locations on or immediately adjacent to the Property. However, two red-tailed hawks and a white-tailed kite were observed foraging over the property, and it provides potential foraging habitat for the loggerhead shrike as well as other raptor species. A CNDDDB occurrence of yellow-headed blackbird (*Xanthocephalus xanthocephalus*) (Occurrence #5) intersects with the Property, but it was determined that there is no potential habitat for the species within the Property.

**Special-Status Mammals** – Given the presence of suitable onsite habitat; the pallid bat and western mastiff bat have a moderate potential to occur on the Property in a foraging capacity. However, due to the lack of any trees or other large structures on the Property, there is no potential for any roosting habitat. While the western mastiff bat is a Covered Species under the SJMSCP (SJCOG 2000), all incidental take minimization and mitigation measures involve nursery sites, which are not located on the Property. Therefore, no action will need to be taken for these species.

## 8.0 RECOMMENDATIONS

- **VELB Buffer and/or Survey** – VELB is a species covered by the SJMSCP (SJCOG 2000), and the incidental take minimization and mitigation measures outlined in the document are as follows:

*“In areas with elderberry bushes, as indicated by the SJMSCP Vegetation Maps or per a preconstruction survey identification or other sources indicated in Section 5.2.2.3, the following shall occur:*

*A. If elderberry shrubs are present on the project site, a setback of 20 feet from the dripline of each elderberry bush shall be established.*

*B. Brightly colored flags or fencing shall be placed surrounding elderberry shrubs throughout the construction process.*

*C. For all shrubs without evidence of VELB exit holes which cannot be retained on the project site as described in A and B, above, the JPA shall, during preconstruction surveys, count all stems of 1" or greater in diameter at ground level. Compensation for removal of these stems shall be provided by the JPA within SJMSCP Preserves as provided in SJMSCP Section 5.5.4(B).*

*D. For all shrubs with evidence of VELB exit holes, the JPA shall undertake transplanting of elderberry shrubs displaying evidence of VELB occupation to VELB*

*mitigation sites during the dormant period for elderberry shrubs (November 1 - February 15). For elderberry shrubs displaying evidence of VELB occupation which cannot be transplanted, compensation for removal of shrubs shall be as provided in SJMSCP Section 5.5.4 (C)."*

If the elderberry shrub can be maintained on the Property, then a 20 ft. setback will need to be established around the shrub (See Figure 11). If the shrub cannot be maintained on the Property, then VELB exit hole surveys consistent with the USFWS protocol (USFWS 2017) will be performed prior to any ground disturbance. Depending on the results of this survey, either mitigation measure C or D above will be used.

- **Pre-construction Reptile Survey** – Both California glossy snake and San Joaquin coachwhip have a low potential to occur on the Property and therefore a pre-construction survey should be performed no more than 48 hours prior to ground disturbance or vegetation removal. Surveys would be required to determine presence/absence of this species. If the species are found to occur on the Property, then passive relocation methods should be attempted before ground disturbance.
- **Pre-Construction Avian Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) in large trees adjacent to the Property should be conducted by a competent biologist 14 days prior to the commencement of the tree removal or site grading activities. Specific attention should be paid to the active Swainson's hawk nest that was identified across Dos Reis Road from the Property. As per the Incidental Take Minimization Measures for Swainson's hawk that are outlined in Section 5.2.4.11 of the SJMSCP (SJCOG 2000):

*"If a nest tree becomes occupied during construction activities, then all construction activities shall remain a distance of two times the dripline of the tree, measured from the nest."*

The dripline for the tree where the Swainson's hawk nest was observed is estimated to be 25 feet, making the required buffer for this nest 50 feet. The nest location and buffer are shown on Figure 11.

If any other birds listed under the Migratory Bird Treaty Act are found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 50 feet from the project activities for passerine birds, and a minimum of

250 feet for other raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).

- **Burrowing Owl Surveys** – Burrowing owls were not identified on the property during May 2021 survey. However, a burrowing owl pre-construction survey should take place before any construction activities commence. It is recommended that they be conducted whenever burrowing owl habitat or sign is encountered on or adjacent to (within 150 meters) a project site. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the Property three additional protocol level surveys will be initiated. As per the incidental take minimization and mitigation measures outlined in the SJMSCO (SJCOG 2000): If burrowing owls are identified and work is to commence during the non-breeding season (September 1 through January 31), then the owls should be evicted from the Property by passive relocation as described in the CDFW’s report on burrowing owls (1995). If work occurs during the breeding season (February 1 through August 31) then the burrows shall not be disturbed and will be provided with a 75-meter protective buffer. However, if it is determined that the birds have not begun laying eggs, or the juveniles from the occupied burrows are foraging independently and are capable of independent survival, then the burrows can be destroyed.
- **Erosion Control** – Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the Property could adversely surrounding habitats and cause increased particulate matter to enter the storm drain system. Implementation of appropriate mitigation measures would ensure that impacts to aquatic systems would be avoided or minimized. Mitigation measures may include best management practices (BMP’s) such as hay bales, silt fencing, placement of straw mulch and hydro seeding of exposed soils after construction as identified in the Storm Water Pollution Prevention Plan (SWPPP).

## 9.0 LITERATURE CITED

- California Department of Fish and Wildlife (CDFW) Natural Diversity Data Base. 2021a. Computer listings and map locations of historic and current recorded occurrences of special-status species and natural communities of special concern for USGS 7.5 minute quadrangle maps: Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon. Accessed on May 3, 2021.
- \_\_\_\_\_.2021b. State and federally listed Endangered, Threatened, and Rare plants of California. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline>
- \_\_\_\_\_.2021c. Special animals. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>
- \_\_\_\_\_.1995. Staff Report on Burrowing Owl Mitigation. October 17, 1995.
- California Native Plant Society (CNPS), Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> Accessed May 3, 2021.
- CEQA. 2021. The California Environmental Quality Act. Appendix G, Environmental Checklist Form. Accessed on May 10, 2021. Available online at [https://www.califaep.org/statute\\_and\\_guidelines.php](https://www.califaep.org/statute_and_guidelines.php)
- The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded. University of California Press, Berkeley, CA. 2012. 1400 pp.
- Holland (1986) Preliminary Description of the Natural Communities of California. CDFW.
- Natural Resources Conservation Service (NRCS). 2021. United States Department of Agriculture. Web Soil Survey. Accessed May 6, 2021. Available on-line at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/>
- San Joaquin Council of Governments (SJCOCG). 2000. San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Stockton, California. Accessed on May 10, 2021. Available online at <https://ca-sjcog2.civicplus.com/173/Plan-Documents>
- Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. A manual of California vegetation. 2<sup>nd</sup> Ed. California Native Plant Society, Sacramento, CA.

Skinner, M. W. and B. M. Pavlik (eds.). 1994. Inventory of rare and endangered vascular plants of California. California Native Plant Society Special Publication No. 1 (5<sup>th</sup> edition). California Native Plant Society, Sacramento, CA. 338 pp.

United States Fish and Wildlife Service (USFWS). 2021a. Endangered and threatened plant and animal species. Accessed on May 10, 2021. <https://www.fws.gov/endangered/>

\_\_\_\_\_. 2021b. Endangered and threatened wildlife and plants; review of plant and animal taxa that are Candidates or Proposed for listing as Endangered or Threatened; annual notice of findings on recycled petitions; annual description of progress on listing actions; proposed rule. Accessed on May 10, 2021. <https://ecos.fws.gov/ecp/>

\_\_\_\_\_. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.

\_\_\_\_\_. 2007. Bald Eagle Management Guidelines and Conservation Measures. The Bald and Golden Eagle Protection Act. Accessed on May 10, 2021. Available on-line at <http://www.fws.gov/northeast/ecologicalservices/pdf/NationalBaldEagleManagementGuidelines.pdf>.

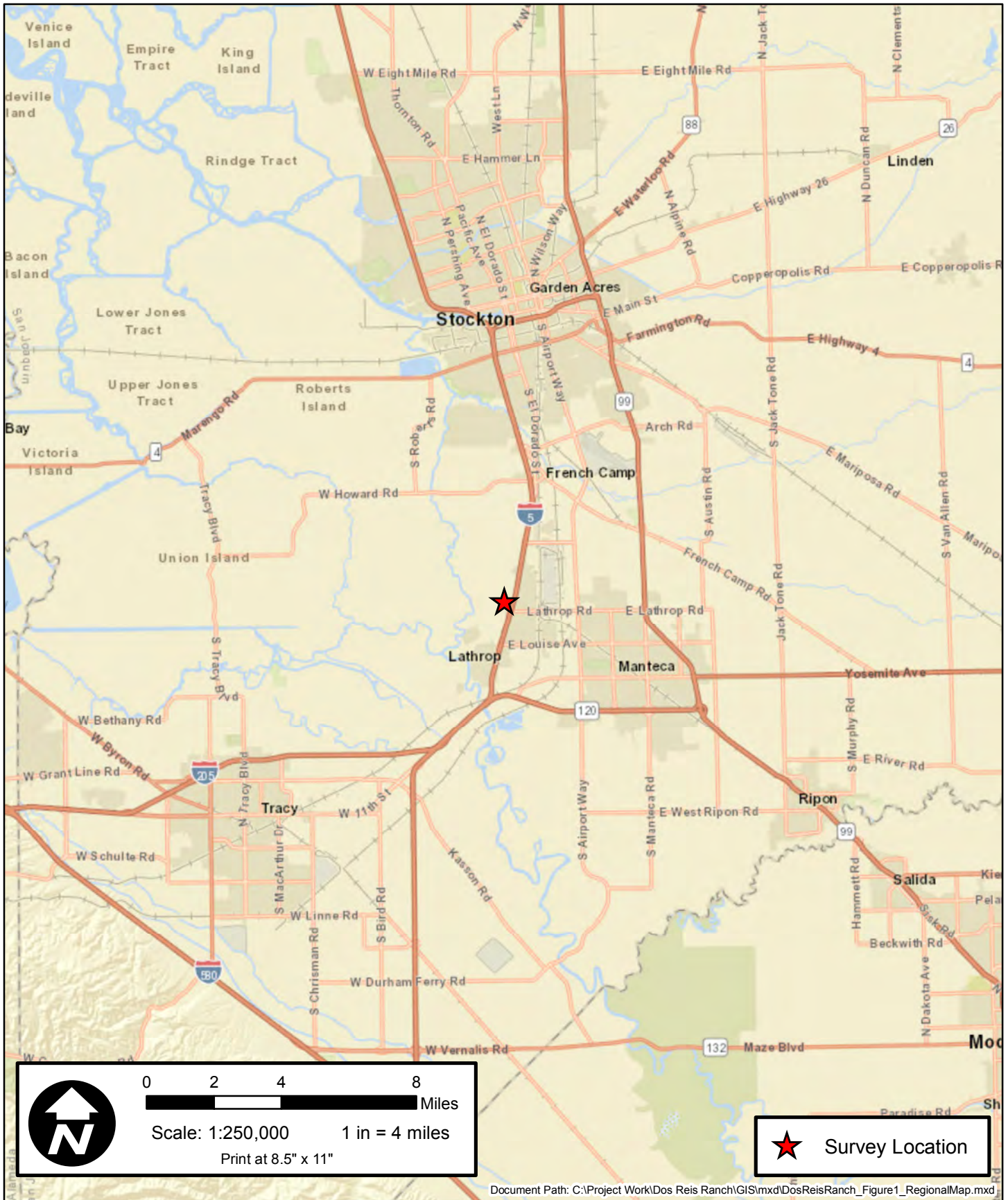
## **ATTACHMENTS**



## **ATTACHMENT 1 FIGURES**

- |                  |  |
|------------------|--|
| <b>Figure 1</b>  | <b>Regional Map</b>                          |
| <b>Figure 2</b>  | <b>Vicinity Map</b>                          |
| <b>Figure 3</b>  | <b>USGS Quadrangle Map</b>                   |
| <b>Figure 4</b>  | <b>Aerial Photograph</b>                     |
| <b>Figure 5</b>  | <b>CNDDDB Map of Special Status Wildlife</b> |
| <b>Figure 6</b>  | <b>CNDDDB Map of Special Status Plants</b>   |
| <b>Figure 7</b>  | <b>USFWS Designated Critical Habitat</b>     |
| <b>Figure 8</b>  | <b>Soils Map</b>                             |
| <b>Figure 9</b>  | <b>Photo Location Map</b>                    |
| <b>Figure 10</b> | <b>Habitat Map</b>                           |
| <b>Figure 11</b> | <b>Special-Status Species Observed Map</b>   |

**Figure 1**  
**Regional Map**

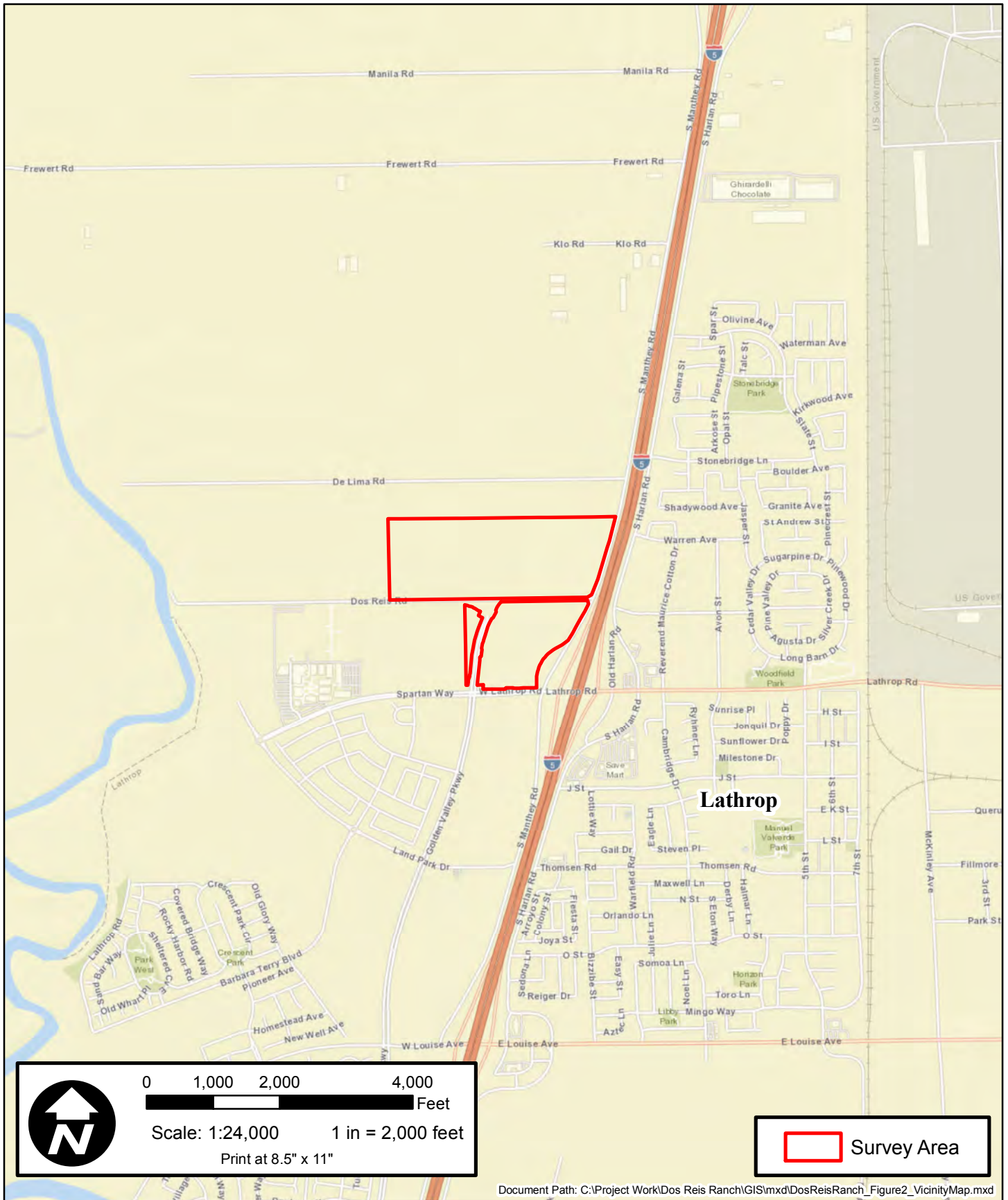


**Figure 1: Regional Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**



193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

**Figure 2**  
**Vicinity Map**

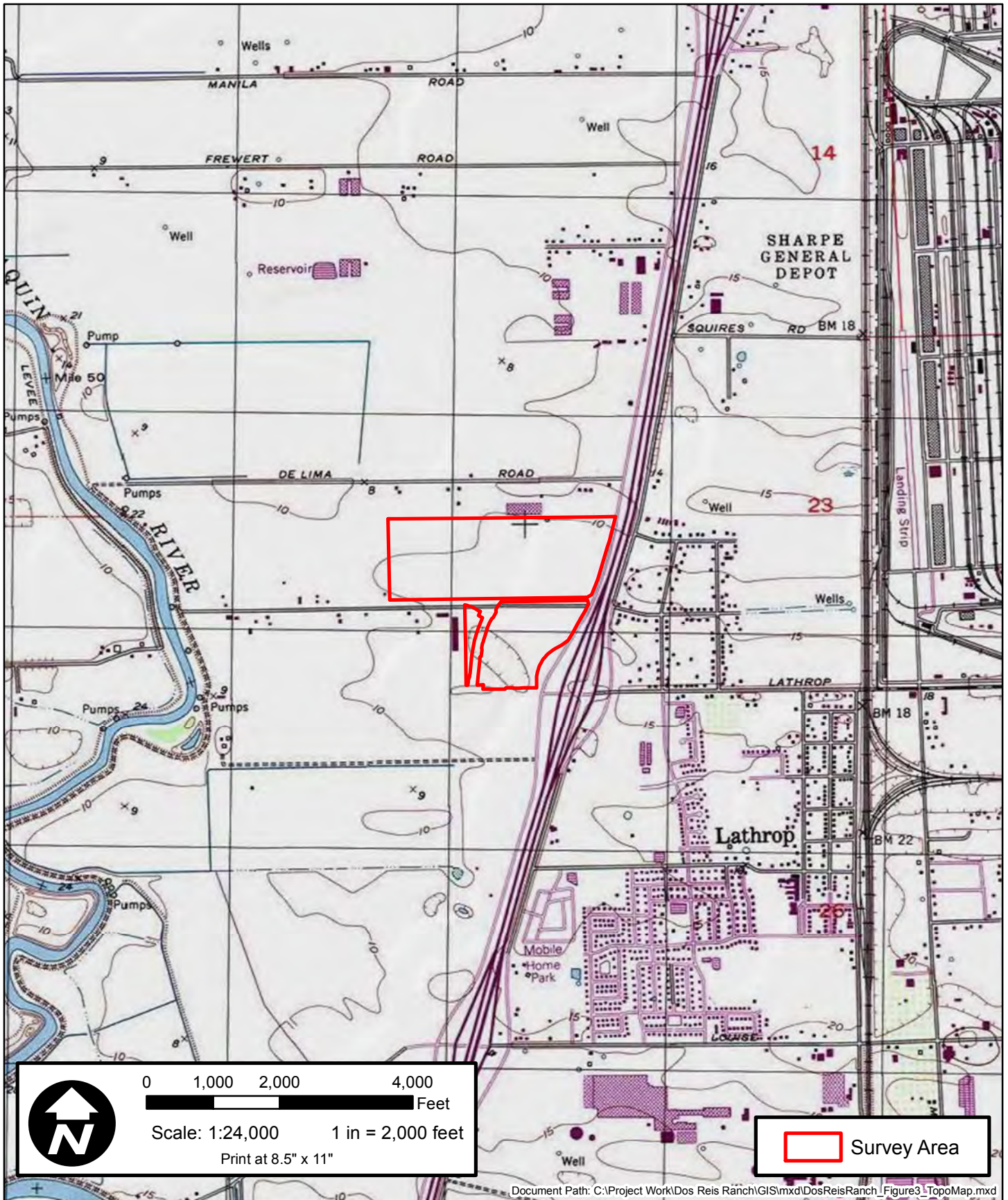


193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

**Figure 2: Vicinity Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**

Revision Date: 5/11/2021

**Figure 3**  
**USGS Quadrangle Map**



**Figure 3: US Topographic Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**



193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

**Figure 4**  
**Aerial Photograph**



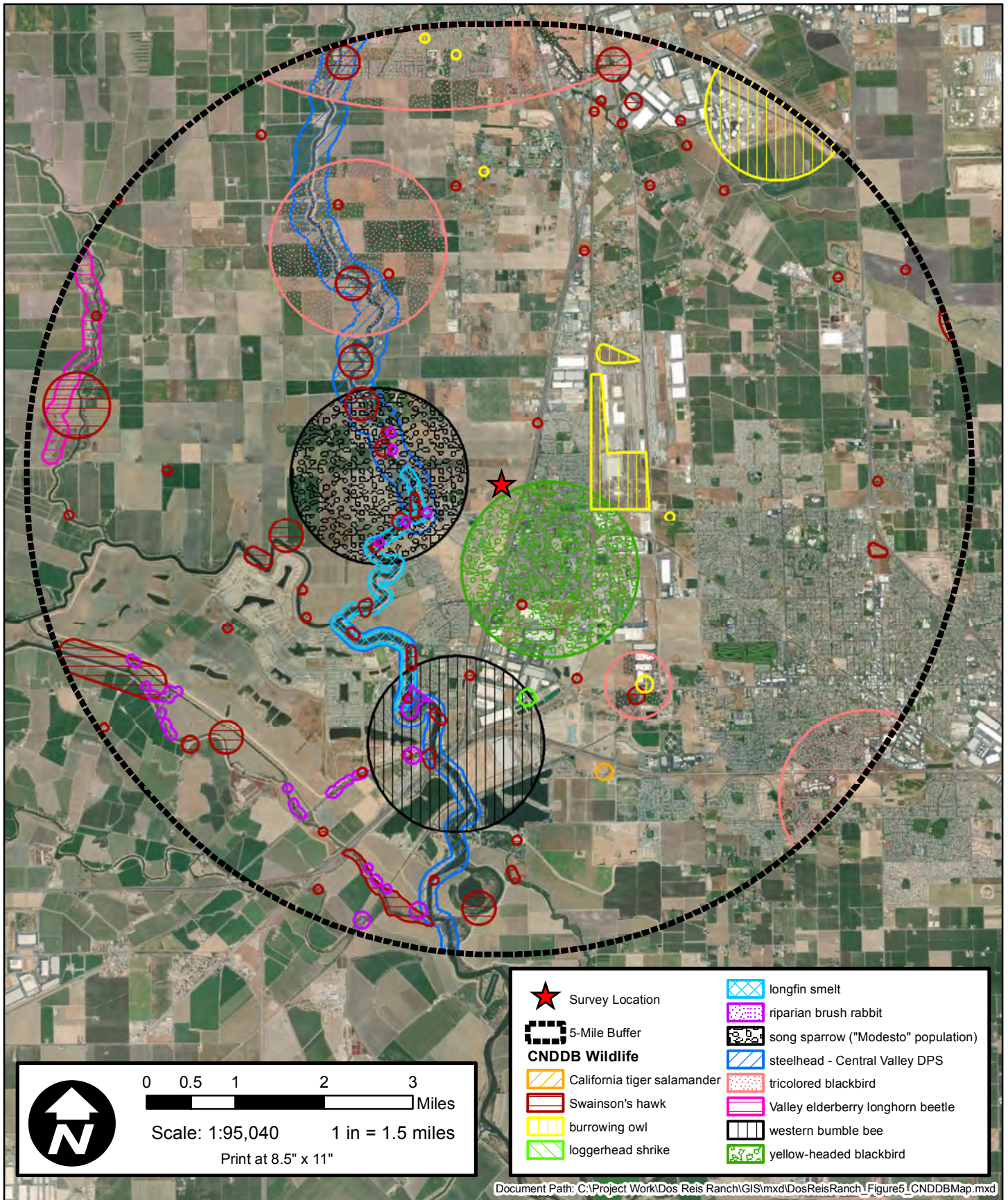


193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

**Figure 4: Aerial Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**

Revision Date: 5/11/2021

**Figure 5**  
**CNDDDB Map of Special Status Wildlife**

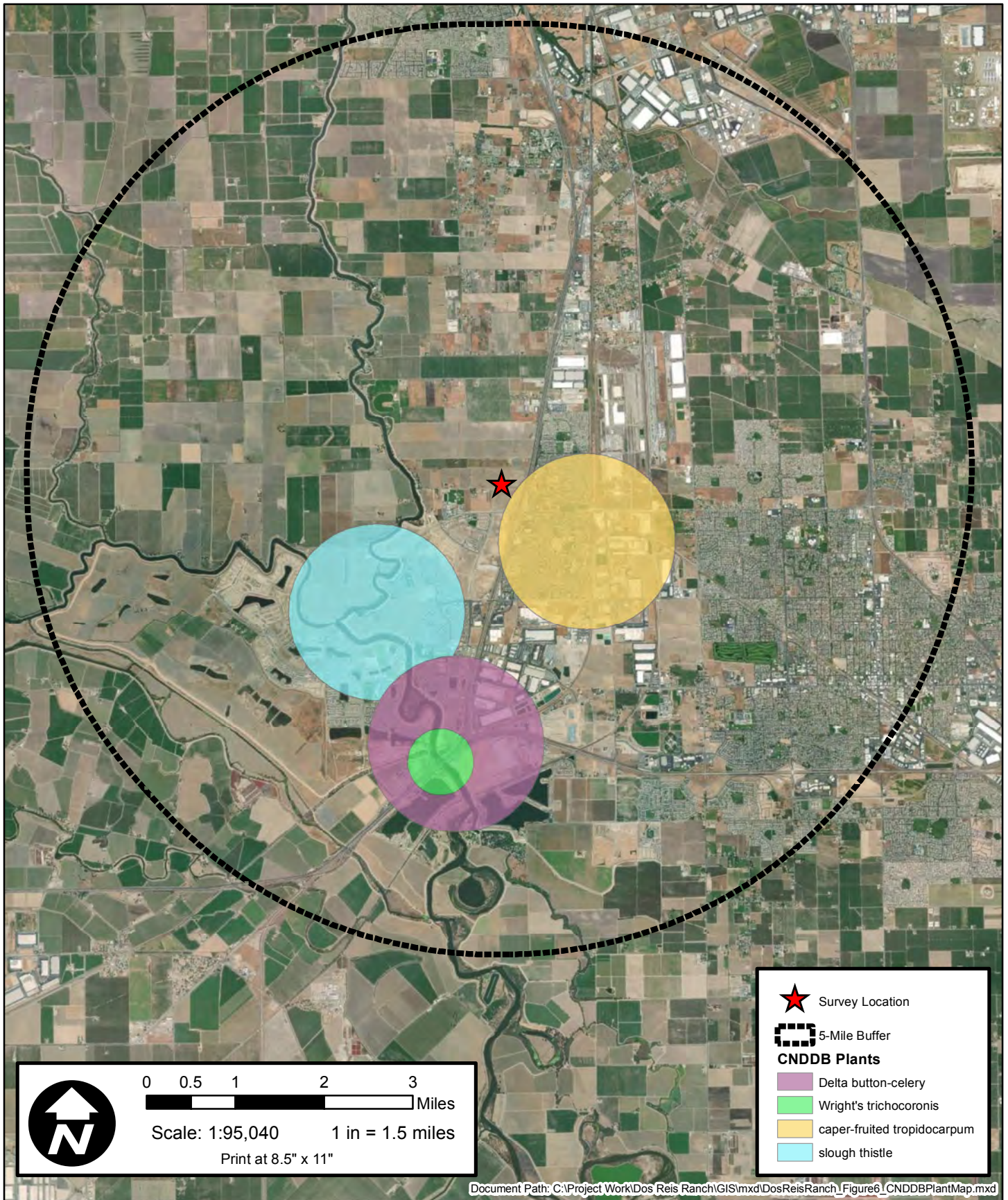


**Figure 5: CNDDB Wildlife Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**









193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

**Figure 6**  
**CNDDDB Map of Special Status Plants**



0 0.5 1 2 3  
Miles  
Scale: 1:95,040 1 in = 1.5 miles  
Print at 8.5" x 11"

-  Survey Location
-  5-Mile Buffer
- CNDDB Plants**
-  Delta button-celery
-  Wright's trichocoronis
-  caper-fruited tropidocarpum
-  slough thistle

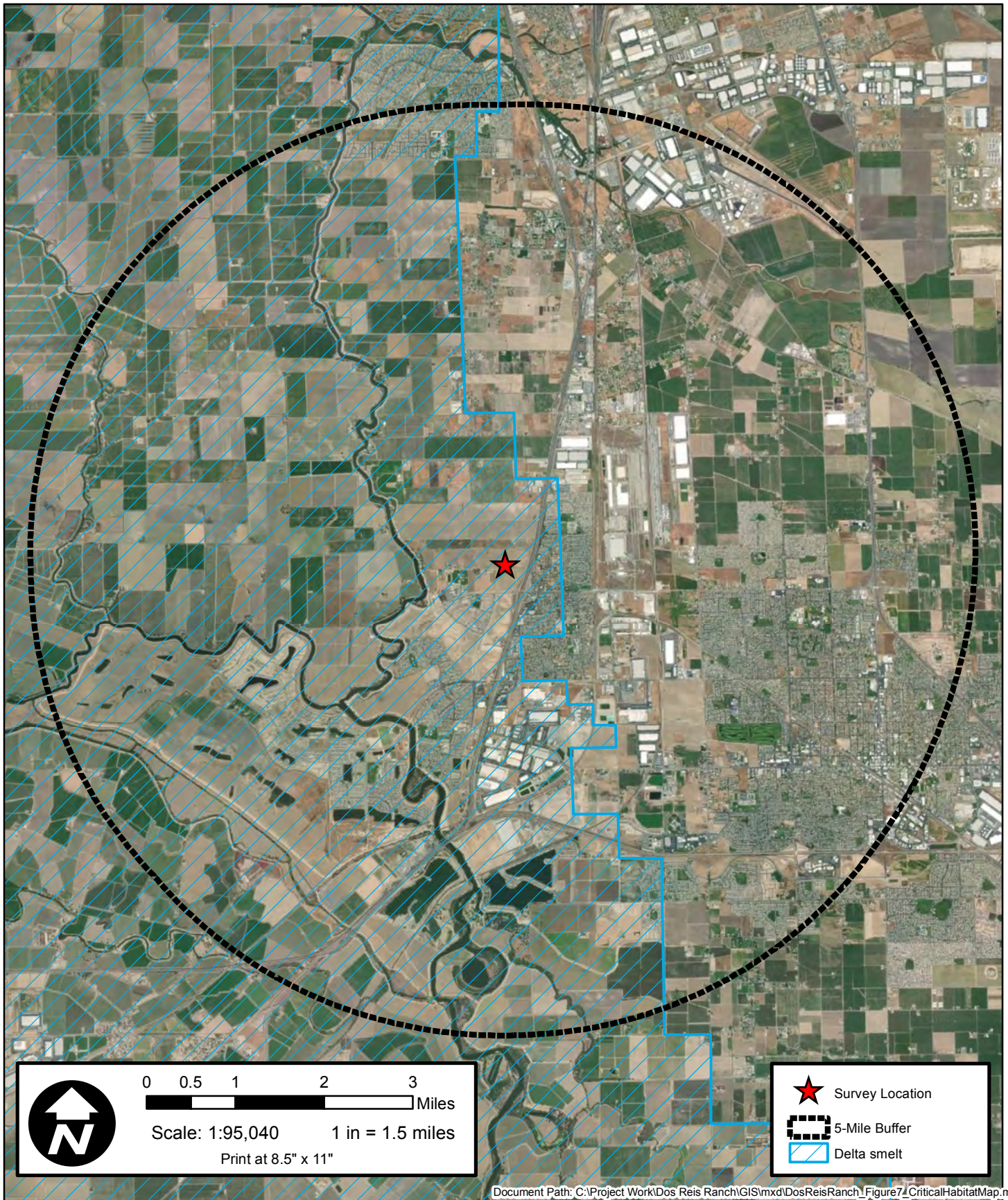


193 Blue Ravine Road, Ste. 165  
Folsom, CA 95630  
Phone: (916) 985-1188

**Figure 6: CNDDB Plants Map  
Dos Reis Ranch Project  
San Joaquin County, California**

Revision Date: 5/11/2021

**Figure 7**  
**USFWS Designated Critical Habitat**



**Figure 7: USFWS Designated Critical Habitat Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**



193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

Revision Date: 5/11/2021

**Figure 8**  
**Soils Map**



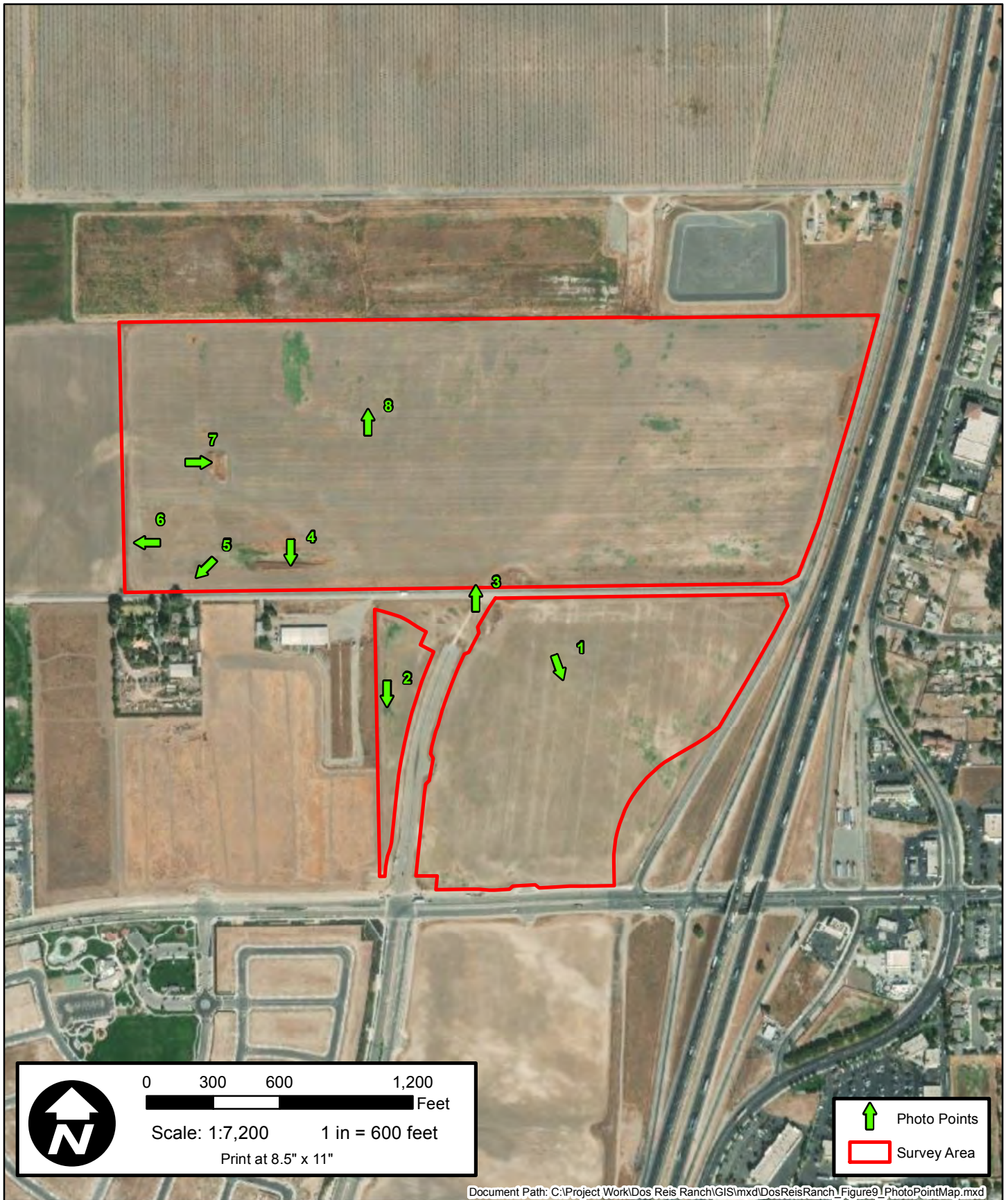


193 Blue Ravine Road, Ste. 165  
Folsom, CA 95630  
Phone: (916) 985-1188

**Figure 8: Soils Map  
Dos Reis Ranch Project  
San Joaquin County, California**

Revision Date: 5/11/2021

**Figure 9**  
**Photo Location Map**



Document Path: C:\Project Work\Dos Reis Ranch\GIS\mxd\DosReisRanch\_Figure9\_PhotoPointMap.mxd

**Figure 9: Photo Points Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**



193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

Revision Date: 5/11/2021

**Figure 10**  
**Habitat Map**



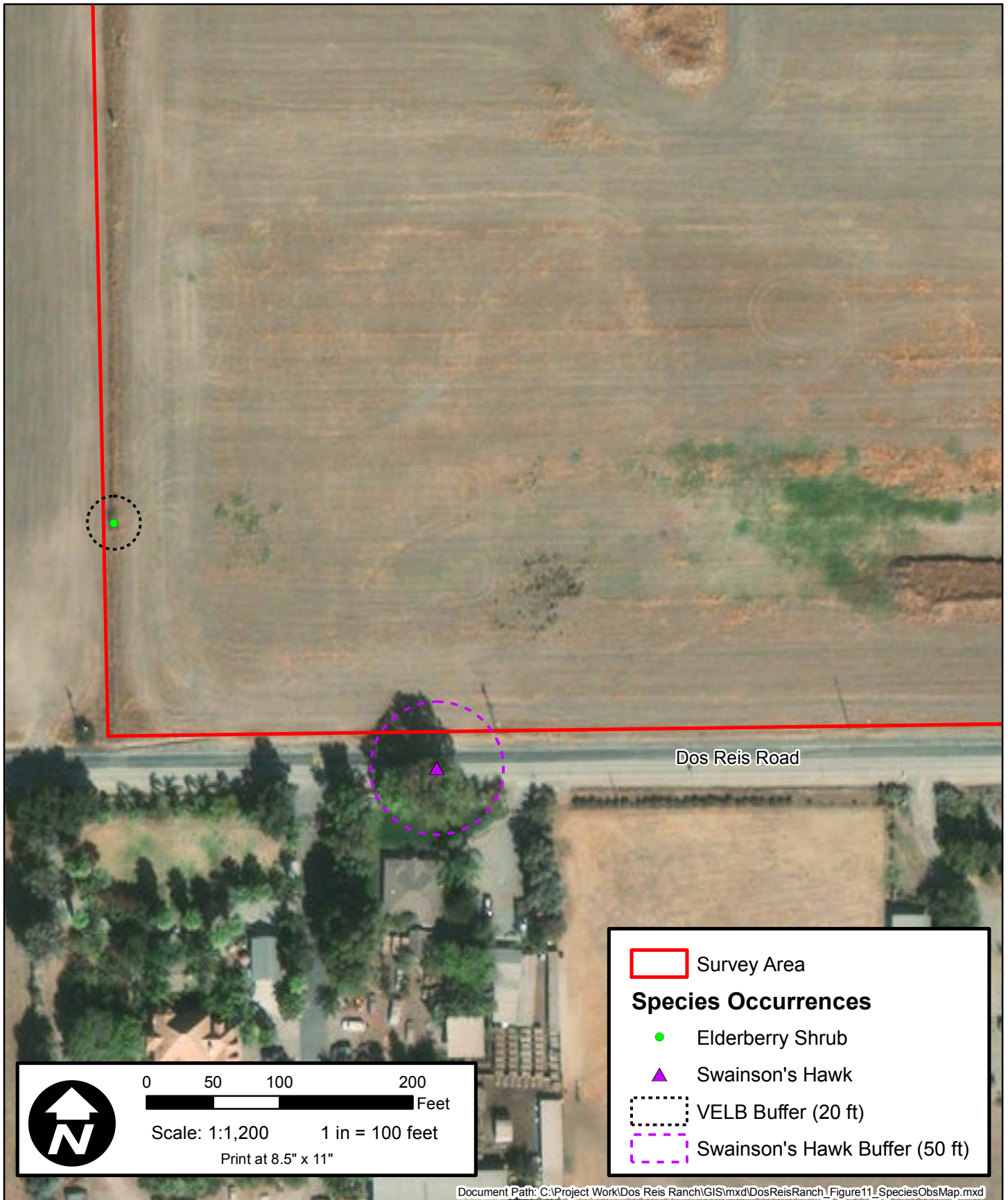
**Figure 10: Habitat Map  
 Dos Reis Ranch Project  
 San Joaquin County, California**



193 Blue Ravine Road, Ste. 165  
 Folsom, CA 95630  
 Phone: (916) 985-1188

Revision Date: 5/11/2021

**Figure 11**  
**Special-Status Species Observed Map**



193 Blue Ravine Road, Ste. 165  
Folsom, CA 95630  
Phone: (916) 985-1188

**Figure 11: Special Status Species Observed Map  
Dos Reis Ranch Project  
San Joaquin County, California**

Revision Date: 5/17/2021

**ATTACHMENT 2**

**TABLES**



**Table 1**

**Plant and Wildlife Species Observed**

**Within/Adjacent to the Survey Area**

**Table 1****Wildlife Species Observed Within/Adjacent to the Survey Area**

<b>Scientific Name</b>	<b>Common Name</b>
<b>Plant Species Observed</b>	
<i>Avena fatua</i>	Wild oat
<i>Amsinckia</i> sp.	Fiddleneck
<i>Brassica nigra</i>	Black mustard
<i>Bromus diandrus</i>	Ripgut brome
<i>Bromus hordeaceus</i>	Soft chess
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Centaurea solstitialis</i>	Yellow star thistle
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Pappose tarweed
<i>Convolvulus arvensis</i>	Field bindweed
<i>Croton setigerus</i>	Turkey mullein
<i>Digitaria sanguinalis</i>	Crabgrass
<i>Epilobium</i> sp.	Willow herb
<i>Erodium</i> sp.	Filaree
<i>Festuca perennis</i>	Italian rye grass
<i>Heliotropium curassavicum</i>	Chinese parsley
<i>Hordeum marinum</i>	Mediterranean barley
<i>Raphanus raphanistrum</i>	Wild radish
<i>Melilotus indicus</i>	Annual sweet clover
<i>Sambucus</i> sp.	Elderberry
<b>Animal Species Observed</b>	
<b>Invertebrate</b>	
<i>Latrodectus hesperus</i>	Western black widow
<b>Birds</b>	
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Buteo swainsoni</i>	Swainson's hawk
<i>Elanus leucurus</i>	White-tailed kite
<b>Mammals</b>	
<i>Canis latrans</i>	Coyote
<i>Otospermophilus beecheyi</i>	California ground squirrel
<b>Reptiles</b>	
<i>Sceloporus occidentalis</i>	Western fence lizard

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East,  
Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon  
7.5 Minute Quadrangle Maps**

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
<b>PLANTS</b>					
alkali milk-vetch <i>(Astragalus tener var. Tener)</i>	-/-1B.2	March – June	Playas, valley and foothill grasslands, and vernal pools in alkaline soils. Micro habitat consists of low ground, alkali flats, and flooded lands	Low No suitable habitat present	Presumed absent.
Alkali-sink goldfields <i>(Lasthenia chrysantha)</i>	-/-1B.1	February – June	Vernal pools and wet, saline flats.	Low No suitable habitat present	Presumed absent.
Big tarplant <i>(Blepharizonia plumosa)</i>	-/-1B.1	July – October	Valley and foothill grasslands, usually with clay soils.	Low Grassland present within Survey Area, but no clay soils.	Presumed absent.
Bristly sedge <i>(Carex comosa)</i>	-/-2B.1	May – September	Coastal prairies, marshes, swamps and lake margins, and valley and foothill grasslands	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
California alkali grass ( <i>Puccinellia simplex</i> )	-/1B.2	March – May	Usually occurs in wetlands, but occasionally found in non-wetlands. Generally grows in mineral springs and saline soils	Low No suitable habitat present	Presumed absent.
Caper-fruited tropidocarpum ( <i>Tropidocarpum capparideum</i> )	-/1B.1	March – April	Valley and foothill grasslands on alkaline hills.	Low No suitable habitat present	Presumed absent.
Delta button-celery ( <i>Eryngium racemosum</i> )	-/E/1B.1	June – October	Riparian scrub, among vernal mesic clay depressions.	Low No suitable habitat present	Presumed absent.
Delta mudwort ( <i>Limosella australis</i> )	T/E/-	May – August	Freshwater and brackish marshes and swamps, riparian scrub, usually found among muddy banks.	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site<sup>**</sup></b>
Delta tulle pea ( <i>Lathyrus jepsonii</i> var. <i>jepsonii</i> )	-/-/1B.2	May – September	Freshwater and brackish marshes and swamps.	Low No suitable habitat present	Presumed absent.
Diamond-petaled California poppy ( <i>Eschscholzia rhombipetala</i> )	-/-/1B.1	March – April	Valley and foothill grasslands with alkaline or clay soils.	Low No suitable habitat present	Presumed absent.
Heartscale ( <i>Atriplex cordulata</i> var. <i>cordulata</i> )	-/-/1B.2	April – October	Found in saline or alkaline soils among chenopod scrub, meadows and seeps, and valley and foothill grasslands with sandy soils.	Low Habitat is regularly disked and historically disturbed.	Presumed absent.
Large-flowered fiddleneck ( <i>Amsinckia grandiflora</i> )	E/E/1B.1	April – May	Cismontane woodland, valley and foothill grassland, annual grassland in various soils.	Low Habitat is regularly disked and historically	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site<sup>**</sup></b>
Lesser saltscale ( <i>Atriplex minuscula</i> )	-/-/1B.1	May – October	Alkaline and sandy soils among chenopod scrub, playas, and valley and foothill grasslands	Low Habitat is regularly disked and historically disturbed.	Presumed absent.
Mason’s lilaepsis ( <i>Lilaeopsis masonii</i> )	-/R/1B.1	April – November	Brackish or freshwater marshes and swamps and riparian scrub areas.	Low No suitable habitat present	Presumed absent.
Palmate-bracted bird’s-beak ( <i>Chloropyron palmatum</i> )	E/E/1B.1	May – October	Annual herb occurring in alkaline soils within chenopod scrub and valley and foothill grassland habitats	Low No suitable habitat present	Presumed absent.
Recurved larkspur ( <i>Delphinium recurvatum</i> )	-/-/1B.2	March – June	Alkaline soils among chenopod scrub, cismontane woodland, and valley and foothill grasslands	Low No suitable habitat present	Presumed absent.
saline clover ( <i>Trifolium hydrophilum</i> )	-/-/1B.2	April – June	Marshes and swamps, valley and foothill grasslands with mesic, alkaline soils, and vernal pools.	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site<sup>**</sup></b>
San Joaquin spearscale ( <i>Atriplex joaquiniana</i> )	-/-/1B.2	April-October	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland in seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc.	Low No suitable habitat present	Presumed absent.
Sanford's arrowhead ( <i>Sagittaria sanfordii</i> )	-/-/1B.2	May – November	Marshes and swamps, and other assorted shallow freshwater features.	Low No suitable habitat present	Presumed absent.
Showy golden madia ( <i>Madia radiata</i> )	-/-/1B.1	March – May	Cismontane woodlands and valley and foothill grasslands.	Low Habitat is regularly disked and historically disturbed.	Presumed absent.
Slough thistle ( <i>Cirsium crassicaule</i> )	/-/-/1B.1	May – August	Chenopod scrub, marshes and swamps including sloughs, and riparian scrub areas.	Low No suitable habitat present	Presumed absent.
Suisun Marsh aster ( <i>Symphyotrichum lentum</i> )	-/-/1B.2	April – November	Brackish and freshwater marshes and swamps.	Low No suitable habitat present	Presumed absent.



**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
Watershield ( <i>Brasenia schreberi</i> )	-/-/2B.3	June – September	Aquatic species found in freshwater marshes and swamps.	Low No suitable habitat present	Presumed absent.
Woolly rose-mallow ( <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> )	-/-/1B.2	June – September	Freshwater marshes and swamps, often among the riprap on levee sides.	Low No suitable habitat present	Presumed absent.
Wright’s trichocoronis ( <i>Trichocoronis wrightii</i> var. <i>wrightii</i> )	-/-/2B.1	May – September	Alkaline soils among meadows and seeps, marshes and swamps, riparian forest, and vernal pools.	Low No suitable habitat present	Presumed absent.
<b>Invertebrates</b>					
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	E/-/-	Resident	Prefer large, turbid vernal pools, often referred to as playa pools. Often stay inundated will into the summer months.	Low No suitable habitat present	Presumed absent.
Crotch bumble bee ( <i>Bombus crotchii</i> )	-/CE/-	Resident	Inhabits grassland and scrub areas, requiring hotter and drier environment than many bumble bee species. They nest underground, often in abandoned rodent dens and requires undisturbed nesting and winter sites.	Low Habitat is regularly disked and historically disturbed.	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
Valley elderberry longhorn beetle <i>(Desmocerus californicus dimorphus)</i>	T/-/-	Resident	Only found in association with its host plant, elderberry ( <i>Sambucus</i> spp.). Most occurrences are found below 500 feet in elevation.	Moderate An elderberry shrub is located adjacent to the Survey Area.	May Occur.
Vernal pool fairy shrimp <i>(Branchinecta lynchi)</i>	T/-/-	Resident	Endemic to central valley vernal pools and swales.	Low No suitable habitat present	Presumed absent.
Vernal pool tadpole shrimp <i>(Lepidurus packardii)</i>	E/-/-	Resident	Wide variety of ephemeral wetland habitats, small to large, cool to warm, basic to acidic water features.	Low No suitable habitat present	Presumed absent.
Western bumble bee <i>(Bombus occidentalis occidentalis)</i>	-/CE/-	February – November	Meadows and grasslands with abundant flora resources that provide pollen and nectar throughout their flight period. Typically nest underground, but may nest above ground in tree cavities, etc.	Low Grassland areas in the Survey Area are disked annually and do not support abundant flora.	Presumed absent.

**Fish**

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
Delta smelt ( <i>Hypomesus transpacificus</i> )	T/E/-	Resident	Endemic to the upper reaches of the San Francisco Bay Delta-Bay Estuary. Generally found in brackish water.	Low No suitable habitat present	Presumed absent.
Hardhead ( <i>Mylopharodon conocephalus</i> )	-/-/SSC	Resident	Low to mid-elevations in relatively undisturbed habitats of larger streams. They prefer pools and runs with deep, clear water, slow velocities, and sand-gravel-boulder substrates.	Low No suitable habitat present	Presumed absent.
Steelhead – Central Valley DPS ( <i>Oncorhynchus mykiss irideus</i> pop. 11)	T/-/-	Resident	Cool, clear, well-oxygenated water preferred. Prefer complex structured river systems with large boulders, etc.	Low No suitable habitat present	Presumed absent.
<b>Amphibians</b>					
California red-legged frog ( <i>Rana draytonii</i> )	T/-/SSC	May 1 – November 1	Lowlands and foothills in or near permanent deep water with dense, shrubby or emergent riparian habitat. Requires 11-20 weeks of permanent water for breeding and larval development. Must have access to aestivation habitat.	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

Common Name/Scientific Name	Status (Fed/State/CNPS or CDFW) <sup>2</sup>	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
California tiger salamander <i>(Ambystoma californiense)</i>	T/T/-	Aquatic Surveys – Once each in March, April, and May with at least 10 days between surveys.  Upland Surveys – 20 nights of surveying under proper conditions beginning October 15 and ending March 15.	Vernal pools, swales and depressions for breeding, needs underground refugia.	Low No suitable habitat present	Presumed absent.
foothill yellow-legged frog <i>(Rana boylei)</i>	-/E/SSC	Year-round resident	Partially-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need cobble for egg-laying.	Low No suitable habitat present	Presumed absent.
Western spadefoot <i>(Spea hammondi)</i>	-/-/SSC	Resident	Found primarily in grasslands, but also in valley-foothill hardwood woodlands. Breeding and egg-laying occur exclusively in vernal pools.	Low No suitable habitat present	Presumed absent.
Reptiles					

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site<sup>**</sup></b>
California glossy snake ( <i>Arizona elegans occidentalis</i> )	-/-/SSC	May – June, and prior to first fall rain.	Most common in desert habitats, but also occur in chaparral, sage brush, valley-foothill hardwood, pine-juniper, and annual grasslands.	Low Annual grasslands with friable soils occur within the Survey Area, but regularly disturbed.	Not Likely to Occur.
Coast horned lizard ( <i>Phrynosoma blainvillii</i> )	-/-/SSC	Year-round resident	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes; requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Low Survey Area is disked annually and does not provide bushes for cover.	Presumed absent.
Giant gartersnake ( <i>Thamnophis gigas</i> )	T/T/-	May 1 to October 1	Found in the Valley from the City of Chico, south to the Mendota Wildlife Area in Fresno County. Habitat includes marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways and agricultural lands such as irrigation and drainage canals, rice fields, and the adjacent uplands.	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
San Joaquin coachwhip ( <i>Masticophis flagellum</i> )	-/-/SSC	Year-round Resident	Open, dry habitats with little or no tree cover; found in valley grassland and saltbush scrub in the San Joaquin Valley; needs mammal burrows for refuge and oviposition sites.	Low Open, dry grasslands found in the Survey Area.	Not Likely to Occur.
Western pond turtle ( <i>Emys marmorata</i> )	-/-/SSC	March – October	Aquatic turtle needs permanent water in ponds, streams, irrigation ditches. Nests on sandy banks or grassy fields.	Low No suitable habitat present	Presumed absent.
<b>Birds</b>					
burrowing owl ( <i>Athene cunicularia</i> )	-/-/SCC	February – August	Dry open annual or perennial grassland, desert, and scrubland. Uses abandoned mammal burrows for nesting.	Low Grassland and mammal burrows occur within the Survey Area.	Not Likely to Occur.
California black rail ( <i>Laterallus jamaicensis coturniculus</i> )	-/T/FP	Dawn surveys during breeding season (April – May)	Inhabits saltwater, brackish, and freshwater marshes. Typically prefers areas of “high marsh” that are above any annual or daily water fluctuations.	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	E/E/-	8 surveys between April 10 and July 31	Structurally diverse riparian habitat, including cottonwood-willow forests, oak woodlands, and mule fat scrub.	Low No suitable habitat present	Presumed absent.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	-/-/SSC	February – August	Open grassland habitats, grazed grasslands. Uses shrubs for nesting.	Low Survey Area provides foraging habitat.	Not Likely to Occur.
Song sparrow ("Modesto" population) ( <i>Melospiza melodia</i> )	-/-/SSC	February – August	Prefer emergent freshwater marshes dominated by tules ( <i>Scirpus</i> spp.) and cattails ( <i>Typha</i> spp.) as well as riparian willow ( <i>Salix</i> spp.) thickets, and riparian forests of Valley Oak ( <i>Quercus lobata</i> ) with blackberry ( <i>Rubus</i> spp.) understory.	Low No suitable habitat present	Presumed absent.
Swainson's hawk ( <i>Buteo swainsoni</i> )	-/T/-	February – October	Nests in riparian areas and in oak savannah near foraging areas. Forages in alfalfa and grain fields with rodent populations.	High Survey Area provides foraging habitat.	Observed foraging and active nest immediately adjacent to Survey Area.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
tricolored blackbird ( <i>Agelaius tricolor</i> )	-/T/SSC	February – August	Nesting within seasonal wetland marshes, blackberry brambles or other protected substrates. Forages in annual grassland and wetland habitats.	Low No suitable habitat present	Presumed absent.
Western yellow-billed cuckoo ( <i>Coccyzus americanus occidentalis</i> )	T/E/-	June 15 – August 15	Wooded habitat with dense cover and water nearby, including woodlands with low, scrubby vegetation. Nests are often placed in willows along streams and rivers with nearby cottonwoods.	Low No suitable habitat present	Presumed absent.
white-tailed kite ( <i>Elanus leucurus</i> )	-/-/FP	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging.	High Survey Area provides foraging habitat.	Individual observed during May 2021 Survey.
Yellow-headed blackbird ( <i>Xanthocephalus xanthocephalus</i> )	-/-/SSC	February – August	Marshes with tall emergent vegetation such as tules ( <i>Scripus</i> spp.) or cattails ( <i>Typha</i> spp.) among edges and over relatively deep water.	Low No suitable habitat present	Presumed absent.
<b>Mammals</b>					



**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
American badger ( <i>Taxidea taxus</i> )	-/-/SSC	Resident	Shrub, forest, and herbaceous habitats with friable soils to dig burrows. Need open, uncultivated ground. Prey on fossorial mammals.	Low No suitable habitat present	Presumed absent.
Pallid bat ( <i>Antrozous pallidus</i> )	-/-/SSC	N/A	Forages in grasslands, shrublands, deserts, forests, and woodlands. Most common in open, dry habitats. Roosts in rock crevices, caves, tree hollows, and buildings. Roosts must protect bats from high temperatures; very sensitive to disturbance of roosting sites.	Moderate Survey Area contains foraging habitat.	Not likely to Occur.
Riparian (=San Joaquin Valley) woodrat ( <i>Neotoma fuscipes riparia</i> )	E/-/SSC	Resident	Prefer habitat with large amount of overall structure, with both understory and overstory cover. Most often observed in areas with an oak ( <i>Quercus</i> ) overstory and an understory of wild grape ( <i>Vitus californica</i> ), willow ( <i>Salix</i> spp.), blackberry ( <i>Rubus</i> spp.), wild rose ( <i>Rosa californica</i> ), or coyote bush ( <i>Baccharis pilularis</i> ).	Low No suitable habitat present	Presumed absent.
Riparian brush rabbit ( <i>Sylvilagus bachmani riparius</i> )	E/E/-	Resident	Restricted to native riparian habitat along the San Joaquin River and its tributaries. Typically found among old-growth riparian forests dominated by Valley oak ( <i>Quercus lobata</i> ) with a thick understory and riparian communities dominated by willows ( <i>Salix</i> spp.) with blackberry ( <i>Rubus</i> spp.) and wild rose ( <i>Rosa californica</i> ).	Low No suitable habitat present	Presumed absent.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

<b>Common Name/Scientific Name</b>	<b>Status (Fed/State/CNPS or CDFW)<sup>2</sup></b>	<b>Blooming or Survey Period</b>	<b>Habitats of Occurrence</b>	<b>Potential on Site</b>	<b>Status on Site**</b>
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	E/T/-	Resident	Annual grasslands or grassy stages with scattered shrubby vegetation. Needs loose soils for burrowing.	Low No suitable habitat present	Presumed absent.
Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> )	-/-/SSC	Resident	Throughout California in a wide variety of habitats; roosts in the open, hanging from walls and ceilings. Needs sites free from human disturbance. Most common in mesic sites.	Low No suitable habitat present	Presumed absent.
western mastiff bat ( <i>Eumops perotis californicus</i> )	-/-/SSC	Resident	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Moderate Survey Area contains foraging habitat.	Not likely to Occur.

**Table 2**

**Special-Status Species for the Lathrop, Holt, Stockton East, Stockton West, Union Island, Manteca, Tracy, Vernalis, and Ripon 7.5 Minute Quadrangle Maps<sup>1</sup>**

Common Name/Scientific Name	Status (Fed/State/CNPS or CDFW) <sup>2</sup>	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
<p>1. Special-status plants and animals as reported by the California Natural Diversity Data Base, California Native Plant Society, and other background research May 2021.</p> <p>2. Order of Codes for Plants - Fed/State/CNPS Order of Codes for Animals - Fed/State/CDFW</p> <p>Codes:</p> <p>SSC - California Species of Special Concern  E - Federally/State Listed as an Endangered Species  T - Federally/State Listed as a Threatened Species  CE - Species listed as a Candidate for Endangered Status  R - Rare  FP - State Fully Protected  1B - California Native Plant Society considers the plant Rare, Threatened, or Endangered in California and elsewhere.  2B - CNPS Plants Rare, Threatened or Endangered in California, but more common elsewhere.  0.1 – Seriously threatened in California.  0.2 – Moderately threatened in California.</p>					

**ATTACHMENT 3**  
**SITE PHOTOGRAPHS**



1. Looking southeast across the southeast parcel. The I-5 overpass can be seen on the horizon line. Photo May 7, 2021.



2. Looking south along the southwest parcel. The Golden Valley Parkway intersection can be seen on the horizon line. Photo May 7, 2021.



3. Looking north across Dos Reis Road at the northern parcel. A coyote can be seen left of the surveillance pole, traversing the middle of the Property. Photo May 7, 2021.



4. Looking down at a large mammal burrow among an upland berm. Photo May 7, 2021.



5. Looking southwest at the large cottonwood tree. A Swainson's hawk was observed perching in a nest in the top of this tree. Photo May 7, 2021.



6. Looking west at an elderberry shrub along the Property fence line. Photo May 7, 2021.



7. Looking east at a large upland berm with a network of ground squirrel burrows. Photo May 7, 2021.



8. Looking north at the most distinct topographic depression on the Property. There was no sign of any water pooling in this area. Photo May 7, 2021.



ATTACHMENT B. PRELIMINARY GEOTECHNICAL ENGINEERING REPORT. PREPARED BY:  
TERRACON CONSULTANTS, INC. AUGUST 16, 2021.



# Preliminary Geotechnical Engineering Report

---

**Dos Reis Ranch  
Lathrop, California**

August 16, 2021  
Terracon Project No. NA215014

**Prepared for:**

The Hodgdon Group  
Colton, California

**Prepared by:**

Terracon Consultants, Inc.  
Lodi, California



August 16, 2021

The Hodgdon Group  
1431 East Cooley Drive, Suite 230  
Colton, California 92324



Attn: Mr. Sean Asmus  
P: (602) 904-2756  
E: seana@hodgdongroup.com

Re: Preliminary Geotechnical Engineering Report  
Dos Reis Ranch  
14101 South Manthey Road  
Lathrop, California  
Terracon Project No. NA215014

Dear Mr. Asmus:

We have completed the Preliminary Geotechnical Engineering services for the above referenced project. This study was performed in general accordance with Terracon Proposal No. PNA215014, final revision dated May 7, 2021. This report presents the findings of the subsurface exploration and provides preliminary geotechnical recommendations concerning earthwork and the design and construction of foundations, floor slabs, and pavements for the proposed project. Our recommendations are preliminary given the early stage of site development and planning. Additional field explorations and testing will be warranted during the later stages of development and planning.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

**Terracon Consultants, Inc.**

A handwritten signature in black ink, appearing to read "Rick S. Greeley".

Rick S. Greeley, E.I.  
Staff Engineer

Garret S.H. Hubbart, Principal  
Geotechnical Engineer 2588  
Office Manager

## REPORT TOPICS

INTRODUCTION.....	1
SITE CONDITIONS.....	1
PROJECT DESCRIPTION.....	2
GEOTECHNICAL CHARACTERIZATION.....	3
GEOTECHNICAL OVERVIEW.....	5
EARTHWORK.....	7
PRELIMINARY SHALLOW FOUNDATION RECOMMENDATIONS.....	12
SEISMIC CONSIDERATIONS.....	14
LIQUEFACTION.....	15
FLOOR SLABS.....	17
LATERAL EARTH PRESSURES.....	18
PRELIMINARY PAVEMENT RECOMMENDATIONS.....	20
PERCOLATION AND INFILTRATION TESTS.....	24
CORROSIVITY.....	25
GENERAL COMMENTS.....	26

**Note:** This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the **GeoReport** logo will bring you back to this page. For more interactive features, please view your project online at [client.terracon.com](http://client.terracon.com).

## ATTACHMENTS

**EXPLORATION AND TESTING PROCEDURES**  
**PHOTOGRAPHY LOG**  
**SITE LOCATION AND EXPLORATION PLANS**  
**EXPLORATION RESULTS**  
**SUPPORTING INFORMATION**

**Note:** Refer to each individual Attachment for a listing of contents.

# Preliminary Geotechnical Engineering Report

**Dos Reis Ranch  
14101 South Manthey Road  
Lathrop, California  
Terracon Project No. NA215014  
August 16, 2021**

## INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed warehouse and retail development to be located at 14101 South Manthey Road in Lathrop, California. The purpose of these services is to provide information and preliminary geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Excavation considerations
- Seismic design parameters per the 2019 California Building Code (CBC)
- Foundation design and construction
- Floor slab design and construction
- Lateral earth pressures
- Pavement design and construction
- Stormwater pond considerations

Our recommendations are preliminary given the early stage of site development and planning. Additional field explorations and testing will be warranted during the later stages of development and planning.

The geotechnical engineering Scope of Services for this project included the advancement of seventeen (17) test borings to depths ranging from approximately 16½ to 51½ feet below existing site grades (bgs) and two (2) sCPT tests to depths of 100 feet bgs. Additionally, four (4) percolation tests were performed at depths of approximately 4 to 5 feet bgs.

Maps showing the site and boring locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring logs and as separate graphs in the **Exploration Results** section.

## SITE CONDITIONS

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
<b>Parcel Information</b>	The project is located at 14101 South Manthey Road in Lathrop, California. APN: 191-220-14 (90 acres) APN: 191-220-60 (34 acres) The site encompasses about 127 acres in total. The coordinates of the approximate center of the site are 37.8319°N and 121.2935°W (See Exhibit D)
<b>Existing Improvements</b>	The site is currently vacant land. Historic imagery suggests the site was used as agricultural land up to 2005. Several piles of fill are in various locations on site.
<b>Current Ground Cover</b>	The site is lightly vegetated with native grasses and weeds. The entire site has been disked recently.
<b>Existing Topography</b>	The site appears is relatively flat; however, there are some gentle minor rolling hills with grade changes of about 5 feet or less.
<b>Geology</b>	Subsurface soils on site are mixed alluvium, generally silty sands and silts underlain by clays interbedded with more silt and sand. Geology consists of Pleistocene to Holocene age quaternary alluvium and marine deposits.

We also collected photographs at the time of our field exploration program. Representative photos are provided in our [Photography Log](#).

## PROJECT DESCRIPTION

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
<b>Information Provided</b>	A site plan as well as general project information was provided by Hodgdon via email on February 10, 2021. Additional information regarding the seismic studies was discussed in a call on March 1, 2021. Additional information regarding the building layout was discussed in a call on April 28, 2021. More discussion about scope was communicated in a call on May 7, 2021.
<b>Project Description</b>	The project includes development of the site for a warehouse building with associated docking bays, drive lanes, truck parking, above and/or below ground stormwater features, and additional site improvements. We understand the building is planned on the north side of the site and portions of the land not used for the warehouse may be used for retail development. Specifics regarding the retail development was not provided at this time.

Item	Description
<b>Proposed Structures</b>	The project includes a single-story, 40' clear, tilt-up wall warehouse building with interior steel framing and a footprint of about 1.5 million square feet; this will likely be supported on a shallow foundation system with slab-on-grade (non-basement) and dock high loading areas. The building may also include some interior mezzanines.
<b>Finished Floor Elevation</b>	Unknown but anticipated to be within about 3 to 4 feet of original grade.
<b>Maximum Loads</b> (as provided)  <b>Maximum Loads</b> (assumed)	Warehouse: <ul style="list-style-type: none"> <li>■ Columns: 120 - 160 kips</li> <li>■ Walls: 6 to 8 kips per linear foot (klf)</li> <li>■ Slabs: 1000 pounds per square foot (psf)</li> </ul> Retail: <ul style="list-style-type: none"> <li>■ Columns: 20 - 40 kips</li> <li>■ Walls: 1 to 3 kips per linear foot (klf)</li> <li>■ Slabs: 150 pounds per square foot (psf)</li> </ul>
<b>Grading/Slopes</b>	Minor cuts and fills on the order of 3 to 4 feet or less are expected to achieve final site grades for the building and paving portions of the development.
<b>Below-Grade Structures</b>	None anticipated
<b>Free-Standing Retaining Walls</b>	Retaining walls (dock high) may be constructed as part of site development to achieve final grades. Lateral earth pressure design parameters will be provided.
<b>Pavements</b>	Paved driveways and parking will be constructed on all sides of the building. We understand both rigid (concrete) and flexible (asphalt) pavement sections should be considered.  Anticipated traffic indices are as follows: <ul style="list-style-type: none"> <li>■ Autos Parking areas: TI = 4.5</li> <li>■ Auto and light truck Driving lanes: TI = 5.5</li> <li>■ Light delivery and trash collection vehicle areas: TI = 6.5</li> <li>■ Loading docks (ADTT=35): TI = 8.0</li> <li>■ Truck entrances and pathways (ADTT=100): TI = 9.5</li> <li>■ Truck entrances and pathways (10 million ESAL or ADTT=750): TI = 12.0</li> </ul> The pavement design period is 20 years
<b>Estimated Start of Construction</b>	Unknown

## GEOTECHNICAL CHARACTERIZATION

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization forms the basis of our geotechnical calculations and evaluation of site preparation and foundation options. Conditions encountered at each exploration point are

indicated on the individual logs. The individual boring and CPT logs can be found in the **Exploration Results** section of this report.

The near surface soils generally consisted of very to medium dense silty sand and sandy silt soils that extended to depths of approximately 6½ to 10 feet below ground surface (bgs). The upper soils were generally underlain by a 4 to 10-foot-thick layer of stiff to hard, medium to high plasticity clay soils. This layer was generally underlain by sand with varying amounts of silt, silt with varying amounts of sand and clay extending to the maximum depth explored of 51½ feet in our borings.

## Groundwater

The boreholes were observed while drilling and immediately after completion for the presence and level of groundwater. Groundwater was encountered at depths of between approximately 4.5 and 17.5 feet bgs. Groundwater data is presented in the table below:

Boring Number	Depth to Groundwater While Drilling, ft.	Depth to Groundwater Immediately after Drilling, ft.	Elevation of Groundwater Immediately after Drilling, ft. <sup>1</sup>
1	8	10	2
2	14	12	1
3	15	7	3
4	14	13	-1
5	11	10	4
6	10	17.5	-3.5
7	8	6	7
8	10	15	0
9	8	8.5	4.5
10	12	12	2
11	9	4.5	11.5
12	15	10	2
13	10	9.5	4.5
14	10	8	6
15	Mud Rotary <sup>2</sup>	Mud Rotary <sup>2</sup>	Mud Rotary <sup>2</sup>
16	10	8.5	4.5
17	12	11.5	1.5



Boring Number	Depth to Groundwater While Drilling, ft.	Depth to Groundwater Immediately after Drilling, ft.	Elevation of Groundwater Immediately after Drilling, ft. <sup>1</sup>
---------------	--	--	---

1. Elevations were estimated using Google Earth TM and the accuracy is limited to info presented on Google Earth.
2. Water was added to the boring before encountering groundwater while switching to mud rotary drilling methods. Therefore, accurate groundwater data could not be obtained.

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were drilled. Therefore, groundwater levels during construction or at other times in the life of the project may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project. Based on our experience in the area with similar projects, we have installed monitoring wells early on in the development phases to monitor the groundwater seasonally to aid in design and planning for the elements of the project that are sensitive to groundwater depth. We recommend installing these monitoring wells for this project.

## GEOTECHNICAL OVERVIEW

Based on subsurface conditions encountered in the borings, the site appears suitable for the proposed construction from a geotechnical point of view provided certain precautions and design and construction recommendations described in this report are followed and the owner understands the inherent risks associated with construction on sites underlain by expansive soils. We have identified several geotechnical conditions that could impact design, construction and performance of the proposed structures, pavements, and other site improvements. These included existing, undocumented fill, shallow groundwater, expansive soils, and loose granular soils. These conditions will require particular attention in project planning, design and during construction and are discussed in greater detail in the following sections.

### Existing, Undocumented Fill Piles

Existing undocumented fill piles were observed in several locations across the site. We do not possess any information regarding the source of the fill. Undocumented fill can present a greater than normal risk of post-construction movement of foundations, slabs, pavements and other site improvements supported on or above these materials. Consequently, it is our opinion the existing fill piles shall be removed from the site or if re-used, should be evaluated by Terracon prior to construction.

## **Shallow Groundwater**

As previously stated, groundwater was measured at depths ranging from about 4.5 to 17.5 feet below existing site grades. In general, measured groundwater levels were shallowest on the east portion of the site in the vicinity of Boring Nos. 3, 7, 11 and 14. Terracon recommends maintaining a separation of at least 2 feet between the bottom of proposed below-grade foundations and measured groundwater levels. Final site grading should be planned and designed to avoid cuts where shallow groundwater is known to exist, and also in areas where such grading would create shallow groundwater conditions.

Preliminary site concepts indicate the utilities may extend below the observed groundwater levels. Thus, temporary dewatering may be needed to lower groundwater levels below temporary excavations. We recommend that on a long-term basis, groundwater levels be maintained at least 2 feet below the foundations.

As previously stated, on similar projects, we have installed monitoring wells early on in the development phases to monitor the groundwater seasonally to aid in design and planning for the elements of the project that are sensitive to groundwater depth. We recommend installing these monitoring wells for this project to gather more data regarding the groundwater level seasonally.

If a permanent or temporary dewatering system is judged necessary by the project team, we can provide additional recommendations, however an experienced dewatering contractor and designer familiar with the area should be consulted. We have not provided any specific dewatering recommendations relating to a geotechnical perspective at this time given the early stages of the development.

## **Expansive Soils**

Expansive soils are present on this site at depths of approximately 8 feet and below. These soils are unlikely to experience a change in moisture due to site development given the depth encountered and presence of shallow groundwater. However, this report provides recommendations to help mitigate the effects of soil shrinkage and expansion. Even if these procedures are followed, some movement and cracking in the structures, pavements, and flatwork is possible. The severity of cracking and other damage such as uneven floor slabs and flat work will probably increase if modification of the site results in excessive wetting or drying of the expansive clays. Eliminating the risk of movement and cosmetic distress is generally not feasible, but it may be possible to further reduce the risk of movement if significantly more expensive measures are used during construction. It is imperative the recommendations described in section **Grading and Drainage** section of the **Earthwork** section of this report be followed to reduce potential movement.

## **Low Strength Soils**

Loose granular soils were encountered at anticipated foundation bearing depths at this site. These materials present a risk for potential settlement of shallow foundations, floor slabs, pavements and other surficial improvements. These materials can also be susceptible to disturbance and loss of strength under repeated construction traffic loads and unstable conditions could develop.

## **Liquefaction Susceptibility**

A final liquefaction analysis has been completed at this time. The Ground Motion Hazard Analysis and Site Response Analysis is provided under a separate cover. Additionally, we have included the report in **Supporting Information** at the back of this report.

Based on our review of the calculations, the anticipated potential total liquefaction-induced settlement across the site varies from about 1 to 1½ inches. We estimate the differential liquefaction-induced settlement may be up to ¾ of an inch over 50 feet. With regards to the potential for lateral spreading, we note that the site and surrounding area is relatively level. Given the relative flatness of the local topography and the variability in the layering of the soil lithology, it is our opinion that the potential for lateral spreading to affect this site is low.

## **Preliminary Foundation and Floor System Recommendations**

Loose granular soils were encountered at anticipated shallow foundation bearing depths. Due to the variable relative density of the near surface soils within the proposed building areas, in our opinion the foundations for the buildings should be supported on a minimum 2 feet of engineered fill in order to provide uniform support for the structure. Given the shallow groundwater, the engineered fill may be substituted with a minimum of 2 sack cement grout slurry mix or soil-cement stabilization. Additional site preparation recommendations, including subgrade improvement and fill placement, are provided in the **Earthwork** section.

The **Shallow Foundations** section addresses support of the buildings bearing directly on a minimum of 2 feet of engineered fill, cement grout slurry (2 sack minimum), and/or soil-cement stabilization. The **Floor Slabs** section addresses slab-on-grade support of the building.

The **General Comments** section provides an understanding of the report limitations.

## **EARTHWORK**

Earthwork is anticipated to include clearing and grubbing, excavations, and fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations, floor slabs, and pavements.

## Site Preparation

Prior to placing fill, any existing vegetation and root mat should be removed. Complete stripping of any topsoil should be performed in the proposed building and parking/driveway areas. The fill piles on site should be observed and tested before accepted for use as fill. The fill piles should be cleaned of any debris and/or deleterious material and stripped of any vegetation.

Underground facilities such as irrigation pipes may be encountered during construction. If underground facilities are encountered, such materials and features should be completely removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Once cuts have been made and prior to placing any engineered fill, the subgrade should be proofrolled with an adequately loaded vehicle such as a fully-loaded tandem-axle dump truck or water truck. The proofrolling should be performed under the direction of the Geotechnical Engineer. Areas excessively deflecting under the proofroll should be delineated and subsequently addressed by the Geotechnical Engineer. Such areas should either be removed or moisture conditioned and recompacted. Such areas may also be modified by stabilizing with cement or aggregate base with geogrids.

The exposed subgrade soil should be scarified, moisture conditioned, and compacted. The depth of scarification of subgrade soils and moisture conditioning of the subgrade is highly dependent upon the time of year of construction and the site conditions that exist immediately prior to construction. If construction occurs during the winter or spring, when the subgrade soils are typically already in a moist condition, scarification and compaction may only be 12 inches. If construction occurs during the summer or fall when the subgrade soils have been allowed to dry out deeper, the depth of scarification and moisture conditioning may be as much as 18 inches. A representative of our office should be present to observe the exposed subgrade and specify the depth of scarification and moisture conditioning required subsequent to grading cuts and prior to placing fill.

## Fill Material Types

All fill materials should be inorganic soils free of vegetation, debris, and fragments larger than three inches in size. Pea gravel or other similar non-cementitious, poorly-graded materials should not be used as fill or backfill without the prior approval of the geotechnical engineer.

Imported earth materials for use as engineered fill should be pre-approved by our representative prior to construction. Imported non-expansive soils may be used as fill material for the following:

- general site grading
- foundation areas
- slab-on-grade floor
- foundation backfill
- trench backfill
- exterior slabs-on-grade

- pavement subgrade

Soils for use as compacted engineered fill material within the proposed building pad area should conform to non-expansive materials as indicated in the following recommendations:

<b>Percent Finer by Weight</b>	
<b><u>Gradation</u></b>	<b><u>(ASTM C 136)</u></b>
3"	100
No. 4 Sieve	50 - 100
No. 200 Sieve	15 - 50
■ Liquid Limit	30 (max)
■ Plasticity Index	10 (max)
■ Maximum Expansive Index*	20 (max)

\*ASTM D 4829

The on-site near surface silty sand should meet the specifications above, although the sandy silt/silt may not. However, due to the non-expansive nature of the silt, the near surface on-site soils are acceptable for use as engineered fill. The underlying lean to fat clays are not suitable for use as engineered fill and spoils from any trenching or utility construction shall not be placed in building, flatwork, and/or pavement areas. Engineered fill should be placed and compacted in horizontal lifts, using equipment and procedures that will produce recommended moisture contents and densities throughout the lift. Fill lifts should not exceed ten inches in loose thickness. The engineered fill should extend at least 5 feet beyond the perimeter of any foundations and extend under any adjacent flatwork.

The contractor shall notify the Geotechnical Engineer of import sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. For all import material, the contractor shall also submit current verified reports from a recognized analytical laboratory indicating that the import has a "not applicable" (Class S0) potential for sulfate attack based upon current ACI criteria and is only "mildly corrosive" to ferrous metal and copper. The reports shall be accompanied by a written statement from the contractor that the laboratory test results are representative of all import material that will be brought to the job.

### **Fill Compaction Requirements**

Recommended compaction and moisture content criteria for engineered fill materials are as follows:

Material Type and Location	Per the Modified Proctor Test (ASTM D 1557)		
	Minimum Compaction Requirement (%)	Range of Moisture Contents for Compaction Above Optimum	
		Minimum	Maximum
<u>On-site sandy soils and Low volume change (non-expansive) imported fill:</u>			
Beneath foundations:	90	0%	+3%
Beneath slabs	90	0%	+3%
Miscellaneous backfill:	90	0%	+3%
Beneath pavement*:	95	0%	+3%
Utility Trenches*:	90	0%	+4%
Bottom of native soil excavation receiving fill:	90	+2%	+4%

\*The upper 12 inches of subgrade soils beneath pavement should be compacted to 95% of the maximum dry density as determined in the ASTM D1557 test method.

We recommend that compacted native soil or any engineered fill be tested for moisture content and relative compaction during placement. Should the results of the in-place density tests indicate the specified moisture content or compaction requirements have not been met, the area represented by the test should be reworked and retested as required until the specified moisture content and relative compaction requirements are achieved.

### Utility Trench Backfill

It is anticipated that the on-site near surface soils will provide suitable support for underground utilities and piping that may be installed. Any soft and/or unsuitable material encountered at the bottom of excavations should be removed and be replaced with an adequate bedding material. A non-expansive granular material with a sand equivalent greater than 30 should be used for bedding and shading of utilities, unless allowed or specified otherwise by the utility manufacturer.

Trench backfill should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. Where trenches are placed beneath slabs or footings, the backfill should satisfy the gradation and expansion index requirements of engineered fill discussed in this report. Flooding or jetting for placement and compaction of backfill is not recommended.

### Grading and Drainage

All grades must provide effective drainage away from the buildings during and after construction and should be maintained throughout the life of the structure. Water retained next to the building can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and

walls, and roof leaks. The roof should have gutters/drains with downspouts that discharge onto pavements or are tied to tight lines that discharge into the on-site storm drain system.

Exposed ground should be sloped and maintained at a minimum 5% away from the buildings for at least 10 feet beyond the perimeter of the building. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After building construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted, as necessary, as part of the structure's maintenance program. Where paving or flatwork abuts the structures, a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

### **Earthwork Construction Considerations**

Shallow excavations for the proposed structures are anticipated to be accomplished with conventional construction equipment. Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of floor slabs. Construction traffic over the completed subgrades should be avoided. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade desiccates, saturates, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted prior to floor slab construction.

The groundwater table could affect overexcavation efforts, especially for over-excavation and replacement of lower strength soils. A temporary dewatering system consisting of sumps with pumps could be necessary to achieve the recommended depth of over-excavation. We have not provided any specific dewatering recommendations given the early stages of the development and the unknown building details. Therefore, the contractor shall plan their work accordingly and use an experienced dewatering contractor and designer familiar with the area.

Based on our experience in the area with similar projects, we have installed monitoring wells early on in the development phases to monitor the groundwater seasonally to aid in design and planning for the elements of the project that are sensitive to groundwater depth. We recommend installing these monitoring wells for this project to gather more data related to the seasonal groundwater depth.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local, and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for

construction site safety, or the contractor's activities; such responsibility shall neither be implied nor inferred.

### **Construction Observation and Testing**

The earthwork efforts should be monitored under the direction of the Geotechnical Engineer. Monitoring should include documentation of adequate removal of vegetation and topsoil, proofrolling, and mitigation of areas delineated by the proofroll to require mitigation.

Each lift of compacted fill should be tested, evaluated, and reworked, as necessary, until approved by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,500 square feet of compacted fill in the building areas and 5,000 square feet in pavement areas. One density and water content test should be performed for every 12-inch thick lift for every 50 to 100 linear feet of compacted utility trench backfill.

In areas of foundation excavations, the bearing subgrade should be evaluated under the direction of the Geotechnical Engineer. If unanticipated conditions are encountered, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer's evaluation of subsurface conditions, including assessing variations and associated design changes.

## **PRELIMINARY SHALLOW FOUNDATION RECOMMENDATIONS**

If the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow foundations.

### **Design Parameters – Compressive Loads**

<b>Item</b>	<b>Description</b>
<b>Maximum Net Allowable Bearing pressure<sup>1, 2</sup></b>	3,000 pounds per square foot
<b>Required Bearing Stratum<sup>3</sup></b>	Minimum 24 inches of engineered fill, cement grout slurry (2 sack minimum), and/or soil-cement stabilization
<b>Minimum Foundation Dimensions</b>	Columns: 30 inches Continuous: 12 inches
<b>Maximum Foundation Dimensions</b>	Columns: 78 inches Continuous: 48 inches



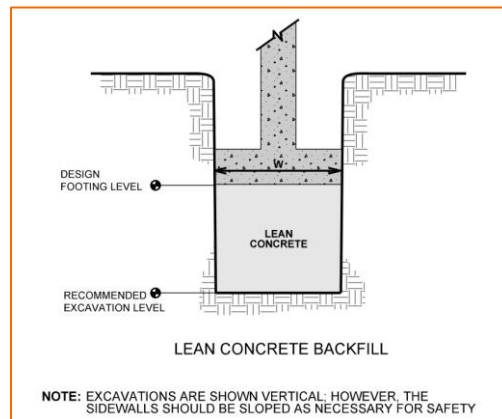
Item	Description
<b>Ultimate Passive Resistance<sup>4</sup> (equivalent fluid pressures)</b>	350 pcf
<b>Ultimate Coefficient of Sliding Friction<sup>5</sup></b>	0.35
<b>Minimum Embedment below Finished Grade<sup>6</sup></b>	24 inches
<b>Estimated Total Settlement from Structural Loads<sup>2</sup></b>	Less than about 1 inch
<b>Estimated Differential Settlement<sup>2, 7</sup></b>	About ½ of total settlement

3. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. An appropriate factor of safety has been applied. These bearing pressures can be increased by 1/3 for transient loads unless those loads have been factored to account for transient conditions. Values assume that exterior grades are relatively flat around the structure.
4. Values provided are for maximum loads noted in **Project Description**.
5. Unsuitable or soft soils should be over-excavated and replaced per the recommendations presented in the **Earthwork**.
6. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face. If passive resistance is used to resist lateral loads, the base friction should be reduced by 25 percent.
7. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Should be neglected for foundations subject to net uplift conditions.
8. Embedment necessary to minimize the effects of seasonal water content variations. Finished grade is defined as the lowest adjacent grade within five feet of the foundation for perimeter (exterior) footings.
9. Differential settlements are as measured over a span of 50 feet.

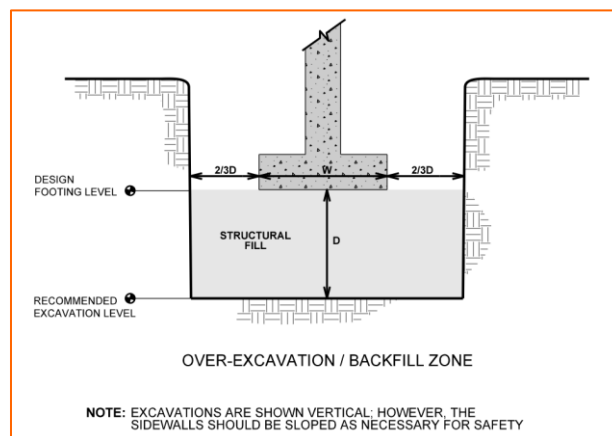
## Foundation Construction Considerations

As noted in **Earthwork**, the footing excavations should be evaluated under the direction of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations should be removed/reconditioned before foundation concrete is placed.

For required support of the shallow foundations (24 inches of engineered fill or cement grout slurry) and if unsuitable bearing soils are encountered at the base of the planned footing excavation, the excavation should be extended deeper to suitable soils, and the footings could bear directly on these soils at the lower level or on lean concrete backfill placed in the excavations. This is illustrated on the sketch below.



Over-excavation for structural fill placement below footings should be conducted as shown below. The over-excavation should be backfilled up to the footing base elevation, with engineered fill placed, as recommended in the **Earthwork** section.



To ensure foundations have adequate support, special care should be taken when footings are located adjacent to trenches. The bottom of such footings should be at least 1 foot below an imaginary plane with an inclination of 1.5 horizontal to 1.0 vertical extending upward from the nearest edge of the adjacent trench.

## **SEISMIC CONSIDERATIONS**

A site-specific ground motion study was performed on this site. Seismic considerations can be found under a separate cover prepared by Terracon titled Report of Site-Specific Ground Motion Study and dated August 10, 2021. Additionally, we have included the report in **Supporting Information** at the back of this report.

## **LIQUEFACTION**

The Ground Motion Hazard Analysis and Site Response Analysis has been completed. Parameters from the site-specific ground motion study were used to complete the liquefaction analysis.

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils or low plasticity fine grained soils exist below groundwater. The California Geological Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. The project site is not located within a CGS liquefaction hazard zone. However, due to the relatively shallow depth to groundwater and the soil conditions encountered in our exploratory borings and CPT's, a cursory liquefaction analysis was performed to determine the liquefaction induced settlement at the site.

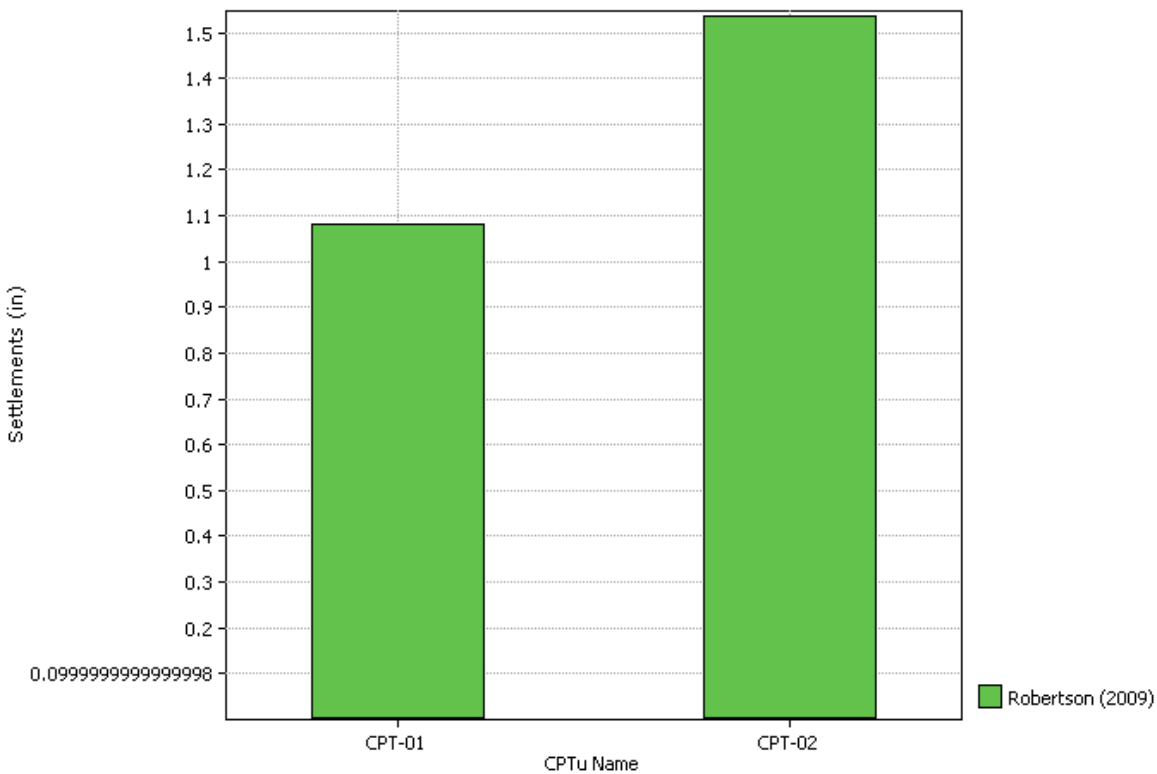
Our liquefaction hazard evaluation was performed in general compliance with the California Geological Survey (CGS) Special Publication 117A (2008) and the Southern California Earthquake Center "Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction Hazards in California" 1999 report.

As recommended in the above reports, we performed a screening analysis to determine if there is a potential for liquefaction to occur at the site. We evaluated the soils encountered in our borings B1 through B17 advanced to a maximum depth of approximately 51½ feet below the existing ground surface (bgs) and two cone penetration tests (CPTs) which were advanced to a depth of 100 feet bgs. We evaluated these soils based on soil classification, corrected SPT blow counts, water content, Atterberg limits, groundwater elevation, shear strength, peak ground acceleration, and CPT data. In our screening investigation we looked at the Atterberg limits for fine-grained soils in our soil borings. The Atterberg limits for these fine-grained soils exhibited liquid limits ranging from 26 to 98 and plasticity indexes ranging from non-plastic to 67. We also calculated the ratio of the in-situ moisture content to the liquid limit. This data was then compared to the criteria by Idriss and Boulanger (2006) and Bray and Sancio (2006) for potential liquefaction or cyclic softening of fine-grained soils. Based on our screening analysis we believe the fine-grained soils at depths near and below groundwater generally have the potential for cyclic softening/liquefaction. As result of our screening and due to the presence of sand layers, we performed a quantitative evaluation of the potential for liquefaction to occur and the effects if liquefaction were to occur on this project.

A Peak Ground Acceleration (PGA) of 0.399 and a mean earthquake magnitude of 6.08 for the project site was used in our evaluation. Groundwater was encountered between the depths of

4½ and 13 feet bgs in our borings at the time they were performed. As a result, a groundwater depth of 5 feet was utilized in our evaluation.

A liquefaction analyses was performed in general accordance with California Geologic Survey Special Publication 117. The liquefaction study utilized the software “CLiq” by GeoLogismiki Geotechnical Software. These analyses were based on the soil data obtained from the two CPT soundings supplemented by laboratory data performed on samples obtained from our borings. Analyses were performed on data obtained from CPT1 and CPT2. CPT calculations were assessed using the Robertson (2009) method. A factor of safety of 1.3 was used against liquefaction. The liquefaction potential analyses were calculated from a depth of 5 to 50 feet bgs. A summary of the results of our analyses using the Robertson (2009) method has been attached to this report. The following table summarizes the vertical settlements calculated using the noted method.



Based on the analysis, various layers between the depths of approximately 5 to 42 feet are susceptible to liquefaction triggering based on a factor of safety of 1.3. However, the soil layers contributing to the majority of potential liquefaction settlement were encountered between the depths of 5 to 35 feet bgs. Based on our review of the calculations, the anticipated potential total liquefaction-induced settlement across the site varies from about 1 to 1½ inches. We estimate the differential liquefaction-induced settlement may be up to ¾ of an inch over 50 feet.

We believe the probability for liquefaction to manifest at the surface across the site is moderate due to the interbedded layering of the subgrade lithology, however if a dock level high building pad is constructed, the potential may be much lower. With regards to the potential for lateral spreading, we note that the site and surrounding area is relatively level. Given the relative flatness of the local topography and the variability in the layering of the soil lithology as well as the distance from the proposed building and a free face (such as the San Joaquin River located about ½ mile east of the site), it is our opinion that the potential for lateral spreading to affect this site is low.

## FLOOR SLABS

Design parameters for floor slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the aggregate base beneath the floor slab.

### Floor Slab Design Parameters

Item	Description
<b>Floor Slab Support</b> <sup>1</sup>	Retail building floor slabs and/or areas with floor coverings should be underlain by a minimum 4 inches of free-draining crushed aggregate <sup>2</sup>  The warehouse floor slab should be underlain by a minimum of 4 inches of Class 2 aggregate base compacted to a minimum of 95 percent relative compaction based on the ASTM D1557 test method.  Additionally, all floor slabs should be supported on a minimum of 18 inches of scarified and recompacted non-expansive native soils and/or imported non-expansive engineered fill.
<b>Estimated Modulus of Subgrade Reaction</b> <sup>3</sup>	200 pounds per square inch per inch (psi/in) for point loads

1. Floor slabs should be structurally independent of building footings or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation. Keep this note if placing slab on expansive soil. If supporting slab on non-expansive fill or lime treated soil, remove this sentence.
2. Free-draining granular material should have less than 5% fines (material passing the No. 200 sieve). Other design considerations such as cold temperatures and condensation development could warrant more extensive design provisions.
3. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in **Earthwork**, and the floor slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding

the use and placement of a vapor retarder. The vapor retarder should meet Class A ASTM E1745 standard.

Saw-cut control joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual. Joints or cracks should be sealed with a water-proof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing or other means.

### **Floor Slab Construction Considerations**

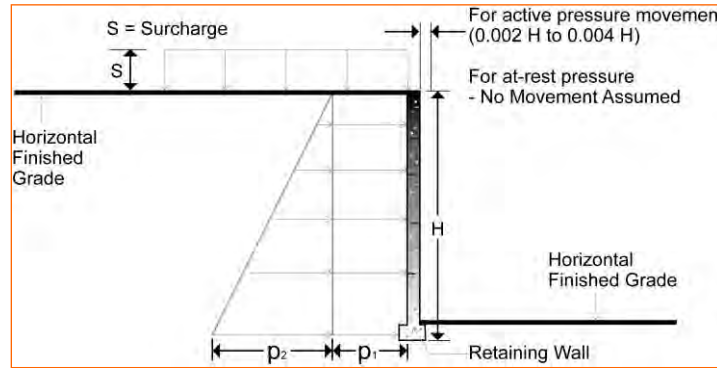
Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of floor slabs, the affected material should be removed and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should approve the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

## **LATERAL EARTH PRESSURES**

### **Design Parameters**

Structures with unbalanced backfill levels on opposite sides should be designed for earth pressures at least equal to values indicated in the following table. Earth pressures will be influenced by structural design of the walls, conditions of wall restraint, methods of construction and/or compaction and the strength of the materials being restrained. Two wall restraint conditions are shown in the diagram below. Active earth pressure is commonly used for design of free-standing cantilever retaining walls and assumes wall movement. The “at-rest” condition assumes no wall movement and is commonly used for basement walls, loading dock walls, or other walls restrained at the top. The recommended design lateral earth pressures do not include a factor of safety and do not provide for possible hydrostatic pressure on the walls (unless stated).



Lateral Earth Pressure Design Parameters				
Earth Pressure Condition <sup>1</sup>	Coefficient for Backfill Type <sup>2</sup>	Surcharge Pressure <sup>3, 4, 5</sup> $p_1$ (psf)	Effective Fluid Pressures (psf) <sup>2, 4, 5</sup>	
			Unsaturated <sup>6</sup>	Submerged <sup>6</sup>
Active ( $K_a$ )	Granular - 0.27	$(0.27)S$	$(30)H$	$(80)H$
At-Rest ( $K_o$ )	Granular - 0.43	$(0.43)S$	$(50)H$	$(90)H$
Passive ( $K_p$ )	Granular - 3.69	---	$(440)H$	$(275)H$

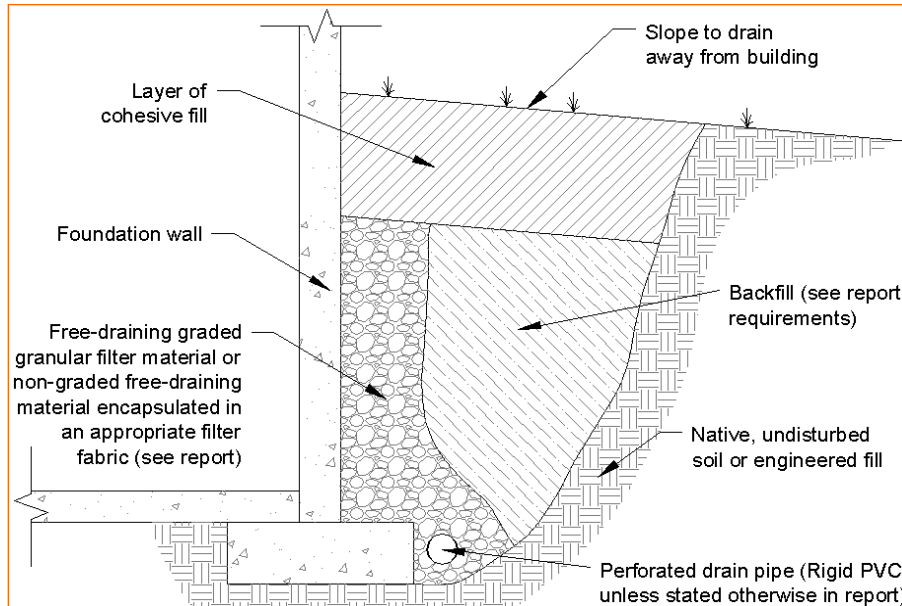
1. For active earth pressure, wall must rotate about base, with top lateral movements 0.002 H to 0.004 H, where H is wall height. For passive earth pressure, wall must move horizontally to mobilize resistance.
2. Uniform, horizontal backfill, compacted to at least 90% of the ASTM D1557 maximum dry density, rendering a maximum unit weight of 120 pcf.
3. Uniform surcharge, where S is surcharge pressure.
4. Loading from heavy compaction equipment is not included.
5. No safety factor is included in these values.
6. To achieve "Unsaturated" conditions, follow guidelines in **Subsurface Drainage for Below-Grade Walls** below. "Submerged" conditions are recommended when drainage behind walls is not incorporated into the design.

Backfill placed against structures should consist of granular soils. For the granular values to be valid, the granular backfill must extend out and up from the base of the wall at an angle of at least 45 and 60 degrees from vertical for the active and passive cases, respectively.

### Subsurface Drainage for Below-Grade Walls

A perforated rigid plastic drain line installed behind the base of walls and extends below adjacent grade is recommended to prevent hydrostatic loading on the walls. The invert of a drain line around a below-grade building area or exterior retaining wall should be placed near foundation bearing level. The drain line should be sloped to provide positive gravity drainage to daylight or to a sump pit and pump. The drain line should be surrounded by clean, free-draining granular material having less than 5% passing the No. 200 sieve. The free-draining aggregate should be

encapsulated in a filter fabric. The granular fill should extend to within 2 feet of final grade, where it should be capped with compacted cohesive fill to reduce infiltration of surface water into the drain system.



As an alternative to free-draining granular fill, a pre-fabricated drainage structure may be used. A pre-fabricated drainage structure is a plastic drainage core or mesh which is covered with filter fabric to prevent soil intrusion and is fastened to the wall prior to placing backfill.

## PRELIMINARY PAVEMENT RECOMMENDATIONS

### General Pavement Comments

Pavement designs are provided for the traffic conditions and pavement life conditions as noted in **Project Description** and in the following sections of this report. A critical aspect of pavement performance is site preparation. Pavement designs noted in this section must be applied to the site which has been prepared as recommended in the **Earthwork** section.

Design of Asphaltic Concrete (AC) pavements are based on the procedures in the Caltrans Highway Design Manual, 2018 edition. Design of Portland Cement Concrete (PCC) pavements are based upon American Concrete Institute (ACI) 330R-01; Guide for Design and Construction of Concrete Parking Lots.

One sample of the near surface soils was obtained and classified at our laboratory by an engineer. The sample was tested to determine its Resistance Value (R-value). The location of the R-value sample is shown on the Exploration Plan. The test produced an R-value of 70. R-values for the



area typically are greater than 50. The Caltrans design method allows the use of a maximum R-value of 50 in design. Therefore, a design R-value of 50 was used for the AC and PCC pavement designs. We have provided pavement sections for traffic indices (TI) of 4.5 through 12.0. The project civil engineer provided a maximum traffic loading of 10 million ESAL's. Total ESAL's of 10 million correlates to a TI of 12.0. If additional pavement sections are required, we should be contacted to provide the additional recommendations. Only one R-value sample was taken. When the project design moves farther along we should be contacted to perform additional R-value tests to verify pavement subgrade conditions.

### Preliminary Pavement Section Thicknesses

The following table provides options for AC and PCC Sections:

Asphaltic Concrete Design						
Layer	Thickness (inches)					
	TI=4.5	TI=5.5	TI=6.5	TI=8.0	TI=9.5	TI=12.0
AC <sup>1</sup>	2.5	3.0	4.0	5.0	6.0	8.0
Aggregate Base	4.0	4.0	4.0	5.0	7.0	10

1. All materials should meet the current Caltrans Standard Specifications, latest edition

Portland Cement Concrete Design						
Layer	Thickness (inches)					
	TI=4.5	TI=5.5	TI=6.5	TI=8.0	TI=9.5	TI=12.0
PCC <sup>1</sup>	5.0	5.0	5.0	6.5	7.0	7.5
Aggregate Base	4.0	4.0	4.0	4.0	4.0	4.0

1. All materials should meet the current Caltrans Standard Specifications, latest edition.

The estimated pavement sections provided in this report are minimums for the assumed design criteria, and as such, periodic maintenance should be expected. Areas for parking of heavy vehicles, concentrated turn areas, and start/stop maneuvers could require thicker pavement sections. Edge restraints (i.e. concrete curbs or aggregate shoulders) should be planned along curves and areas of maneuvering vehicles. A maintenance program including surface sealing, joint cleaning and sealing, and timely repair of cracks and deteriorated areas will increase the pavement's service life. As an option, thicker sections could be constructed to decrease future maintenance.

Concrete for rigid pavements should have a minimum 28-day compressive strength of 4,000 psi, a modulus of rupture of 500 psi, and be placed with a maximum slump of 4 inches. Although not required for structural support, a minimum 4-inch thick base course layer is recommended to help reduce potential for slab curl, shrinkage cracking, and subgrade pumping through joints. Proper joint spacing will also be required to prevent excessive slab curling and shrinkage cracking. Joints should be sealed to prevent entry of foreign material and dowelled where necessary for load transfer.

Where practical, we recommend early-entry cutting of crack-control joints in PCC pavements. Cutting of the concrete in its “green” state typically reduces the potential for micro-cracking of the pavements prior to the crack control joints being formed, compared to cutting the joints after the concrete has fully set. Micro-cracking of pavements may lead to crack formation in locations other than the sawed joints, and/or reduction of fatigue life of the pavement.

Pavement design methods are intended to provide structural sections with adequate thickness over a subgrade such that wheel loads are reduced to a level the subgrade can support.

Openings in pavements, such as decorative landscaped areas, are sources for water infiltration into surrounding pavement systems. Water can collect in the islands and migrate into the surrounding subgrade soils thereby degrading support of the pavement. This is especially applicable for islands with raised concrete curbs, irrigated foliage, and low permeability near-surface soils. The civil design for the pavements with these conditions should include features to restrict or to collect and discharge excess water from the islands. Examples of features are edge drains connected to the storm water collection system, longitudinal subdrains, or other suitable outlet and impermeable barriers preventing lateral migration of water such as a cutoff wall installed to a depth below the pavement structure.

Dishing in parking lots surfaced with AC is usually observed in frequently-used parking stalls (such as near the front of buildings) and occurs under the wheel footprint in these stalls. The use of higher-grade asphaltic cement, or surfacing these areas with PCC, should be considered. The dishing is exacerbated by factors such as irrigated islands or planter areas, sheet surface drainage to the front of structures.

Rigid PCC pavements will perform better than AC in areas where short-radii turning and braking are expected (i.e. entrance/exit aprons) due to better resistance to rutting and shoving. In addition, PCC pavement will perform better in areas subject to large or sustained loads. An adequate number of longitudinal and transverse control joints should be placed in the rigid pavement in accordance with ACI and/or AASHTO requirements. Expansion (isolation) joints must be full depth and should only be used to isolate fixed objects abutting or within the paved area.

PCC pavement details for joint spacing, joint reinforcement, and joint sealing should be prepared in accordance with American Concrete Institute (ACI 330R-01 and ACI 325R.9-91). PCC pavements should be provided with mechanically reinforced joints (doweled or keyed) in accordance with ACI 330R-01.

## **Pavement Drainage**

Pavements should be sloped to provide rapid drainage of surface water. Water allowed to pond on or adjacent to the pavements could saturate the subgrade and contribute to premature pavement deterioration. In addition, the pavement subgrade should be graded to provide positive drainage within the granular base section. Appropriate sub-drainage or connection to a suitable daylight outlet should be provided to remove water from the granular subbase.

The pavement surfacing and adjacent sidewalks should be sloped to provide rapid drainage of surface water. Water should not be allowed to pond on or adjacent to slabs, since it could saturate the subgrade and contribute to premature pavement or slab deterioration.

## **Pavement Maintenance**

The pavement sections represent minimum recommended thicknesses and, as such, periodic maintenance should be anticipated. Therefore, preventive maintenance should be planned and provided for through an on-going pavement management program. Maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment. Maintenance consists of both localized maintenance (e.g. crack and joint sealing and patching) and global maintenance (e.g. surface sealing). Preventive maintenance is usually the priority when implementing a pavement maintenance program. Additional engineering observation is recommended to determine the type and extent of a cost-effective program. Even with periodic maintenance, some movements and related cracking may still occur and repairs may be required.

Pavement performance is affected by its surroundings. In addition to providing preventive maintenance, the civil engineer should consider the following recommendations in the design and layout of pavements:

1. Final grade adjacent to paved areas should slope down from the edges at a minimum 2%.
2. Subgrade and pavement surfaces should have a minimum 2% slope to promote proper surface drainage.
3. Install below pavement drainage systems surrounding areas anticipated for frequent wetting.
4. Install joint sealant and seal cracks immediately.
5. Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils.
6. Place compacted, low permeability backfill against the exterior side of curb and gutter.

7. Place curb, gutter and/or sidewalk directly on subgrade soils rather than on unbound granular base course materials.

## PERCOLATION AND INFILTRATION TESTS

### Percolation Tests

Four percolation tests were performed in the likely locations of proposed stormwater retention basins and at the depths noted below as agreed to with The Hogdgon Group. The location of the tests are shown on the Exploration Plan.

The results of the percolation test are presented in the following table. The infiltration rates are also shown, as calculated by the Porchet Method (aka Inverse Borehole Method):

Test ID	Depth of test, ft.	Average head, ft.	Soil Type at Test Depth	Percolation Rate, inches per hour	Infiltration Rate, inches per hour
P1	4.5	2.7	Silty Sand	8.6	0.4
P2	4.5	2.9	Silty Sand	7.2	0.3
P3	5	2.6	Silty Sand	5.3	0.4
P4	4	2.5	Silty Sand	9.1	0.3

Our tests were performed using clean water; the storm water runoff will likely contain materials such as silt, leaves, oil residues, and other matter that may reduce the infiltration characteristics of the soils – we recommend that an appropriate safety factor be applied to the estimated percolation and infiltration rates for use in design. The safety factor should consider the level of filtration the system can provide. The percolation rates presented above are applicable at the locations and depths of the tests, if storm water facilities are installed at other locations/depths on the site, the rates may differ.

We provide the following considerations for the design, construction and maintenance of the storm water collection system. The long-term percolation and infiltration rates will depend on many factors, and can be reduced if the following conditions are present/not incorporated:

- Variability of site soils.
- Fine layering of soils
- Construction practices result in a compacted basin bottom
- Pre-treatment (filtration) of the influent is not provided, and/or
- Maintenance of the systems is not performed regularly.

Subsurface Soil Variations: Variations in subsurface soil conditions and the presence of fine layering that may not have been detected in the exploration program can affect the percolation rate of the receptor soils.

Construction Considerations: Operation of heavy equipment during construction may densify the receptor soils in the bottom of the storm drain system or the bio-swales. The soils exposed in the bottom of the systems should not be compacted and should remain in their native condition and/or should be scarified and protected from compaction.

Maintenance of Facilities: The percolation and infiltration rates of the receptor soils will be reduced in the event that fine sediment, organic materials, and/or oil residue are allowed to settle in basin or bio-swale areas. The use of a filtration system as well as a maintenance program is highly recommended. All intakes should be cleaned regularly following significant rains and prior to the beginning of the rainy season. Satisfactory long-term performance of the bottom of the system will require some degree of maintenance, as possible.

## CORROSIVITY

The table below lists the results of laboratory soluble sulfate, soluble chloride, electrical resistivity, and pH testing. The values may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials which will be used for project construction.

Corrosivity Test Results Summary						
Boring	Sample Depth (feet)	Soil Description	Soluble Sulfate (%)	Soluble Chloride (%)	Electrical Resistivity (Ω-cm)	pH
B1	1.0 – 2.5	Silty Sand	0.01	<0.01	6,645	8.28
B17	1.0 – 2.5	Silty Sand	<0.01	<0.01	3,492	8.59

The sulfate test results indicate that the soil from borings B1 and B17 classify as Class S0 according to Table 19.3.1.1 of ACI 318-14. This indicates that the sulfate level is negligible when considering corrosion to concrete. Based on the results of the sulfate content test results, ACI 318-14, Section 19.3 does not specify the type of cement or a maximum water-cement ratio for concrete for sulfate Class S0. For further information, see ACI 318-14, Section 19.3.

## **GENERAL COMMENTS**

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Due to the wide spacing of our borings, the recommendations in the report shall be considered preliminary. Terracon should be contacted to provide a more detailed exploration and analysis to verify the subsurface conditions are consistent with the preliminary recommendations as the project moves forward and site plans are finalized. Additionally, Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

## ATTACHMENTS

## EXPLORATION AND TESTING PROCEDURES

### Field Exploration

Number of Borings	Planned Boring Depth (feet) <sup>1</sup>	Location
3	50	Planned building areas and for the liquefaction analysis
14	15 to 20	Planned building areas
4	3 to 4	Stormwater features (percolation tests)
Number of CPTs	Planned CPT Depth (feet) <sup>1</sup>	Location
2	100	Planned building areas and for the liquefaction analysis, Site Class, and GMHA and SRA

1. Below ground surface.

**Boring Layout and Elevations:** Unless otherwise noted, Terracon personnel provided the boring layout. Coordinates were obtained with a handheld GPS unit (estimated horizontal accuracy of about ±10 feet) and approximate elevations were obtained utilizing Google Earth. If elevations and a more precise boring layout are desired, we recommend borings be surveyed.

**Subsurface Exploration Procedures:** We advanced the borings with a track-mounted rotary drill rig using solid-stem augers, hollow-stem flight augers and mud-rotary drilling methods. We obtained samples at depths of 1 foot, 2.5 feet, 5 feet and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. A 2.5-inch O.D. split-barrel Modified California sampling spoon with 2.0-inch I.D. tube lined sampler was used for sampling. Tube-lined, split-barrel sampling procedures are similar to standard split spoon sampling procedure; however, blow counts are not equivalent to the SPT blow counts. The values provided on our boring logs are uncorrected. We observed and recorded groundwater levels during drilling and sampling. As required by the County, all borings were backfilled with neat cement-grout after their completion.

For the cone penetrometer testing, the CPT rig hydraulically pushes an instrumented cone through the soil while nearly continuous readings are recorded to a portable computer. The cone is equipped with electronic load cells to measure tip resistance and sleeve resistance and a pressure transducer to measure the generated ambient pore pressure. The face of the cone has



an apex angle of 60° and an area of 15 cm<sup>2</sup>. Digital Data representing the tip resistance, friction resistance, pore water pressure, and probe inclination angle are recorded about every 2 centimeters while advancing through the ground at a rate between 1½ and 2½ centimeters per second. These measurements are correlated to various soil properties used for geotechnical design. No soil samples are gathered through this subsurface investigation technique. CPT testing was conducted in general accordance with ASTM D5778 “Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils.”

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

**Percolation Testing:** As requested, four percolation tests were performed on the project site. These tests were performed at depths of about 4 to 5 feet below the existing ground surface. The tests were performed by drilling the test holes and then placing about 2 inches of gravel in the bottom of the holes. The holes were then cased with PVC pipe and gravel was placed around the outside of the pipe. Water was added to the holes and allowed to soak overnight. The tests were performed by adding water to the holes to provide for about 1.5 to 4.5 feet of head. Readings of the drop in water surface elevation were made at approximately 15 minute intervals over a period of about 2 hours.

## **Laboratory Testing**

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil strata, as necessary, for this project. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods were applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D422 Standard Test Method for Particle-Size Analysis of Soils
- ASTM D1140 Standard Test Method for Determining the Amount of Material Finer than No. 200 Sieve by Soil Washing

- ASTM D2844 Standard Test Method for Resistance Value R-Value and Expansion Pressure of Compacted Soils
- Corrosivity

The laboratory testing program included examination of soil samples by an engineer. Based on the material's texture and plasticity, we described and classified the soil samples in accordance with the Unified Soil Classification System.

## PHOTOGRAPHY LOG



Vegetation and fill pile along Dos Reis Road looking north



Overgrown fill pile along Manthey Road looking south

## **SITE LOCATION AND EXPLORATION PLANS**

### **Contents:**

Site Location Plan

Exploration Plan

Note: All attachments are one page unless noted above.

**SITE LOCATION**

Dos Reis Ranch ■ Lathrop, California

August 16, 2021 ■ Terracon Project No. NA215014

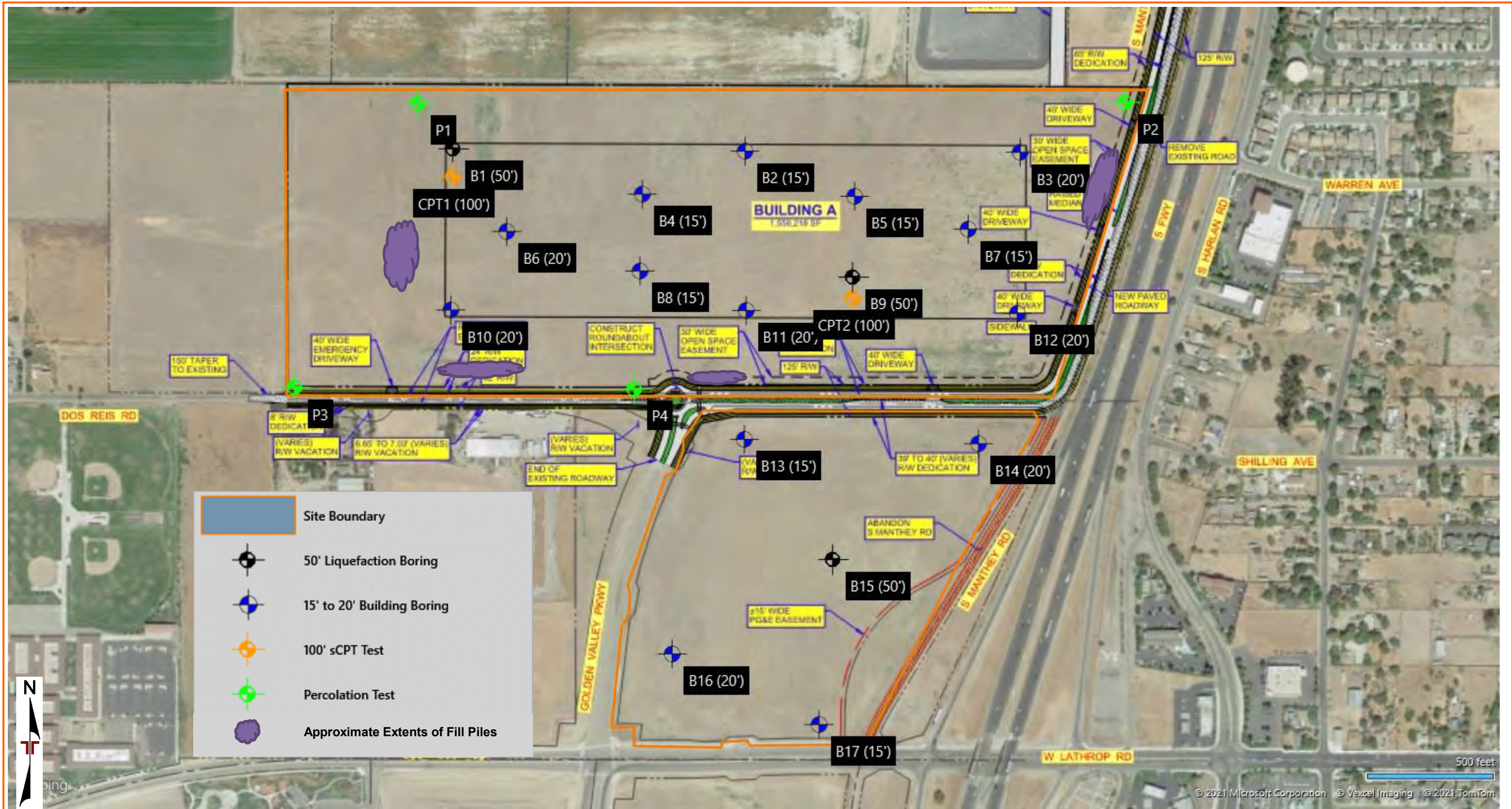


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

**EXPLORATION PLAN**

Dos Reis Ranch ■ Lathrop, California  
August 16, 2021 ■ Terracon Project No. NA215014



## **EXPLORATION RESULTS**

### **Contents:**

Boring Logs (B1 through B17)

Atterberg Limits

Grain Size Distribution

R-Value

Corrosivity

CPT Data (2 pages)

Liquefaction Analysis Report (12 pages)

Note: All attachments are one page unless noted above.

# BORING LOG NO. B1

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	See <a href="#">Exploration Plan</a> Latitude: 37.8329° Longitude: -121.2974°  Approximate Surface Elev.: 12 (Ft.) +/- ELEVATION (Ft.)									LL-PL-PI		
	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, loose											
			5			4-4-5 N=9		5.7				
						3-3-3 N=6		12.7				
						3-4-4 N=8		16.6				
		8.0		▽								
	<b>FAT CLAY (CH)</b> , high plasticity, brown, stiff											
			10	▽								
						2-3-5 N=8	1.5 (HP)	33.6		98-31-67	92	
		12.0										
	<b>POORLY GRADED SAND (SP)</b> , gray											
			15			8-9-10 N=19		25.2				
		19.0										
	<b>SANDY SILT (ML)</b> , fine to medium grained, brown, very stiff											
			20			14-24-29 N=53	2.25 (HP)	30.7				
		25.0										
	<b>POORLY GRADED SAND WITH SILT (SP-SM)</b> , fine to medium grained, brown, medium dense											
			25			8-8-11 N=19		25.1		NP	7	

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA and Mud Rotary

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 8 feet while drilling
- ▽ 10 feet after drilling



Boring Started: 06-02-2021

Boring Completed: 06-02-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014



# BORING LOG NO. B1

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	See <a href="#">Exploration Plan</a>										LL-PL-PI		
	Latitude: 37.8329° Longitude: -121.2974°		Approximate Surface Elev.: 12 (Ft.) +/-										
		30.0	-18+/-	30									
	<b>POORLY GRADED SAND WITH SILT (SP-SM)</b> , fine to medium grained, brown, medium dense <i>(continued)</i>												
	<b>SANDY SILT (ML)</b> , fine to medium grained, brown, hard				X		7-8-12 N=20	4.25 (HP)	18.0				
	<b>LEAN CLAY (CL)</b> , medium plasticity, brown, very stiff				X		10-5-7 N=12	2.5 (HP)	29.0				
	<b>LEAN CLAY (CL)</b> , medium plasticity, brown, very stiff				X		4-5-7 N=12	2.5 (HP)	31.2			48-22-26	93
	<b>SANDY SILT (ML)</b> , brown, very stiff				X		5-5-7 N=12	3.0 (HP)	23.8				
	<b>LEAN CLAY (CL)</b> , brown, very stiff				X		3-4-7 N=11	2.5 (HP)	32.6				
	<b>Boring Terminated at 51.5 Feet</b>												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA and Mud Rotary

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 8 feet while drilling
- ▽ 10 feet after drilling



Boring Started: 06-02-2021

Boring Completed: 06-02-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. B2

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8329° Longitude: -121.2935°  Approximate Surface Elev.: 13 (Ft.) +/-	DEPTH (Ft.)	ELEVATION (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
Silty Sand	<p><b>SILTY SAND (SM)</b>, fine to medium grained, brown, medium dense</p> <p>fine grained, olive brown</p>	5				5-6-10		9.5	111			
						4-5-5 N=10		20.7				
							4-5-8		23.4	97		
Lean Clay	<p><b>LEAN CLAY (CL)</b>, medium plasticity, olive, stiff to very stiff, with silty sand lenses</p> <p>brownish gray</p>	10	3+/-	▽		2-10-10 N=20	2.5 (HP)	43.8				
			15	-3.5+/-	▽		3-2-6 N=8	1.5 (HP)	33.9			
<p><b>Boring Terminated at 16.5 Feet</b></p>												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 14 feet while drilling
- ▽ 12 feet after drilling



Boring Started: 06-07-2021

Boring Completed: 06-07-2021

Drill Rig: D-50

Driller: E. Rodriguez

Project No.: NA215014

# BORING LOG NO. B3

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	DEPTH	ELEVATION (Ft.)								LL-PL-PI		
[Pattern]	<b>SILTY SAND (SM)</b> , fine grained, brown, medium dense											
	2.5	10.5+/-				5-7-10		23.0	95			
[Pattern]	<b>SILT (ML)</b> , olive brown, stiff					6-6-10 N=16		26.1				
	5.0	8+/-	5									
[Pattern]	<b>SILTY SAND (SM)</b> , fine grained, olive brown, medium dense					4-5-8		28.4	93			
	10.0	3+/-		▽								
[Pattern]	<b>LEAN CLAY (CL)</b> , medium plasticity, brownish gray, stiff, with sandy clay lenses					1-4-6 N=10	2.0 (HP)	42.5			31-20-11	
	17.0	-4+/-	15	▽		3-7-10	2.5 (HP)	17.8	101			
[Pattern]	<b>SILTY SAND (SM)</b> , fine to coarse grained, brown, medium dense											
	21.5	-8.5+/-	20			5-6-11 N=17		20.9				
<b>Boring Terminated at 21.5 Feet</b>												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.  
Elevation estimated using Google Earth

WATER LEVEL OBSERVATIONS	
▽	15 feet while drilling
▽	7 feet after drilling



Notes:	
Boring Started: 06-07-2021	Boring Completed: 06-07-2021
Drill Rig: D-50	Driller: E. Rodriguez
Project No.: NA215014	

# BORING LOG NO. B4

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8324° Longitude: -121.2949°  Approximate Surface Elev.: 13 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
●●●●●	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense	5		X	3-7-10		10.0	109			
				X	5-5-6 N=11		13.6				
				X	4-6-8		12.3	110			
///	<b>FAT CLAY (CH)</b> , high plasticity, greenish gray, stiff	10		X	3-3-6 N=9	2.5 (HP)	39.1				
	brownish gray, medium stiff		▽								
			▽								
		15		X	6-8-10 N=18	1.0 (HP)	32.7				
	<b>Boring Terminated at 16.5 Feet</b>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

WATER LEVEL OBSERVATIONS
▽ 14 feet while drilling
▽ 13 feet after drilling



Boring Started: 06-07-2021

Boring Completed: 06-07-2021

Drill Rig: D-50

Driller: E. Rodriguez

Project No.: NA215014

# BORING LOG NO. B5

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION	DEPTH (Ft.)	ELEVATION (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	See <a href="#">Exploration Plan</a>									Latitude: 37.8324° Longitude: -121.2920°	LL-PL-PI	
	Approximate Surface Elev.: 14 (Ft.) +/-											
5.0	<b>SILTY SAND (SM)</b> , fine grained, brown, medium dense, moderate cementation	5	9+/-	X	X	4-6-20		17.6				
				X	X	10-11-15 N=26					NP	35
10.0	<b>SILT (ML)</b> , olive-gray			X	X	8-11-18		25.7	100			
15.0	<b>LEAN CLAY (CL)</b> , medium plasticity, olive-gray, very stiff		4+/-	▽	X	4-5-7 N=12	2.25 (HP)	29.7				
16.5	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense		-1+/-		X	4-4-7 N=11		34.7				
	<b>Boring Terminated at 16.5 Feet</b>											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 11 feet while drilling
- ▽ 10 feet after drilling



Boring Started: 06-07-2021

Boring Completed: 06-07-2021

Drill Rig: D-50

Driller: E. Rodriguez

Project No.: NA215014

# BORING LOG NO. B6

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8320° Longitude: -121.2967°  Approximate Surface Elev.: 14 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	
									LL-PL-PI	PERCENT FINES
	DEPTH ELEVATION (Ft.)									
Silty Sand (SM)	dense	5	X	X	5-6-9		3.9		NP	18
			X	X	4-6-8 N=14		7.2			
	loose		X	X	2-4-5		16.0			
Silt with Sand (ML)	brown, very stiff	10	▽	X	4-4-10 N=14	2.25 (HP)	25.2	95		
	brown with orange, medium dense	15	▽	X	2-2-5 N=7	0.75 (HP)	40.2			
	gray, hard	20	▽	X	6-12-19 N=31	4.5 (HP)	20.4	104		
<b>Boring Terminated at 21.5 Feet</b>		21.5								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.  
Elevation estimated using Google Earth

Notes:

WATER LEVEL OBSERVATIONS	
▽	10 feet while drilling
▽	17.5 after drilling



Boring Started: 06-01-2021	Boring Completed: 06-01-2021
Drill Rig: D-50	Driller: E. Rodriguez
Project No.: NA215014	

# BORING LOG NO. B7

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8321° Longitude: -121.2904°  Approximate Surface Elev.: 13 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
DEPTH	ELEVATION (Ft.)										
Silty Sand	<b>SILTY SAND (SM)</b> , fine to medium grained, olive brown, loose				2-3-4		21.7	105			
	olive, medium dense				3-6-7 N=13		23.7				
	dark olive brown, loose	5	▽		3-4-5		29.2	95			
			▽								
Lean Clay with Sand	<b>LEAN CLAY WITH SAND (CL)</b> , medium plasticity, olive gray, very stiff	10.0			4-4-6 N=10	4.0 (HP)	30.8				
	brown	15			4-8-7 N=15	4.0 (HP)	19.7				
	<b>Boring Terminated at 16.5 Feet</b>	16.5									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 8 feet while drilling
- ▽ 6 feet after drilling



Boring Started: 06-07-2021

Boring Completed: 06-07-2021

Drill Rig: D-50

Driller: E. Rodriguez

Project No.: NA215014

# BORING LOG NO. B8

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8316° Longitude: -121.2949°  Approximate Surface Elev.: 15 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
●●●●●	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense	5.0		X	7-12-15		7.8				
●●●●●		5.0		X	3-6-6 N=12		9.2				
●●●●●	<b>SANDY SILT (ML)</b> , brown, very stiff	6.5		X	3-5-6	4.0 (HP)	15.6	105			
●●●●●	<b>POORLY GRADED SAND (SP)</b> , fine to coarse grained, brown, loose	11.5	▽	X	3-4-5 N=9		20.8		NP	2	
●●●●●	<b>SILT (ML)</b> , brown, very stiff	16.5	▽	X	2-3-4	2.25 (HP)	32.9	88			
<b>Boring Terminated at 16.5 Feet</b>											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.  
Elevation estimated using Google Earth

Notes:

WATER LEVEL OBSERVATIONS	
▽	10 feet while drilling
▽	15 feet after drilling



Boring Started: 06-01-2021	Boring Completed: 06-01-2021
Drill Rig: D-50	Driller: E. Rodriguez
Project No.: NA215014	



# BORING LOG NO. B9

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8315° Longitude: -121.2920°  Approximate Surface Elev.: 13 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	<p><b>SILTY SAND (SM)</b>, fine grained, brown, dense</p> <p>medium dense</p>	5.0	8+/-	5	3-17-21		20.4				
		4-5-7 N=12									
		2-3-2 N=5									
		4-4-5 N=9	1.0 (HP)								
		2-6-8 N=14	28.3	NP	20						
		7-8-10 N=18	1.5 (HP)	37.4							
		25		7-9-20 N=29	3.0 (HP)	30.6					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA and Mud Rotary

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- 8 feet while drilling
- 8.5 feet after drilling



Boring Started: 06-04-2021

Boring Completed: 06-04-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. B9

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	Latitude: 37.8315° Longitude: -121.2920°								LL-PL-PI	
	Approximate Surface Elev.: 13 (Ft.) +/-									
	DEPTH ELEVATION (Ft.)									
30	<b>SANDY SILTY CLAY (CL-ML)</b> , low plasticity, brown, stiff to very stiff, weakly cemented in places <i>(continued)</i>	30	X		4-6-8 N=14	2.5 (HP)	25.2		26-19-7	55
35	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense	35	X		4-10-17 N=27		27.7			
40		40	X		8-10-12 N=22		30.4			
45	<b>LEAN CLAY (CL)</b> , medium plasticity, greenish gray, stiff	45	X		3-3-6 N=9	2.0 (HP)	26.5			
50	very stiff	50	X		2-4-8 N=12	2.25 (HP)	29.9			
51.5	<b>Boring Terminated at 51.5 Feet</b>	51.5								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA and Mud Rotary

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

WATER LEVEL OBSERVATIONS
▽ 8 feet while drilling
▽ 8.5 feet after drilling



Boring Started: 06-04-2021	Boring Completed: 06-04-2021
Drill Rig: D-50	Driller: P. Mullen
Project No.: NA215014	

# BORING LOG NO. B10

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8312° Longitude: -121.2975°  Approximate Surface Elev.: 14 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense  loose	5			7-9-7		5.5				
		5			5-6-9		8.7				
		5			2-3-4		11.3				
		10	4+/-		2-4-7	3.0 (HP)	30.9	91			
	<b>SILT WITH SAND (ML)</b> , brown, very stiff	15	▽		3-3-7		26.6				
		20	-6+/-		4-8-17		15.9	108			
	<b>POORLY GRADED SAND WITH SILT (SP-SM)</b> , fine to medium grained, brown, medium dense  <b>Boring Terminated at 21.5 Feet</b>	21.5									-7.5+/-

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 12 feet while drilling
- ▽ 12 feet after drilling



Boring Started: 06-01-2021

Boring Completed: 06-01-2021

Drill Rig: D-50

Driller: E. Rodriguez

Project No.: NA215014

# BORING LOG NO. B11

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8312° Longitude: -121.2935°  Approximate Surface Elev.: 15 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
DEPTH	ELEVATION (Ft.)										
5.0	10+/-	5.0	10+/-	5	10	15	20	21.5	-5+/-	-6.5+/-	
<b>SILTY SAND (SM)</b> , fine to medium grained, brown, dense											
light brown, medium dense											
<b>SANDY SILT (ML)</b> , fine grained, brown, dense											
<b>POORLY GRADED SAND (SP)</b> , fine to medium grained, dark brown, loose											
<b>SILT (ML)</b> , brownish gray, stiff											
<b>LEAN CLAY (CL)</b> , medium plasticity, brown, hard											
<b>Boring Terminated at 21.5 Feet</b>											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- 9 feet while drilling
- 4.5 feet after drilling



Boring Started: 06-04-2021

Boring Completed: 06-04-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. B12

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	See <a href="#">Exploration Plan</a>										LL-PL-PI	
	Latitude: 37.8311° Longitude: -121.2898° Approximate Surface Elev.: 12 (Ft.) +/-											
	<b>SILTY SAND (SM)</b> , fine to medium grained, orange brown to olive, medium dense, trace clay	2.5	9.5+/-				3-11-15		24.3	103		
	<b>SILT WITH SAND (ML)</b> , brown to olive brown, very stiff	5.0	7+/-	5			6-6-7	2.0 (HP)	27.0		NP	79
	<b>SILT WITH SAND (ML)</b> , fine grained, olive brown, medium stiff	10.0	2+/-	10	▽		2-2-5		24.8			
	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, loose	15.0	-3+/-	15	▽		7-6-9		28.0			
	<b>FAT CLAY (CH)</b> , high plasticity, brownish gray, very stiff	21.5	-9.5+/-	20			4-4-5	2.5 (HP)	23.2			
	<b>Boring Terminated at 21.5 Feet</b>											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method: 6" HSA	See <a href="#">Supporting Information</a> for explanation of symbols and abbreviations. Elevation estimated using Google Earth	Notes:
Abandonment Method: Boring backfilled with neat cement-grout		
<b>WATER LEVEL OBSERVATIONS</b> ▽ 15 feet while drilling ▽ 10 feet after drilling	 902 Industrial Way Lodi, CA	Boring Started: 06-08-2021 Drill Rig: D-50 Project No.: NA215014
		Boring Completed: 06-08-2021 Driller: E. Rodriguez

# BORING LOG NO. B13

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8298° Longitude: -121.2935°  Approximate Surface Elev.: 14 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense  fine grained	5		X	5-8-8 N=16		7.8				
				X	11-15-19		24.6	96			
				X	5-6-6 N=12		22.7				
		10	▽	X	3-4-7		20.9				
	<b>POORLY GRADED SAND (SP)</b> , fine to medium grained, brown, medium dense	15		X	2-4-6 N=10		30.0				
	<b>SILT WITH SAND (SM)</b> , fine to medium grained, brown, medium dense  <i>Boring Terminated at 16.5 Feet</i>	16.5		X							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 10 feet while drilling
- ▽ 9.5 feet after drilling



Boring Started: 06-04-2021

Boring Completed: 06-04-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. B14

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8297° Longitude: -121.2903°  Approximate Surface Elev.: 14 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
Silty Sand	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense	5		X	8-11-14 N=25		7.1				
				X	8-13-11 N=24		19.9				
			▽	X	4-6-7		25.2				
			▽								
Lean Clay	<b>LEAN CLAY WITH SAND (CL)</b> , medium plasticity, brownish gray, very stiff	9.0		X	4-6-10 N=16	2.25 (HP)	26.9				
	hard			X	6-7-8	4.5+ (HP)	37.4	88			
	stiff to very stiff			X	4-16-30 N=46	2.0 (HP)	16.1				
	<b>Boring Terminated at 21.5 Feet</b>	21.5									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 10 feet while drilling
- ▽ 8 feet after drilling



Boring Started: 06-03-2021

Boring Completed: 06-03-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. B15

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	Latitude: 37.8285° Longitude: -121.2923°								LL-PL-PI	
	Approximate Surface Elev.: 13 (Ft.) +/-	ELEVATION (Ft.)								
SILT WITH SAND (ML), fine grained, brown, medium dense		2.5		X	4-7-7 N=14		12.3		NP	75
SILTY SAND (SM), fine to medium grained, brown, loose				X	3-3-6 N=9		12.7			
fine grained, medium dense		5		X	3-7-10 N=17		26.8			
LEAN CLAY (CL), medium plasticity, brownish gray, very stiff		10.0		X	5-6-6 N=12	2.5 (HP)	20.2			
stiff		15		X	3-5-6 N=11	1.0 (HP)	36.9			
SILTY SAND (SM), fine to medium grained, greenish gray, medium dense, trace clay		20.0		X	5-5-7 N=12		32.6		NP	34
		25		X	9-11-9 N=20	3.5 (HP)	27.6			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA and Mud Rotary

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

Switched to mud rotary before encountering groundwater



Boring Started: 06-03-2021

Boring Completed: 06-03-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014



# BORING LOG NO. B15

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	Approximate Surface Elev.: 13 (Ft.) +/-								DEPTH	ELEVATION (Ft.)	
29.0		-16+/-									
	<b>POORLY GRADED SAND (SP)</b> , fine to coarse grained, brown, dense	30		X	13-16-16 N=32		27.2				
	medium dense	35		X	10-13-14 N=27		47.9				
		40		X	10-10-13 N=23		28.1		NP	7	
		45		X	3-4-8 N=12		19.0				
	<b>LEAN CLAY (CL)</b> , medium plasticity, gray, stiff	50		X	5-7-6 N=13	2.0 (HP)	13.5				
	45.0	-32+/-									
	<b>Boring Terminated at 51.5 Feet</b>	51.5									
		-38.5+/-									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
6" HSA and Mud Rotary

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

Switched to mud rotary before encountering groundwater



Boring Started: 06-03-2021

Drill Rig: D-50

Project No.: NA215014

Boring Completed: 06-03-2021

Driller: P. Mullen

# BORING LOG NO. B16

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	See <a href="#">Exploration Plan</a>										LL-PL-PI		
	Latitude: 37.8275° Longitude: -121.2945°		Approximate Surface Elev.: 13 (Ft.) +/-										
		<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense	4.5				5-8-10		10.4	113			
		loose			5			5-4-4 N=8	8.9			NP	15
								4-4-6	11.5	101			
			9.0	4+/-	10			11-14-15 N=29	21.4				
		<b>POORLY GRADED SAND (SP)</b> , fine to medium grained, brown, medium dense	12.0	1+/-	15			7-9-16	25.8	95			
	<b>SANDY SILT (SM)</b> , fine grained, brown, medium dense	20.0	-7+/-	20			4-4-6 N=10	2.0 (HP)	17.4				
	<b>LEAN CLAY (CL)</b> , medium plasticity, brown, stiff	21.5	-8.5+/-										
	<b>Boring Terminated at 21.5 Feet</b>												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- 10 feet while drilling
- 8.5 feet after drilling



Boring Started: 06-04-2021

Boring Completed: 06-04-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. B17

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON DATATEMPLATE.GDT 6/24/21

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	Latitude: 37.8267° Longitude: -121.2925°								LL-PL-PI	
	Approximate Surface Elev.: 13 (Ft.) +/-	ELEVATION (Ft.)								
Silty Sand	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense			X	6-6-6 N=12		17.4			
	dense			X	5-18-16		10.1			
	loose	5		X	3-4-4 N=8		9.3			
	fine grained	10	▽	X	3-4-5		22.6			
		15.0								-2+/-
Poorly Graded Sand	<b>POORLY GRADED SAND (SP)</b> , fine to medium grained, brown, medium dense			X	7-10-11 N=21		19.4			
	<b>Boring Terminated at 16.5 Feet</b>	16.5								-3.5+/-

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with neat cement-grout

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

- ▽ 12 feet while drilling
- ▽ 11.5 feet after drilling



Boring Started: 06-03-2021

Boring Completed: 06-03-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

# BORING LOG NO. P1

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	Latitude: 37.8334° Longitude: -121.2979°								LL-PL-PI	
	Approximate Surface Elev.: 14 (Ft.) +/-									
	DEPTH ELEVATION (Ft.)									
4.5	<p><b>SILTY SAND (SM)</b>, fine to medium grained, brown, medium dense</p>			X	6-6-8 N=14		4.6			
9.5+/-	<p><b>Boring Terminated at 4.5 Feet</b></p>			X	5-5-5 N=10		7.9			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled soil cuttings.

**WATER LEVEL OBSERVATIONS**

*No groundwater encountered*

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:



Boring Started: 06-02-2021

Drill Rig: D-50

Project No.: NA215014

Boring Completed: 06-02-2021

Driller: P. Mullen

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

# BORING LOG NO. P2

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	Latitude: 37.8334° Longitude: -121.2883°  Approximate Surface Elev.: 14 (Ft.) +/- ELEVATION (Ft.)								LL-PL-PI	
4.5	<b>SILTY SAND (SM)</b> , fine to medium grained, brown	9.5+/-			6-6-6 N=12		18.1			
	<b>Boring Terminated at 4.5 Feet</b>				4-6-7 N=13		14.7			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with soil cuttings.

See [Supporting Information](#) for explanation of symbols and abbreviations.  
Elevation estimated using Google Earth

Notes:

**WATER LEVEL OBSERVATIONS**

*No groundwater encountered*



Boring Started: 06-02-2021

Boring Completed: 06-02-2021

Drill Rig: D-50

Driller: P. Mullen

Project No.: NA215014

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

# BORING LOG NO. P3

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS	PERCENT FINES
	Latitude: 37.8303° Longitude: -121.2996°								LL-PL-PI	
	Approximate Surface Elev.: 14 (Ft.) +/-									
	DEPTH ELEVATION (Ft.)									
4.5	<p><b>SILTY SAND (SM)</b>, fine to medium grained, brown, medium dense</p> <p>loose</p>	9.5+/-		X	15-10-10 N=20		6.6			
	<p><b>Boring Terminated at 4.5 Feet</b></p>			X	6-5-4 N=9		8.7			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with soil cuttings

**WATER LEVEL OBSERVATIONS**

No groundwater encountered

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:



Boring Started: 06-02-2021

Drill Rig: D-50

Project No.: NA215014

Boring Completed: 06-02-2021

Driller: P. Mullen

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

# BORING LOG NO. P4

**PROJECT:** Dos Reis Ranch

**CLIENT:** The Hodgdon Group  
Colton, CA

**SITE:** 14101 South Manthey Road  
Lathrop, CA

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 37.8303° Longitude: -121.2950°  Approximate Surface Elev.: 15 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	<b>SILTY SAND (SM)</b> , fine to medium grained, brown, medium dense				5-6-6		8.4			
	loose				4-4-4		16.6			
	4.5 <b>Boring Terminated at 4.5 Feet</b> 10.5+/-									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
4" SSA

Abandonment Method:  
Boring backfilled with soil cuttings.

**WATER LEVEL OBSERVATIONS**

*No groundwater encountered*

See [Supporting Information](#) for explanation of symbols and abbreviations.

Elevation estimated using Google Earth

Notes:



Boring Started: 06-01-2021

Boring Completed: 06-01-2021

Drill Rig: D-50

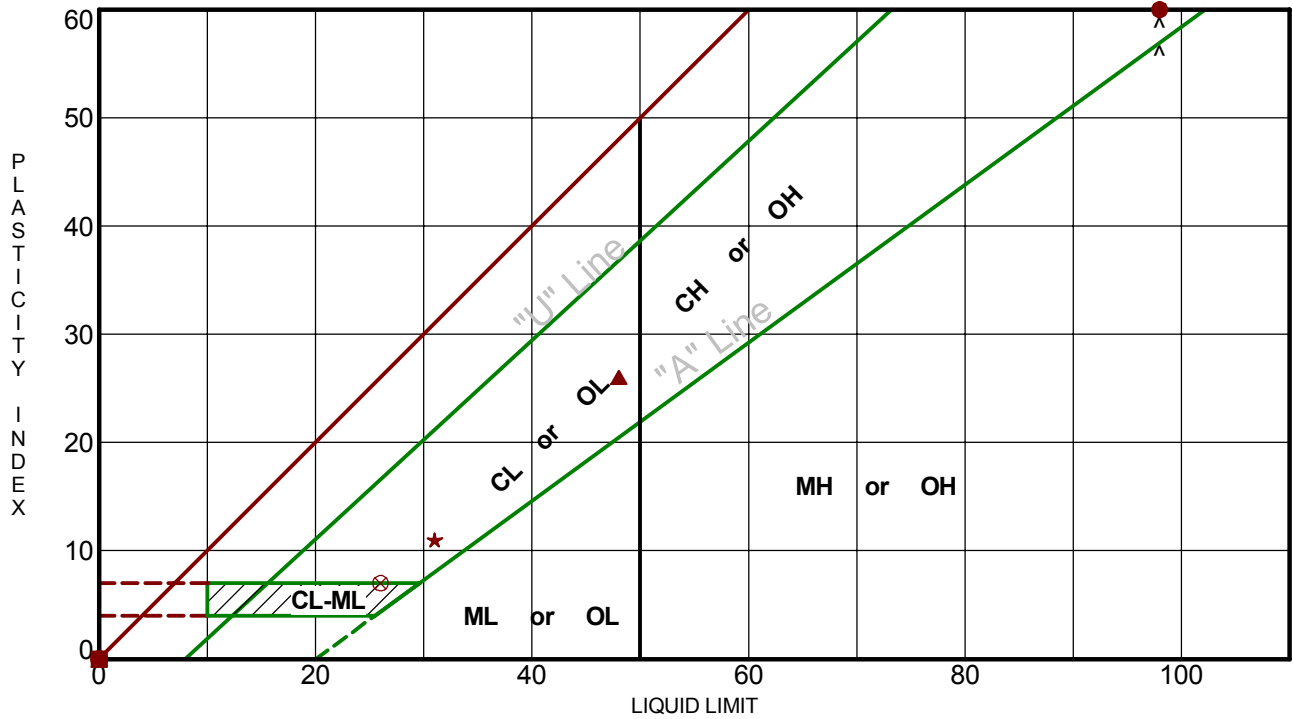
Driller: E. Rodriguez

Project No.: NA215014

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/24/21

# ATTERBERG LIMITS RESULTS

ASTM D4318



LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ATTERBERG LIMITS NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/21/21

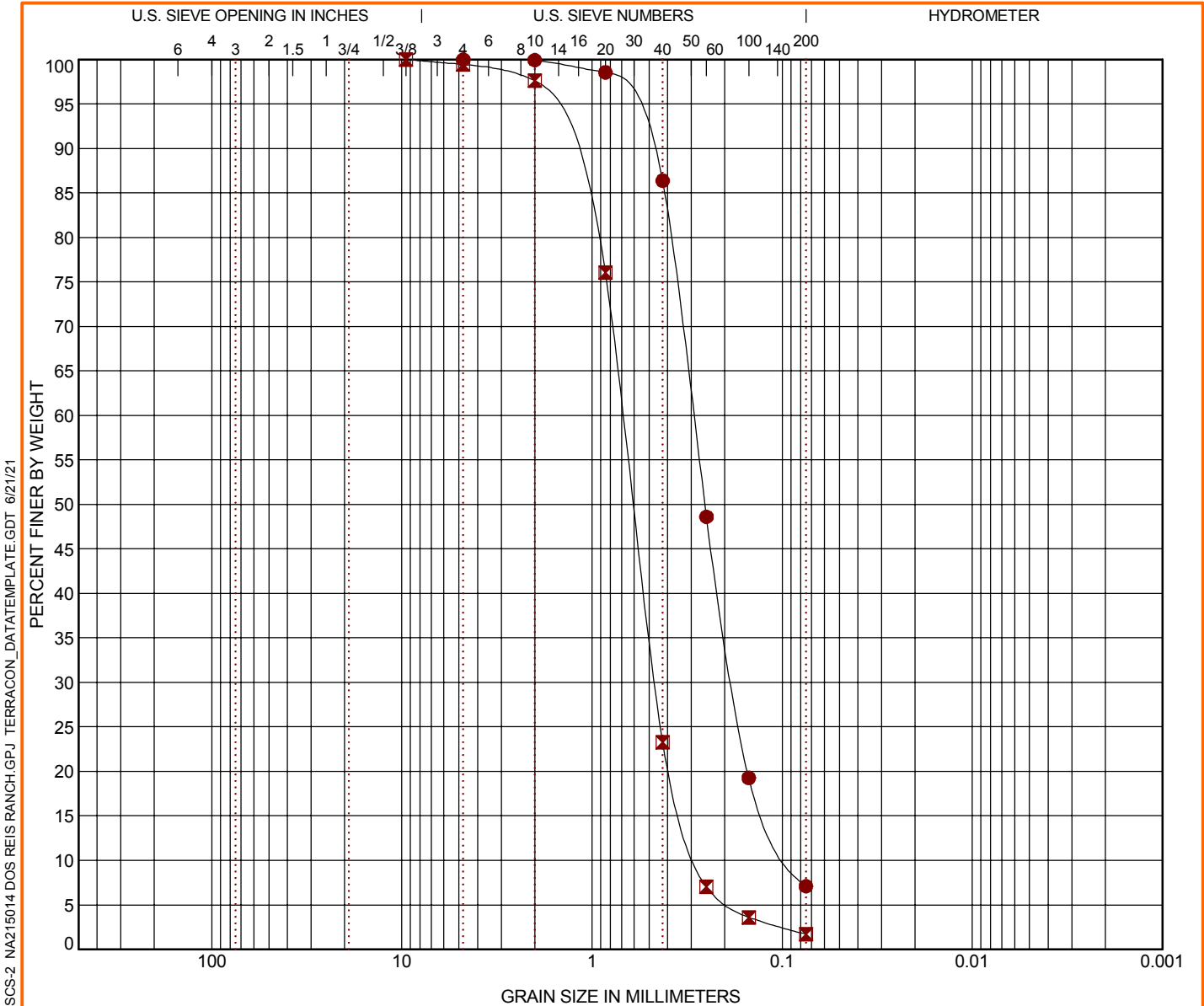
Boring ID	Depth	LL	PL	PI	Fines	USCS	Description
● B1	10 - 11.5	98	31	67	91.7	CH	FAT CLAY
⊠ B1	25 - 26.5	NP	NP	NP	7.1	SP-SM	POORLY GRADED SAND with SILT
▲ B1	40 - 41.5	48	22	26	93.5	CL	LEAN CLAY
★ B3	10 - 11.5	31	20	11		CL	LEAN CLAY
⊙ B5	2.5 - 4	NP	NP	NP	34.6	SM	SILTY SAND
⊕ B6	1 - 2.5	NP	NP	NP	17.8	SM	SILTY SAND
○ B8	10 - 11.5	NP	NP	NP	1.7	SP	POORLY GRADED SAND
△ B9	15 - 16.5	NP	NP	NP	19.7	SM	SILTY SAND
⊗ B9	30 - 31.5	26	19	7	54.7	CL-ML	SANDY SILTY CLAY
⊕ B11	5 - 6.5	NP	NP	NP	59.9	ML	SANDY SILT
□ B12	2.5 - 4	NP	NP	NP	79.2	ML	SILT with SAND
⊕ B15	1 - 2.5	NP	NP	NP	75.0	ML	SILT with SAND
⊕ B15	20 - 21.5	NP	NP	NP	34.4	SM	SILTY SAND
★ B15	40 - 41.5	NP	NP	NP	6.5	SP	POORLY GRADED SAND
⊗ B16	2.5 - 4	NP	NP	NP	15.1	SM	SILTY SAND

PROJECT: Dos Reis Ranch	 902 Industrial Way Lodi, CA	PROJECT NUMBER: NA215014
SITE: 14101 South Manthey Road Lathrop, CA		CLIENT: The Hodgdon Group Colton, CA



# GRAIN SIZE DISTRIBUTION

ASTM D422 / ASTM C136



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Boring ID	Depth	USCS Classification	WC (%)	LL	PL	PI	Cc	Cu
● B1	25 - 26.5	POORLY GRADED SAND with SILT (SP-SM)	25.1	NP	NP	NP	1.26	3.31
■ B8	10 - 11.5	POORLY GRADED SAND (SP)	20.8	NP	NP	NP	1.14	2.50

Boring ID	Depth	D <sub>100</sub>	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	%Cobbles	%Gravel	%Sand	%Silt	%Fines	%Clay
● B1	25 - 26.5	4.75	0.293	0.181	0.089	0.0	0.0	92.9		7.1	
■ B8	10 - 11.5	9.5	0.688	0.464	0.276	0.0	0.5	97.8		1.7	

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS-2 NA215014 DOS REIS RANCH.GPJ TERRACON\_DATATEMPLATE.GDT 6/21/21

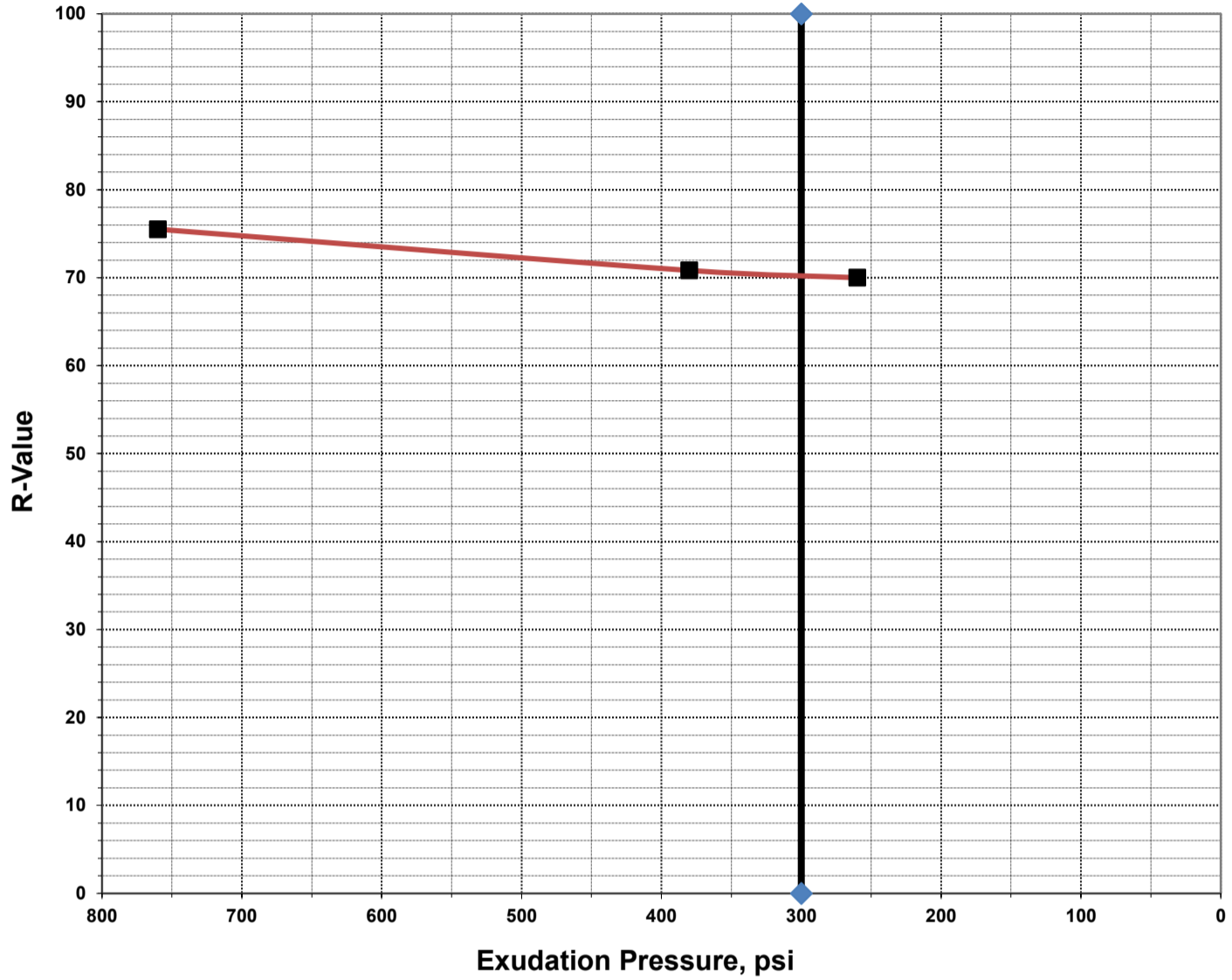
PROJECT: Dos Reis Ranch

SITE: 14101 South Manthey Road  
Lathrop, CA



PROJECT NUMBER: NA215014

CLIENT: The Hodgdon Group  
Colton, CA



Specimen Identification	Compaction Pressure (psi)	R-Value at 300 psi
<b>B17</b>	<b>350.0</b>	<b>70</b>

**R-Value Test**

**Client:** The Hodgdon Group  
**Project:** Dos Reis Ranch  
**Site:** 14101 South Manthley Rd., Lathrop, CA  
**Project No.:** NA215014

**Client**  
The Hodgdon Group  
Colton, CA

**Project**  
Dos Reis Ranch

**Sample Submitted By:** Terracon (NA)

**Date Received:** 6/16/2021

**Lab No.:** 21-0529

### Results of Corrosion Analysis

Sample Number	--	--
Sample Location	B1	B17
Sample Depth (ft.)	1.0-2.5	1.0-2.5
pH Analysis, ASTM G 51	8.28	8.59
Water Soluble Sulfate (SO <sub>4</sub> ), AWWA 4500 E (percent %)	0.01	<0.01
Sulfides, AWWA 4500-S D, (mg/kg)	Nil	Nil
Chlorides, ASTM D 512, (percent %)	<0.01	<0.01
Red-Ox, AWWA 2580, (mV)	+690	+687
Total Salts, AWWA 2540, (mg/kg)	539	586
Saturated Minimum Resistivity, ASTM G 57, (ohm-cm)	6645	3492

**Analyzed By:**



Trisha Campo  
Chemist

## LIQUEFACTION ANALYSIS REPORT

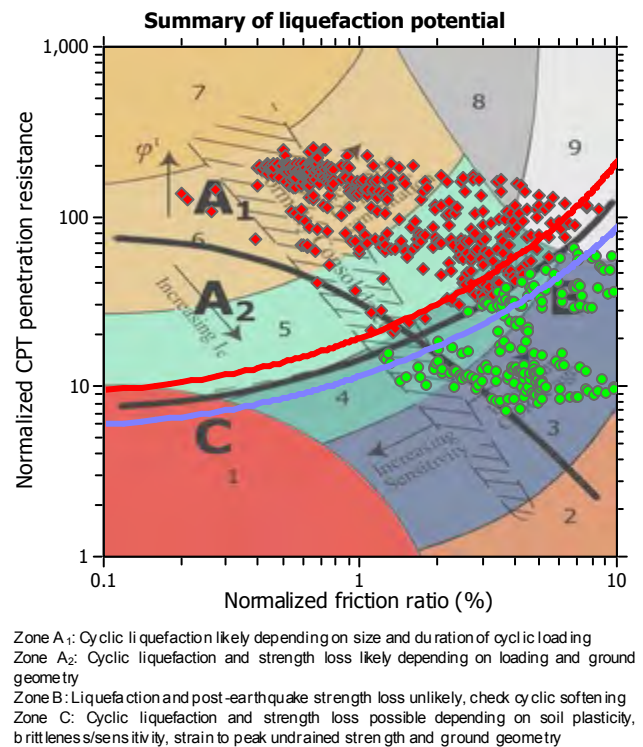
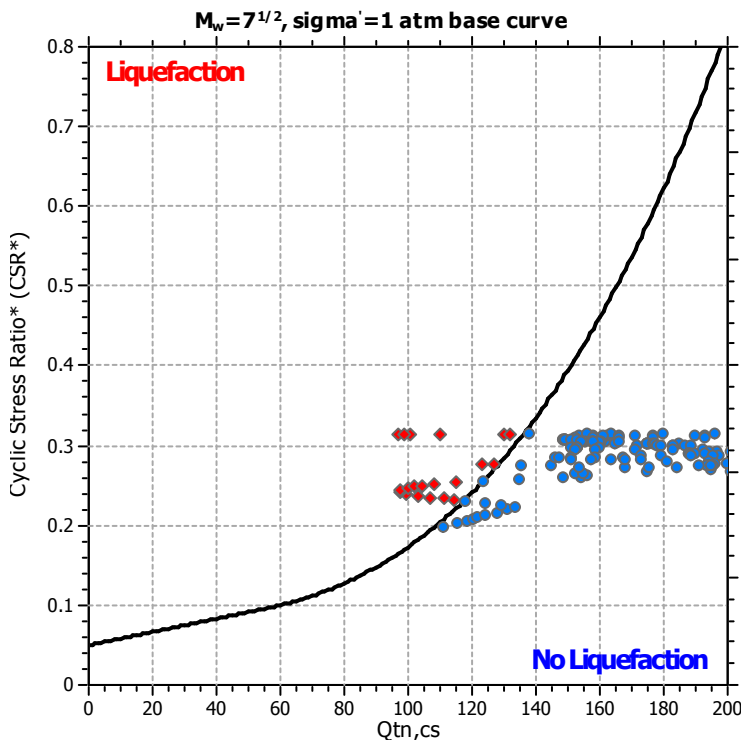
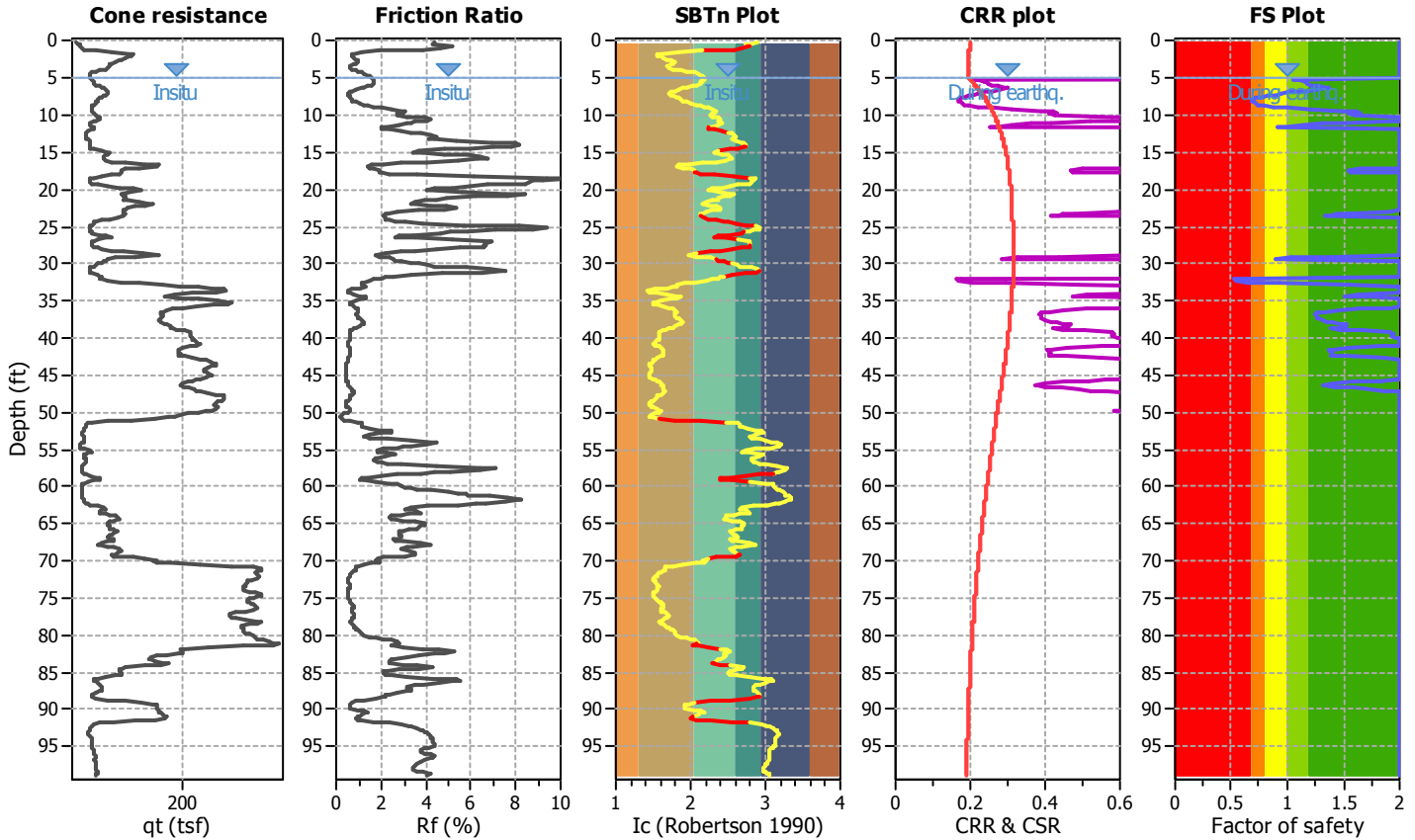
**Project title : Dos Reis Ranch**

**Location : Lathrop, CA**

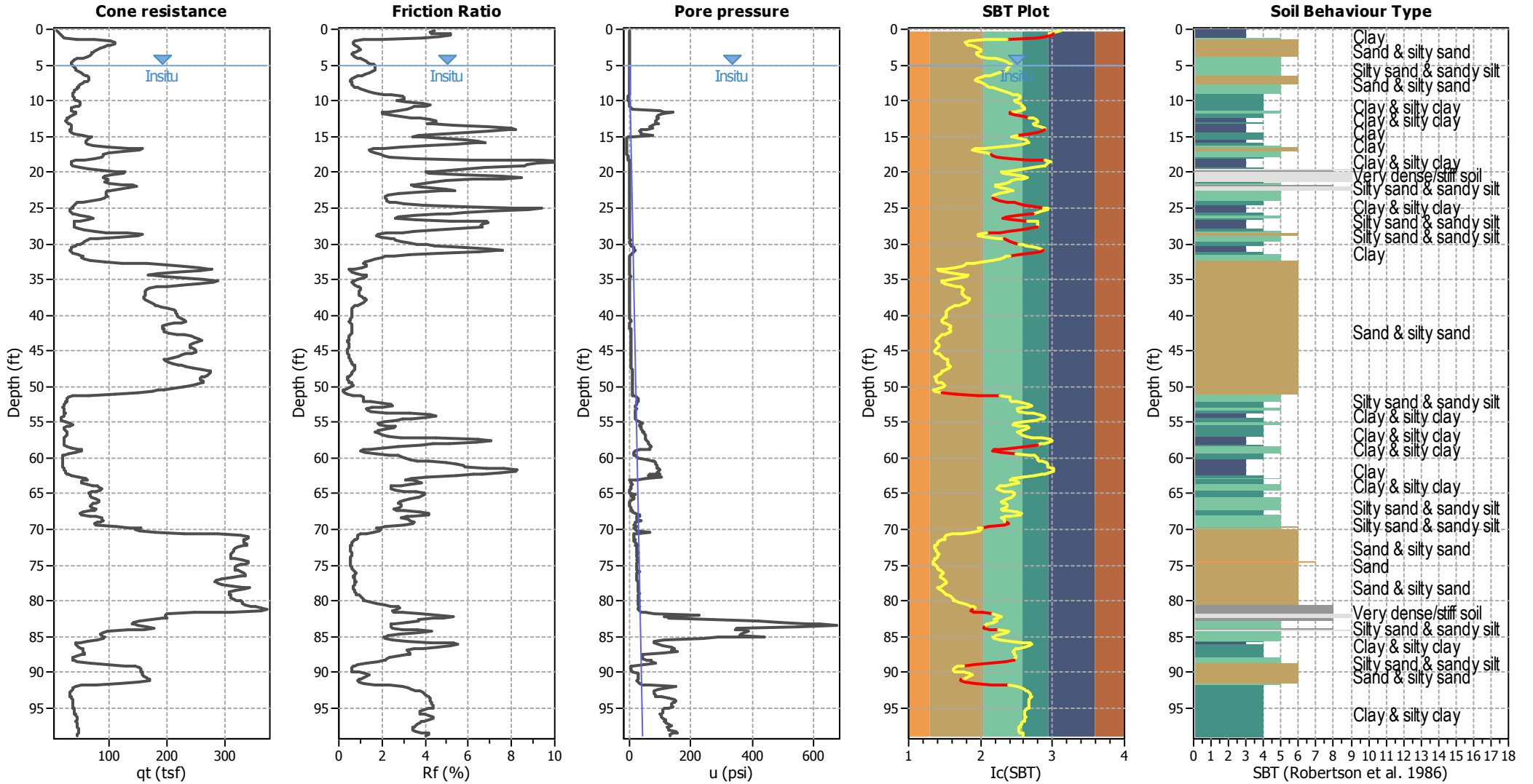
**CPT file : CPT-01**

**Input parameters and analysis data**

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	5.00 ft	Use fill:	No	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	5.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude $M_w$ :	6.08	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.40	Unit weight calculation:	Based on SBT	$K_0$ applied:	No		



### CPT basic interpretation plots



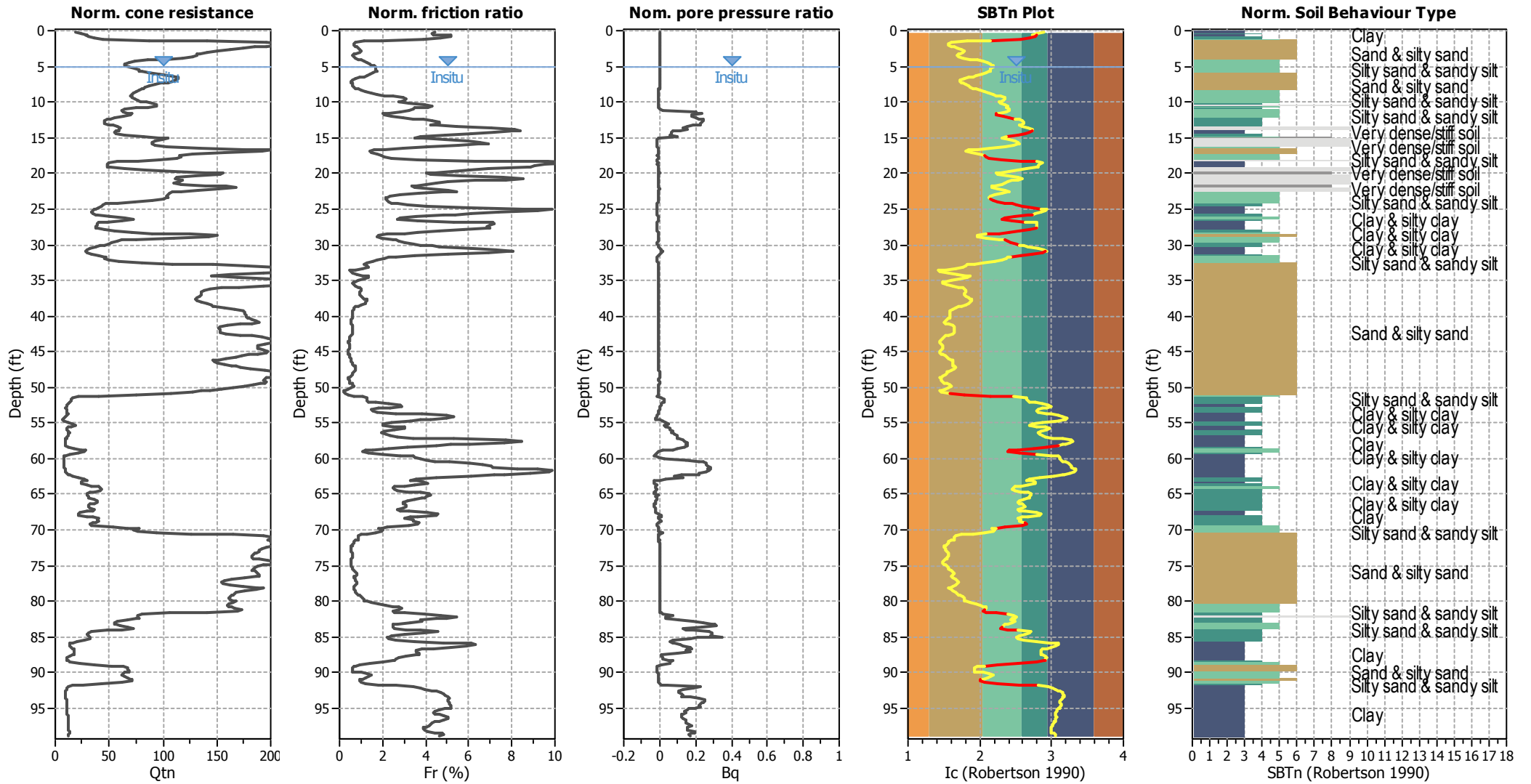
#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	$K_v$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

#### SBT legend

1. Sensitive fine grained	4. Clayey silt to silty	7. Gravely sand to sand
2. Organic material	5. Silty sand to sandy silt	8. Very stiff sand to
3. Clay to silty clay	6. Clean sand to silty sand	9. Very stiff fine grained

### CPT basic interpretation plots (normalized)



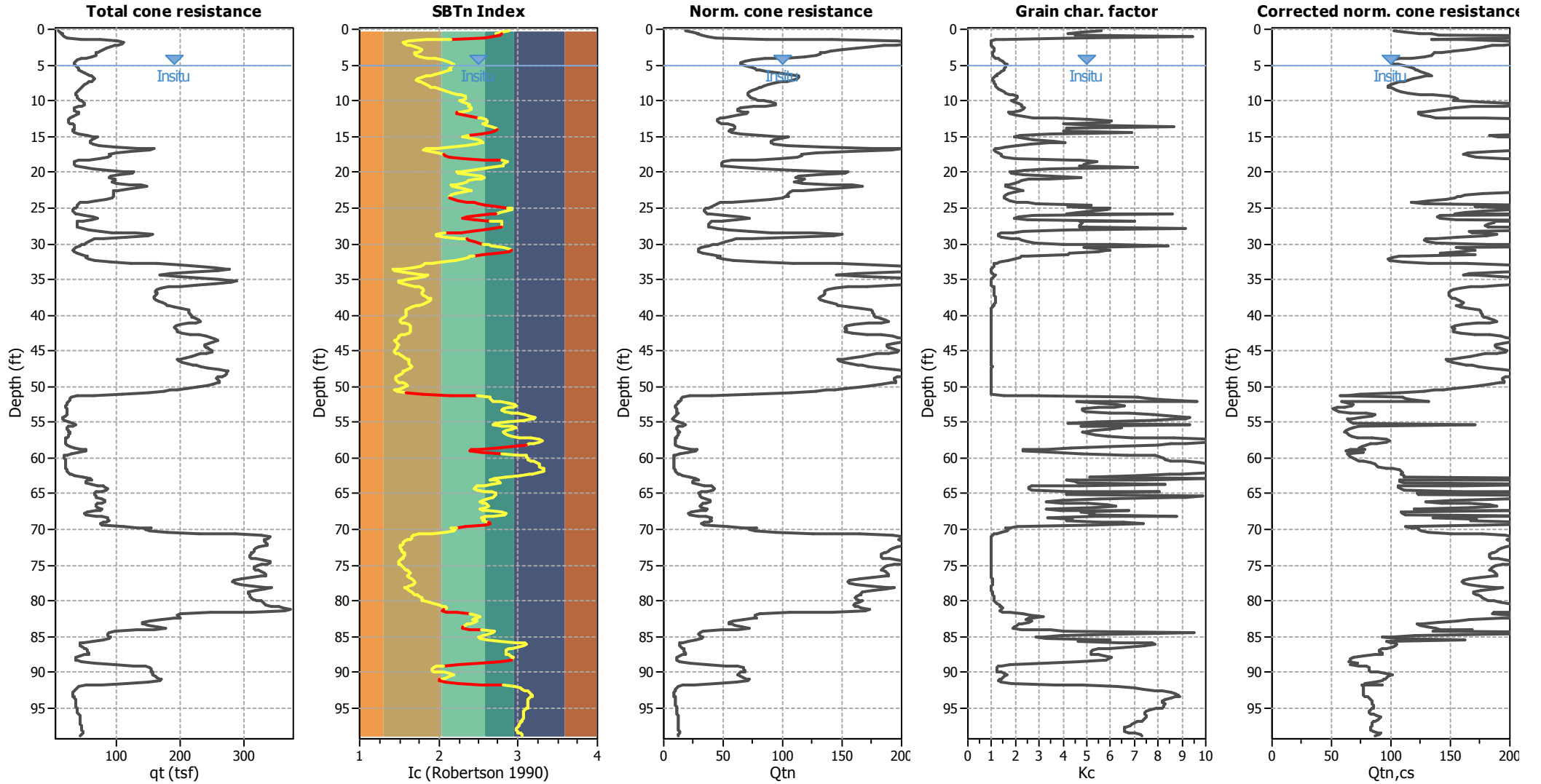
#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	$K_v$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

#### SBTn legend

1. Sensitive fine grained	4. Clayey silt to silty	7. Gravely sand to sand
2. Organic material	5. Silty sand to sandy silt	8. Very stiff sand to
3. Clay to silty clay	6. Clean sand to silty sand	9. Very stiff fine grained

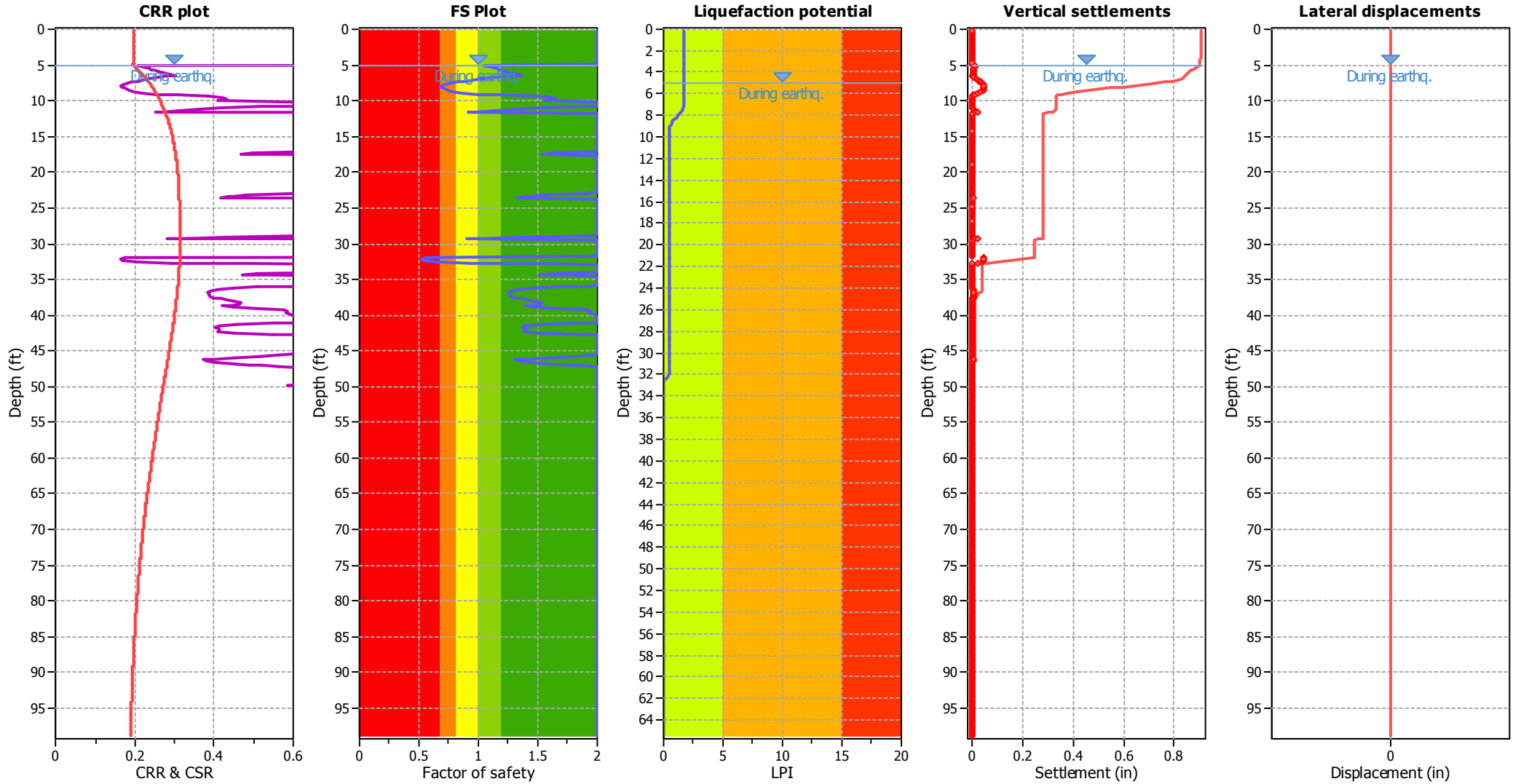
### Liquefaction analysis overall plots (intermediate results)



#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K <sub>v</sub> applied:	No
Earthquake magnitude M <sub>w</sub> :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

### Liquefaction analysis overall plots



#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (earthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	$K_v$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

#### F.S. color scheme

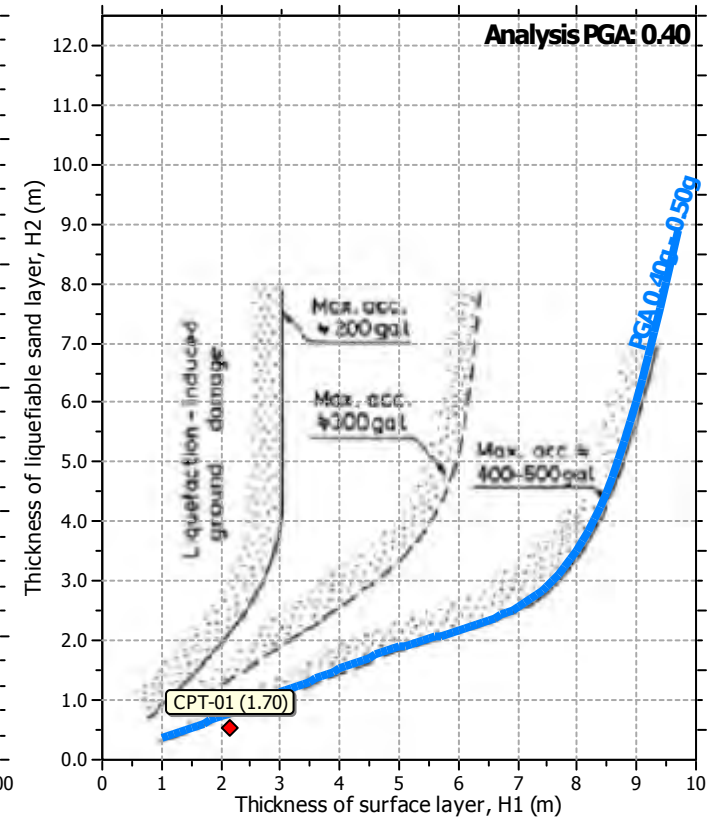
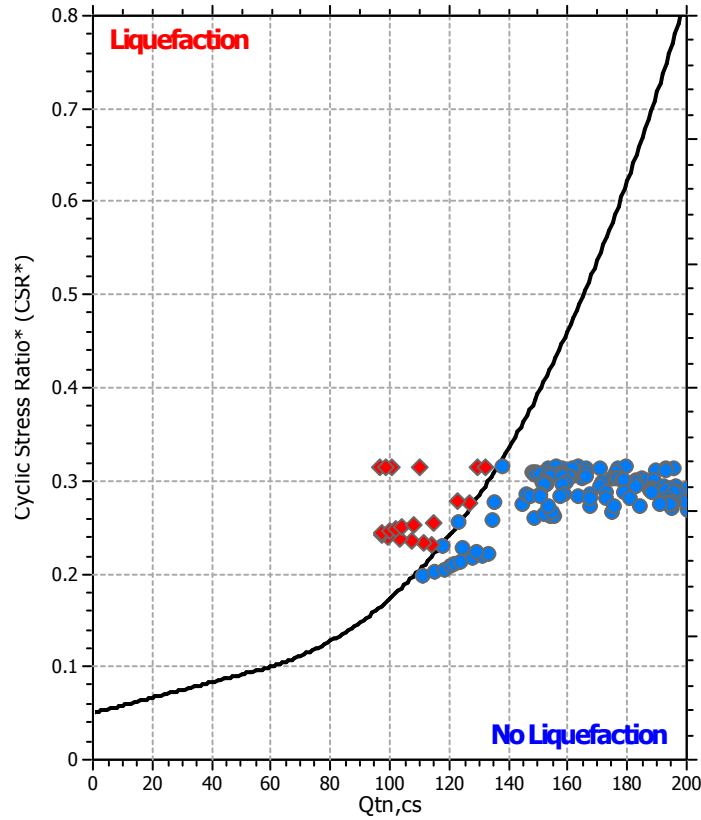
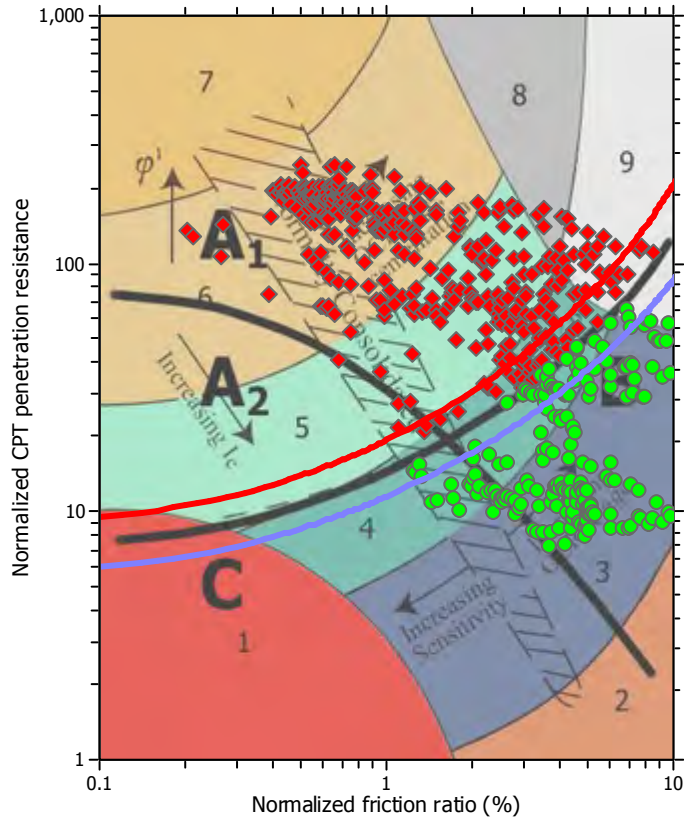
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

#### LPI color scheme

- Very high risk
- High risk
- Low risk



### Liquefaction analysis summary plots



#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (earthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on $I_c$ value	$I_c$ cut-off value:	2.60	$K_v$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

## LIQUEFACTION ANALYSIS REPORT

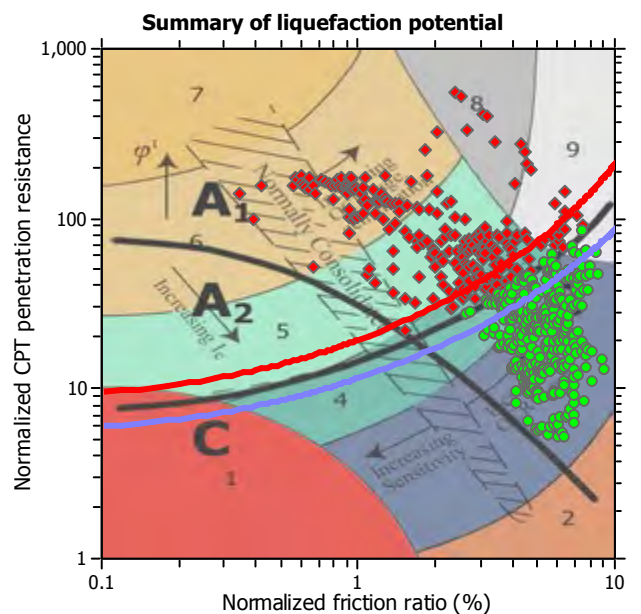
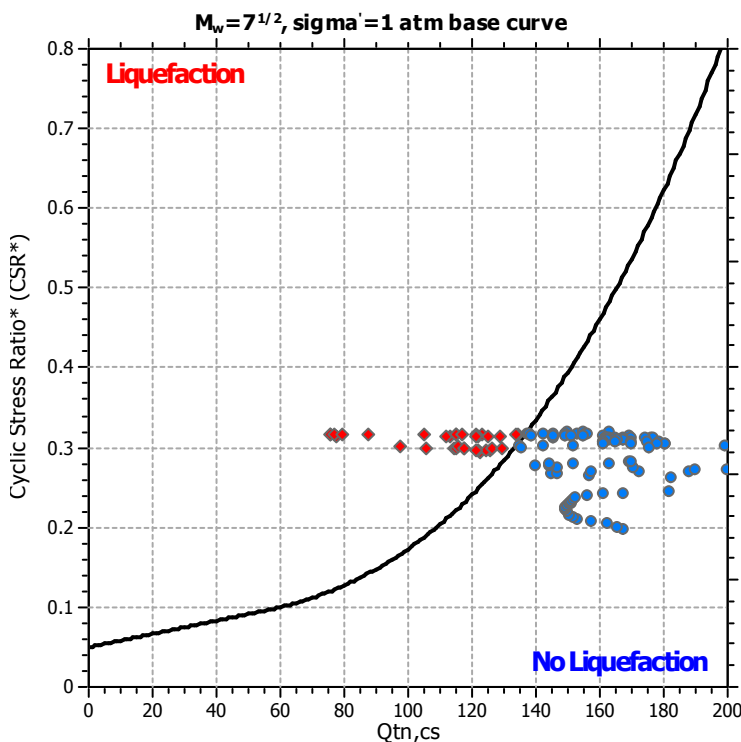
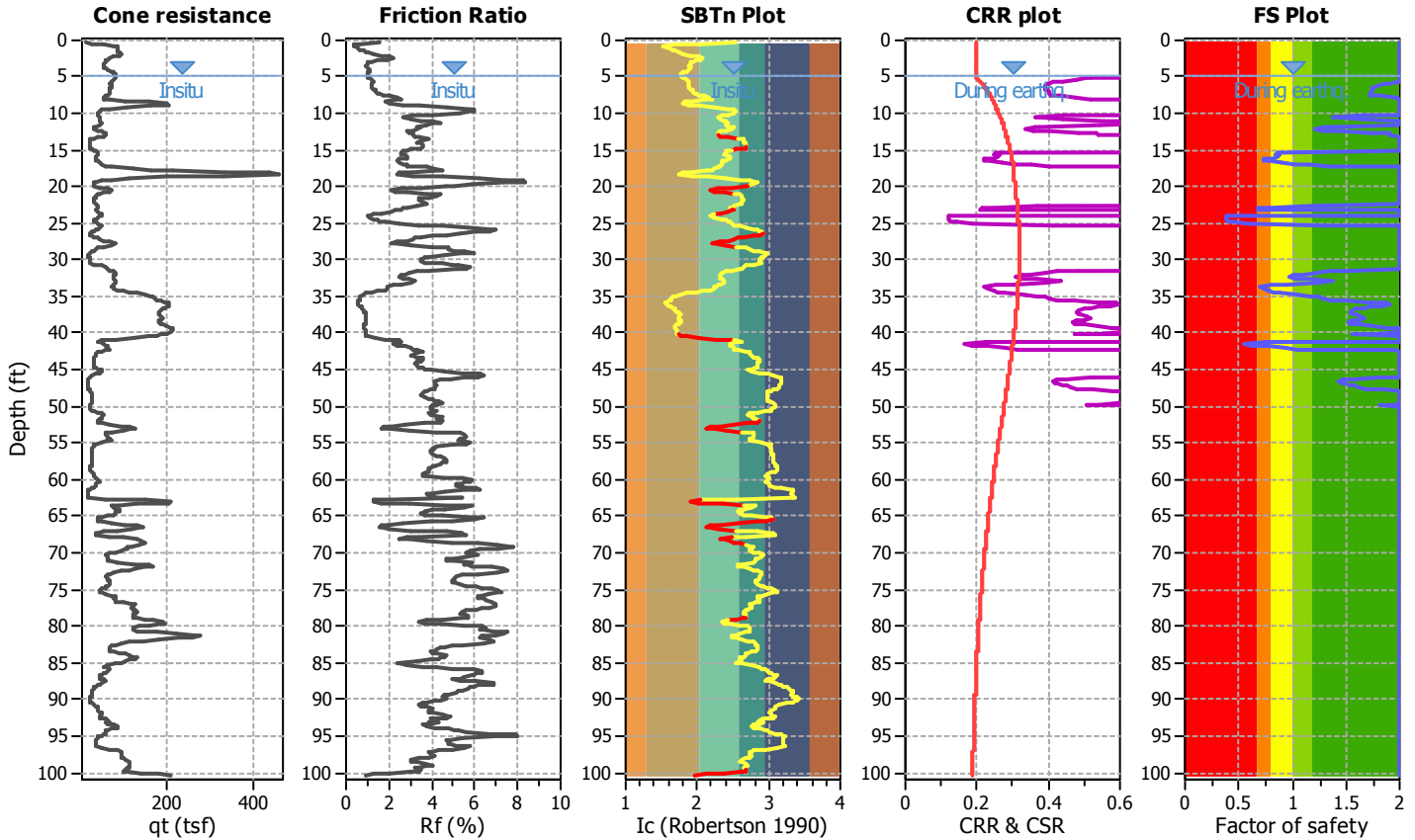
**Project title : Dos Reis Ranch**

**Location : Lathrop, CA**

**CPT file : CPT-02**

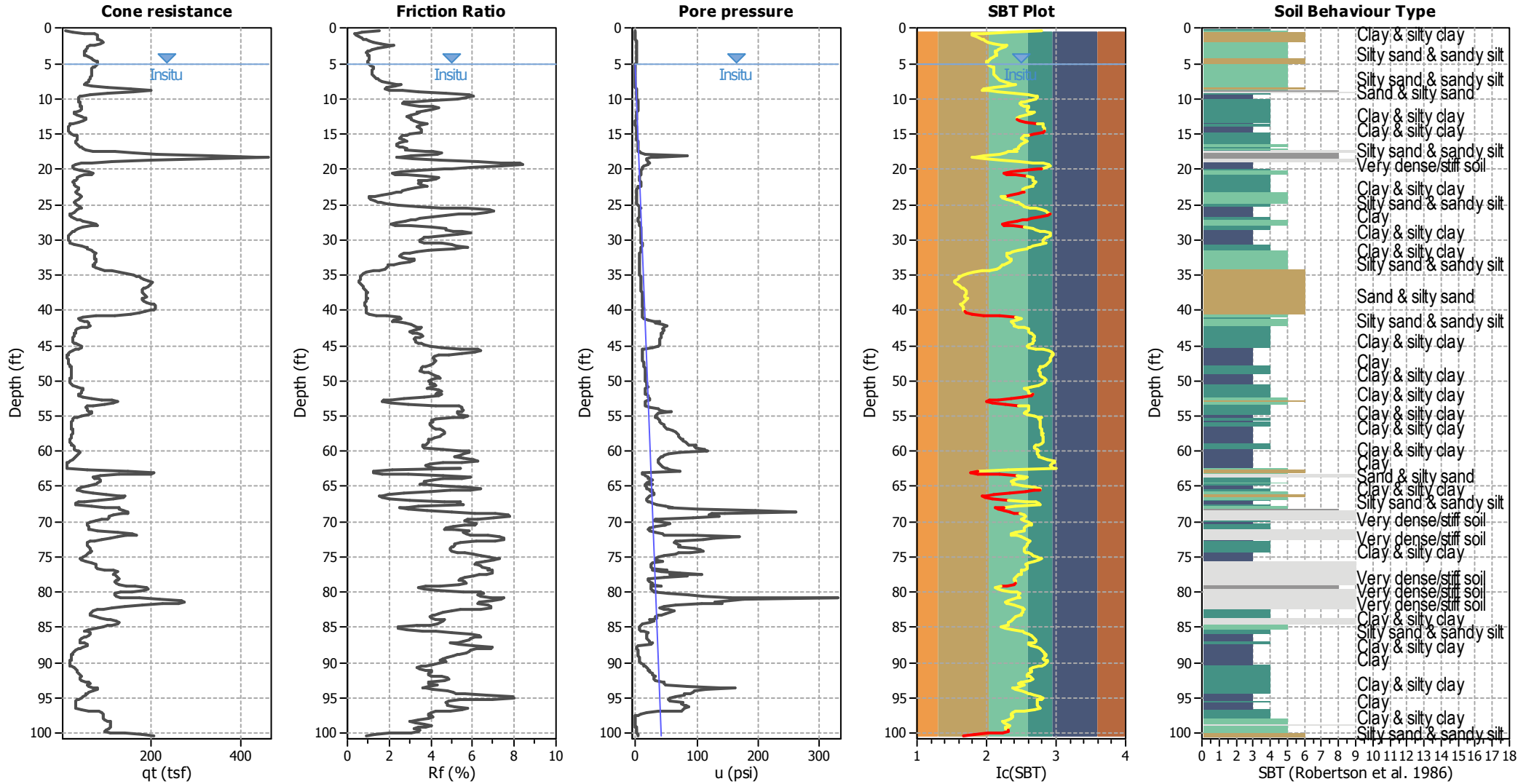
**Input parameters and analysis data**

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	5.00 ft	Use fill:	No	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	5.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude $M_w$ :	6.08	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.40	Unit weight calculation:	Based on SBT	$K_v$ applied:	No		



Zone A<sub>1</sub>: Cyclic liquefaction likely depending on friction and duration of cyclic loading  
 Zone A<sub>2</sub>: Cyclic liquefaction and strength loss likely depending on loading and ground geometry  
 Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening  
 Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

### CPT basic interpretation plots



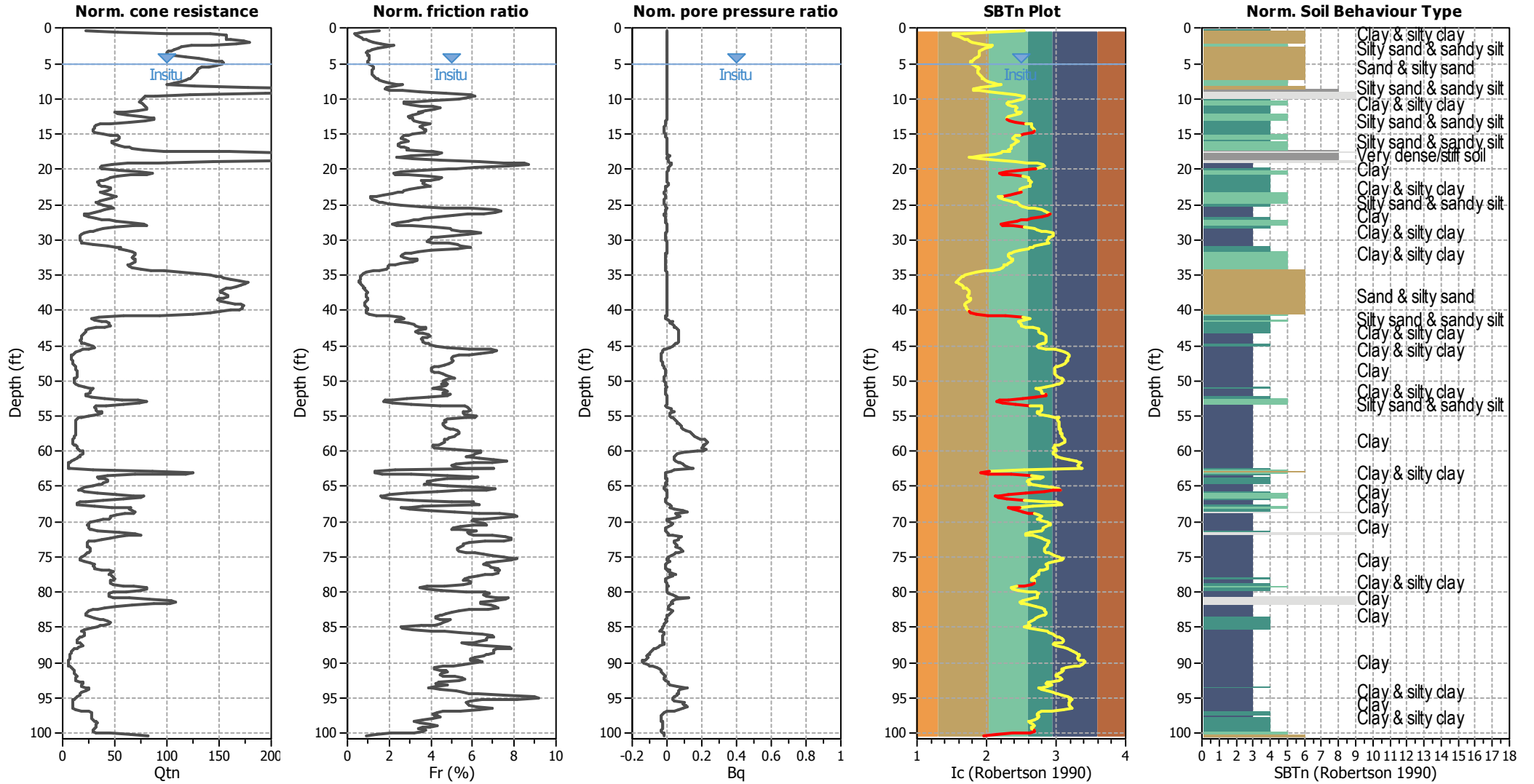
#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	$K_p$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

#### SBT legend

1. Sensitive fine grained	4. Clayey silt to silty	7. Gravely sand to sand
2. Organic material	5. Silty sand to sandy silt	8. Very stiff sand to
3. Clay to silty clay	6. Clean sand to silty sand	9. Very stiff fine grained

### CPT basic interpretation plots (normalized)



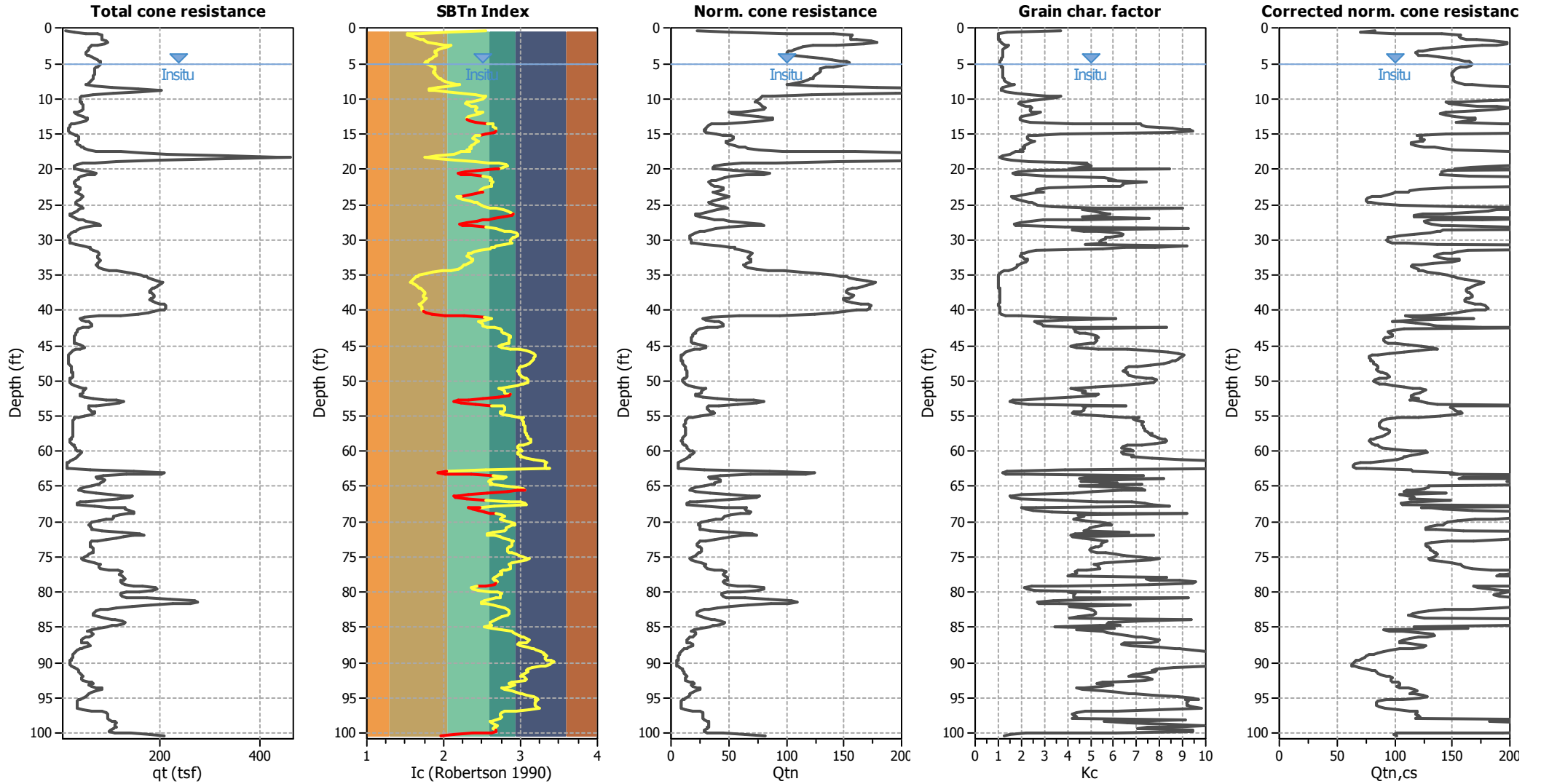
#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	$K_p$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

#### SBTn legend

1. Sensitive fine grained	4. Clayey silt to silty	7. Gravely sand to sand
2. Organic material	5. Silty sand to sandy silt	8. Very stiff sand to
3. Clay to silty clay	6. Clean sand to silty sand	9. Very stiff fine grained

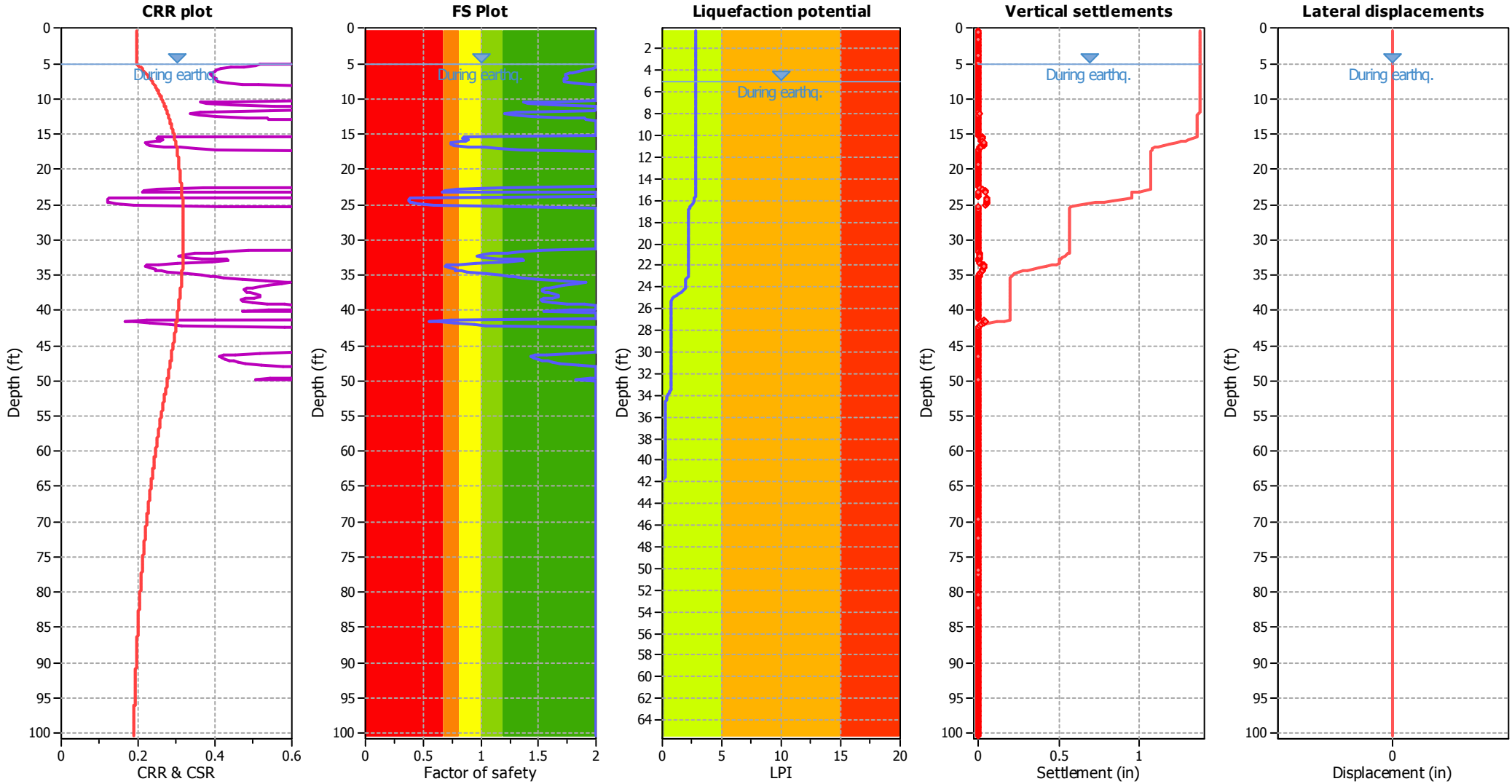
### Liquefaction analysis overall plots (intermediate results)



#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K <sub>v</sub> applied:	No
Earthquake magnitude M <sub>w</sub> :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

### Liquefaction analysis overall plots



#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (earthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	$K_s$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

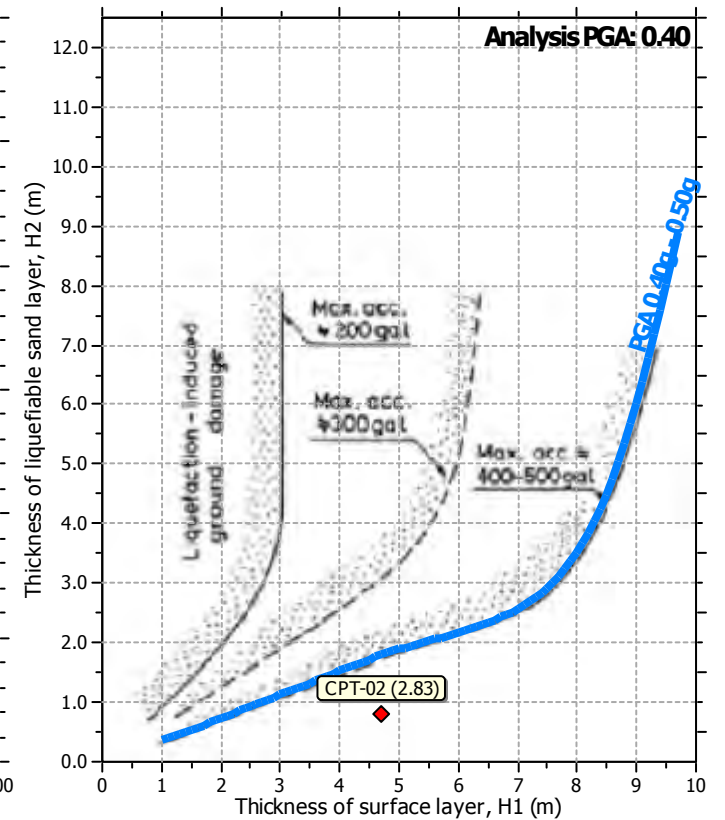
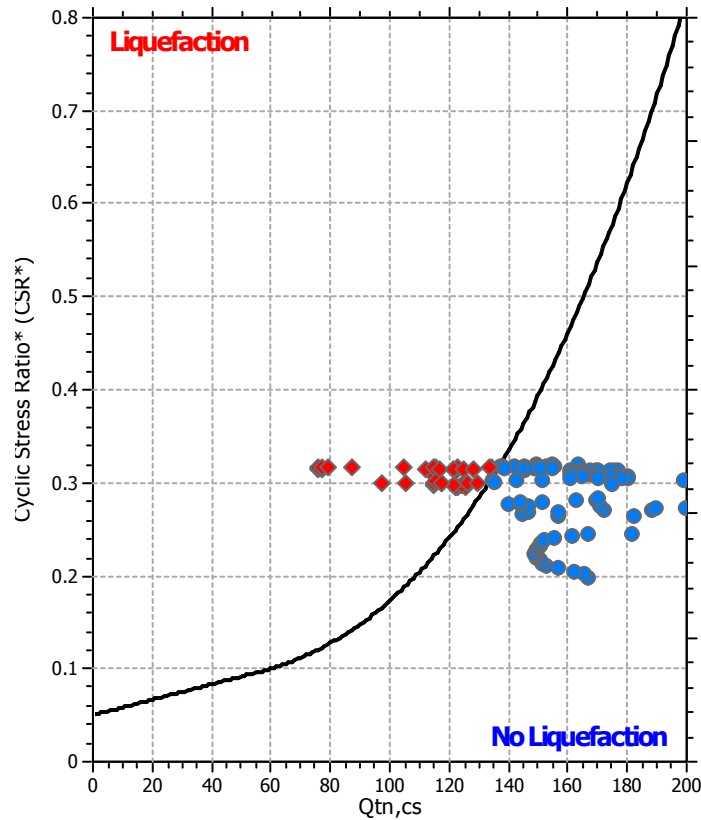
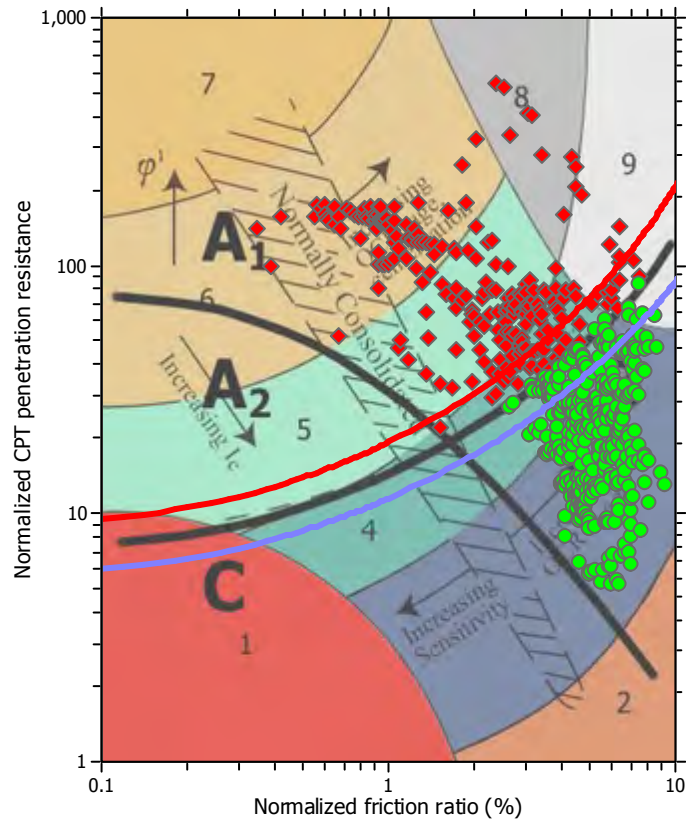
#### F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

#### LPI color scheme

- Very high risk
- High risk
- Low risk

### Liquefaction analysis summary plots





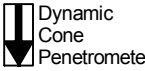



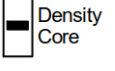
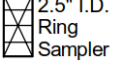




#### Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (earthq.):	5.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on $I_c$ value	$I_c$ cut-off value:	2.60	$K_v$ applied:	No
Earthquake magnitude $M_w$ :	6.08	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.40	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	5.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

# GENERAL NOTES

## DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

Dos Reis Ranch ■ Stockton, CA  
Terracon Project No. NA215014

SAMPLING	WATER LEVEL	FIELD TESTS
 2" I.D. Ring Sampler  Rock Core   Dynamic Cone Penetrometer  Grab Sample   Shelby Tube  Standard Penetration Test   Density Core  2.5" I.D. Ring Sampler	 Water Initially Encountered   Water Level After a Specified Period of Time   Water Level After a Specified Period of Time   Cave In Encountered  Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	<b>N</b> Standard Penetration Test Resistance (Blows/Ft.)  <b>(HP)</b> Hand Penetrometer  <b>(T)</b> Torvane  <b>(DCP)</b> Dynamic Cone Penetrometer  <b>UC</b> Unconfined Compressive Strength  <b>(PID)</b> Photo-Ionization Detector  <b>(OVA)</b> Organic Vapor Analyzer

### DESCRIPTIVE SOIL CLASSIFICATION

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

### LOCATION AND ELEVATION NOTES

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See [Exploration and Testing Procedures](#) in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

### STRENGTH TERMS

RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance			CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance			
Descriptive Term (Density)	Standard Penetration or N-Value Blows/Ft.	2" I.D. Ring Sampler Blows/Ft.	Descriptive Term (Consistency)	Unconfined Compressive Strength Qu, (tsf)	Standard Penetration or N-Value Blows/Ft.	2" I.D. Ring Sampler Blows/Ft.
Very Loose	0 - 3	0 - 4	Very Soft	less than 0.25	0 - 1	< 2
Loose	4 - 9	5 - 13	Soft	0.25 to 0.50	2 - 4	3 - 5
Medium Dense	10 - 29	14 - 41	Medium Stiff	0.50 to 1.00	4 - 8	6 - 11
Dense	30 - 50	42 - 72	Stiff	1.00 to 2.00	8 - 15	12 - 21
Very Dense	> 50	> 72	Very Stiff	2.00 to 4.00	15 - 30	22 - 43
			Hard	> 4.00	> 30	> 43

### RELEVANCE OF SOIL BORING LOG

The soil boring logs contained within this document are intended for application to the project as described in this document. Use of these soil boring logs for any other purpose may not be appropriate.



## **SUPPORTING INFORMATION**

### **Contents:**

General Notes

Unified Soil Classification System

Report of Site-Specific Ground Motion Study (13 pages)

Note: All attachments are one page unless noted above.

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests <sup>A</sup>				Soil Classification		
				Group Symbol	Group Name <sup>B</sup>	
<b>Coarse-Grained Soils:</b> More than 50% retained on No. 200 sieve	<b>Gravels:</b> More than 50% of coarse fraction retained on No. 4 sieve	<b>Clean Gravels:</b> Less than 5% fines <sup>C</sup>	$Cu \geq 4$ and $1 \leq Cc \leq 3$ <sup>E</sup>	GW	Well-graded gravel <sup>F</sup>	
			$Cu < 4$ and/or [ $Cc < 1$ or $Cc > 3.0$ ] <sup>E</sup>	GP	Poorly graded gravel <sup>F</sup>	
		<b>Gravels with Fines:</b> More than 12% fines <sup>C</sup>	Fines classify as ML or MH	GM	Silty gravel <sup>F, G, H</sup>	
			Fines classify as CL or CH	GC	Clayey gravel <sup>F, G, H</sup>	
	<b>Sands:</b> 50% or more of coarse fraction passes No. 4 sieve	<b>Clean Sands:</b> Less than 5% fines <sup>D</sup>	$Cu \geq 6$ and $1 \leq Cc \leq 3$ <sup>E</sup>	SW	Well-graded sand <sup>I</sup>	
			$Cu < 6$ and/or [ $Cc < 1$ or $Cc > 3.0$ ] <sup>E</sup>	SP	Poorly graded sand <sup>I</sup>	
		<b>Sands with Fines:</b> More than 12% fines <sup>D</sup>	Fines classify as ML or MH	SM	Silty sand <sup>G, H, I</sup>	
			Fines classify as CL or CH	SC	Clayey sand <sup>G, H, I</sup>	
<b>Fine-Grained Soils:</b> 50% or more passes the No. 200 sieve	<b>Silts and Clays:</b> Liquid limit less than 50	<b>Inorganic:</b>	$PI > 7$ and plots on or above "A" line	CL	Lean clay <sup>K, L, M</sup>	
			$PI < 4$ or plots below "A" line <sup>J</sup>	ML	Silt <sup>K, L, M</sup>	
		<b>Organic:</b>	Liquid limit - oven dried	< 0.75	OL	Organic clay <sup>K, L, M, N</sup>
			Liquid limit - not dried			Organic silt <sup>K, L, M, O</sup>
	<b>Silts and Clays:</b> Liquid limit 50 or more	<b>Inorganic:</b>	$PI$ plots on or above "A" line	CH	Fat clay <sup>K, L, M</sup>	
			$PI$ plots below "A" line	MH	Elastic Silt <sup>K, L, M</sup>	
		<b>Organic:</b>	Liquid limit - oven dried	< 0.75	OH	Organic clay <sup>K, L, M, P</sup>
			Liquid limit - not dried			Organic silt <sup>K, L, M, Q</sup>
	<b>Highly organic soils:</b>	Primarily organic matter, dark in color, and organic odor			PT	Peat

<sup>A</sup> Based on the material passing the 3-inch (75-mm) sieve.

<sup>B</sup> If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

<sup>C</sup> Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

<sup>D</sup> Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

<sup>E</sup>  $Cu = D_{60}/D_{10}$      $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

<sup>F</sup> If soil contains  $\geq 15\%$  sand, add "with sand" to group name.

<sup>G</sup> If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

<sup>H</sup> If fines are organic, add "with organic fines" to group name.

<sup>I</sup> If soil contains  $\geq 15\%$  gravel, add "with gravel" to group name.

<sup>J</sup> If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

<sup>K</sup> If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

<sup>L</sup> If soil contains  $\geq 30\%$  plus No. 200 predominantly sand, add "sandy" to group name.

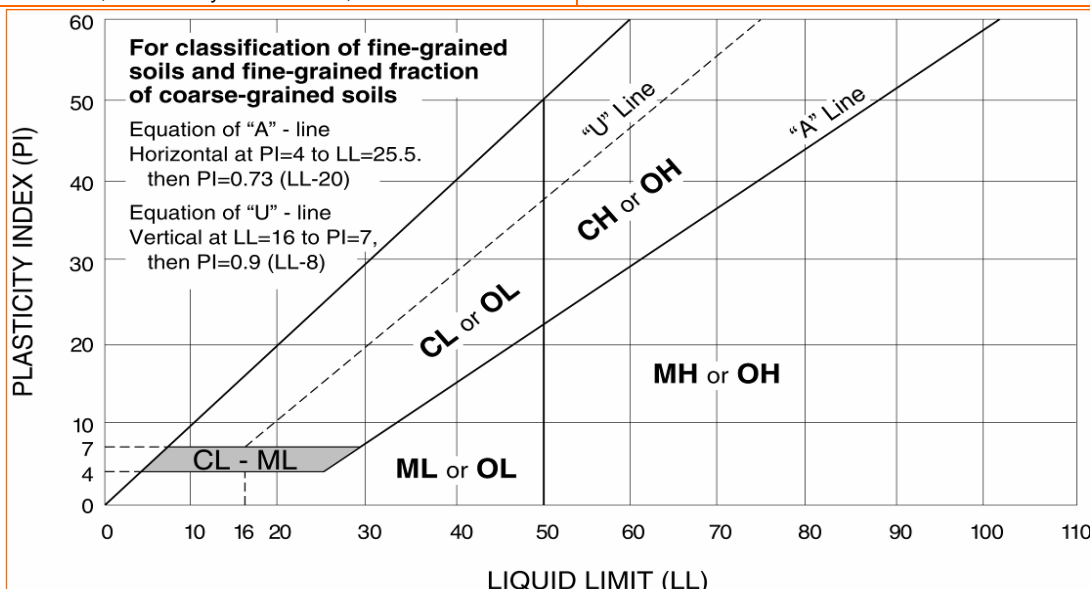
<sup>M</sup> If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name.

<sup>N</sup>  $PI \geq 4$  and plots on or above "A" line.

<sup>O</sup>  $PI < 4$  or plots below "A" line.

<sup>P</sup>  $PI$  plots on or above "A" line.

<sup>Q</sup>  $PI$  plots below "A" line.





August 13, 2021

The Hodgon Group  
1431 East Cooley Drive, Suite 230  
Colton, California 92324

Attn: Mr. Sean Asmus  
P: (602) 904-2756  
E: seana@hodgdongroup.com

Re: Report of Site-Specific Ground Motion Study  
Dos Reis Ranch  
Lathrop, California  
Terracon Project No. 81215116

Dear Mr. Asmus:

Terracon Consultants, Inc. (Terracon) has completed the site-specific ground motion study for the above-referenced project. Our geotechnical engineering report (Draft submitted June 25, 2021, finalized August 16, 2021) describes the site and project and provides recommendations for earthwork, foundations, and other components of the project. The ground motion study services were performed in general accordance with our Agreement for Services dated May 7, 2021.

## TECTONIC SETTING AND EARTHQUAKE SOURCES

Lathrop (latitude 37.83119 and longitude -121.29245) is within the Great Valley geomorphic province, an alluvial plain extending through the central part of California. The plain is formed above a structural trough that is filled with a thick sequence of sediments deposited from the bordering highlands including the Coast Ranges and Sierra Nevada. The San Joaquin River drains the southern portion of the Great Valley and is located approximately 1 mile west of the site. Project explorations indicate that the site is underlain by fluvial (river) sediments that include interlayered silts, sands, and clays of variable density/stiffness.

The site is not located in a State-designated Alquist-Priolo earthquake fault zone; therefore, the potential for surface rupture due to faulting at the site is low. The following table summarizes historical seismicity in the site region.

Event	Year	Magnitude	Distance to Site (km)	Direction
SF Peninsula	1838	7	97	SW
San Jose	1865	6.5	89	SW
Hayward	1868	7	75	W
Mare Island	1898	6.5	103	NW

San Francisco	1906	7.9	110	W
Calaveras fault	1911	6.5	78	SW
Loma Prieta	1989	6.9	103	SW

A scenario earthquake model for the Great Valley 7 fault (Orestimba fault) with a magnitude of 6.9 and epicenter approximately 30 kilometers southwest of the site yields a PGA value of 0.23g for the site (USGS Earthquake Hazards Program, 2017).

Faults in the site region include the San Joaquin/Orestimba fault (element 7 of the Great Valley Fault System as modeled by USGS), the Greenville Fault, and the Mount Diablo Thrust located approximately 23 kilometers southwest, 36 kilometers southwest, and 43 kilometers west of the site, respectively. More distant fault sources include the Calaveras fault, the Hayward fault and the Peninsula section of the San Andreas fault zone located approximately 58 kilometers southwest, 65 kilometers west-southwest and 95 kilometers west of the site, respectively. According to deaggregation of the USGS seismic hazard model, seismic shaking hazard at the site for PGA is dominated by the Greenville and San Joaquin/Orestimba sources at magnitudes of 6.9 and 7.0, respectively. The long period hazard – as determined from deaggregation of the hazard at the 1-second site period - is dominated by the Greenville, San Andreas, and Calaveras fault sources. Significant hazard is contributed by non-fault, gridded/background sources in the USGS model.

## **FIELD SHEAR WAVE VELOCITY TESTING AND SITE CLASS**

Collected data from Seismic Cone Penetration Tests (sCPT), performed by Terracon and presented in the geotechnical engineering report, were used to compute the time-averaged shear wave velocity for the upper 100 feet (30 meters) of the soil profile ( $V_{S,100}$ ).  $V_{S,100}$  was 955 feet/second for sCPT-01 and 888 feet/second for sCPT-02. The  $V_{S,100}$  value indicated a NEHRP Site Class D for seismic design per Table 20.3-1 of ASCE 7-16. However, because of the soil liquefaction hazard discussed in the geotechnical engineering report, the Site Class is F.

## **APPLICABLE CODES AND STANDARDS**

In general, the basis of design is the 2019 California Building Code which uses the 2018 International Building Code (2018 IBC) as a model. The 2018 IBC states that structures shall be designed and constructed to resist the effects of earthquake motions in accordance with ASCE 7-16. Per ASCE 7-16, the design earthquake ground motions are two-thirds of the risk-targeted Maximum Considered Earthquake ( $MCE_R$ ) which is defined as a 1 percent chance of structure collapse in 50 years.

## SITE-SPECIFIC GROUND MOTION STUDY

The site-specific ground motion study in this report included both a ground motion hazard analysis and a site response analysis. The procedures outlined in ASCE 7-16 Chapters 11, 20 and 21 were utilized in part for preparation of site-specific spectra for the proposed project.

### Base Ground Motions

Selection and scaling of ground motions to be used as input for site response analysis requires target values of spectral acceleration ( $S_a$ ) across a range of structural periods ( $T$ ) referred to as a target spectrum. The base condition was modelled using  $V_{s,30} = 550$  meters/second ( $V_{s,100} = 1,800$  feet/second) to generate the target spectrum. Values of  $Z_{1.0}$  and  $Z_{2.5}$  were selected as 0.4 kilometer and 1.4 kilometers, respectively, based on CGS Map Sheet 48 (2016) and the correlation provided by Next Generation West 2 (NGA-West 2) default basin depths.

The  $MCE_R$  spectrum was developed as a probabilistic spectrum using values obtained with the USGS Unified Hazard Tool (<https://earthquake.usgs.gov/hazards/interactive/>) web-based software application consistent with the NGA-West 2 attenuation relations (GMMs). The equally-weighted spectral values from the attenuation relations of Abrahamson and others (ASK 2014), Boore and others (BSSA 2014), Campbell and Borzognia (CB 2014) and Chiou and Youngs (CY 2014) were used for the probabilistic spectrum. The values so obtained were scaled from geomean to maximum rotated values using the factors of Shahi and Baker (2014). The probabilistic MCE spectrum was converted to a risk-targeted spectrum ( $MCE_R$ ) using the risk coefficients  $C_{RS} = 0.946$  and  $C_{R1} = 0.951$ .

The USGS seismic model considers seismic sources including known faults and background seismicity consistent with the 2014 US National Seismic Hazard maps. Gridded seismic sources are included in the probabilistic model.

ASCE 7-16 Supplement No. 1 states that the deterministic ground motion response spectrum need not be calculated when the largest spectral response acceleration of the probabilistic ground motion response spectrum of Section 21.2.2 is less than  $1.2 \times F_a$ . For this site, the largest probabilistic amplitude value is less than  $1.2 \times F_a$ ; therefore, the deterministic spectrum is not included for evaluation of this site.

### Selection and Scaling of Earthquake Records

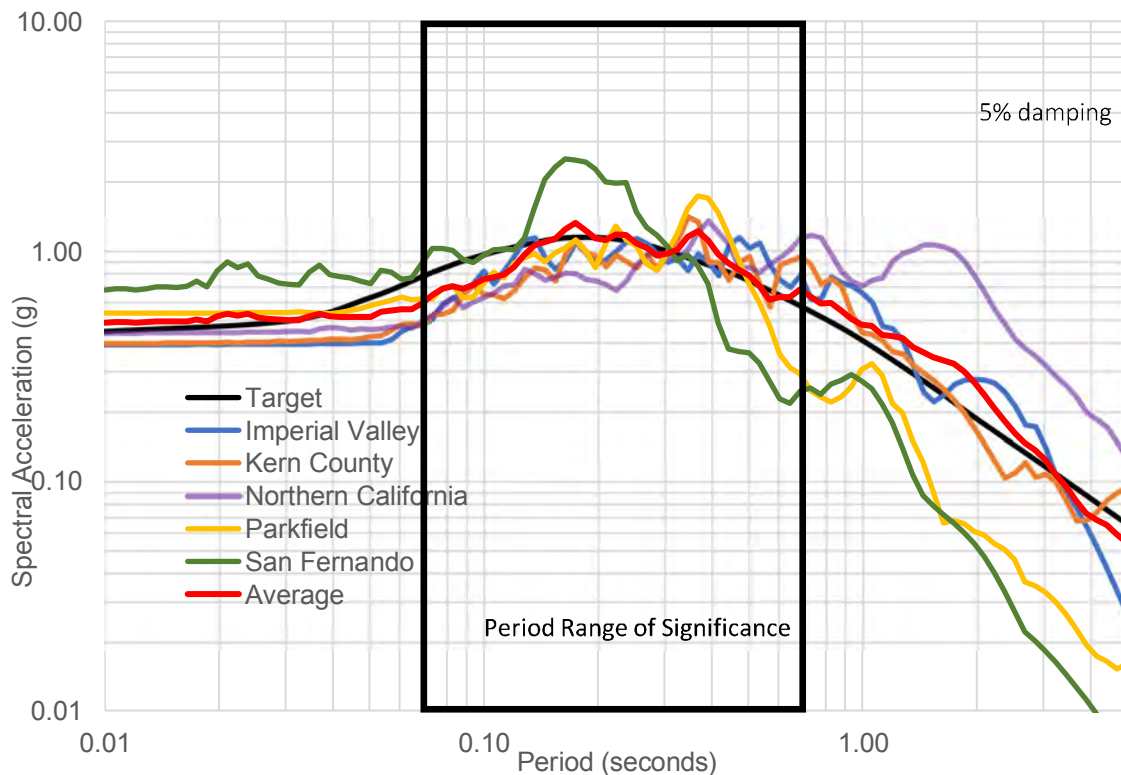
The  $MCE_R$  spectral acceleration values at the base of our soil model (i.e.,  $V_{s,100} = 1,800$  feet/second) were used as a target spectrum for selecting and scaling time histories of acceleration. The time histories served as input motions to our site response analysis. Deaggregation of the probabilistic seismic hazard analysis allowed us to define our search criteria for the time histories. The recorded motions were obtained from the Pacific Earthquake

Engineering Research (PEER) Center. We selected recordings from a database of strike-slip fault mechanisms with a moment magnitude range of 6 to 8 and a source-to-site distance range of 5 to 50 km. Characteristics of the recorded accelerograms, referred to as seed motions, and their scale factors are listed in Table 1.

**Table 1. Characteristics of Selected Time Histories**

<b>Earthquake</b>	<b>Moment Magnitude</b>	<b>Station</b>	<b>Distance (km)</b>	<b>Component</b>	<b>Scale Factor</b>
<b>1940 Imperial Valley, California</b>	7.0	El Centro Array #9	6	180	1.4
<b>1952 Kern County, California</b>	7.4	Taft Lincoln School	39	021	2.5
<b>1954 Northern California, California</b>	6.5	Ferndale City Hall	27	044	2.7
<b>1966 Parkfield, California</b>	6.2	Temblor pre-1969	16	205	1.5
<b>1971 San Fernando, California</b>	6.6	Lake Hughes #12	19	021	1.7

The selected recordings for the sources provided the minimum mean squared error after scaling relative to the target spectrum within the period range of 0.07 and 0.75 seconds. We based this range on the fundamental period of vibration ( $0.34 < T < 0.5$  seconds) provided by the structural engineer. Figure 1 compares the  $MCE_R$  target spectrum to computed spectra from the scaled time histories and the average of the scaled time histories.



**Figure 1. Comparison of Target Spectrum to Computed Response Spectra**

### Site Response Analysis

We evaluated the one-dimensional, nonlinear response of the site soils as described in ASCE 7-16 Section 21.1. The site response analyses were performed using the computer program DEEPSOIL v.7.0.26.0 (Hashash and others, 2017). We developed two soil models for analysis from the sCPT-01 and sCPT-02 results and the field and laboratory testing. In both models, we assigned  $V_s = 1,800$  feet/second at a depth of 200 feet. Between the termination depth of the sCPT soundings (about 100 feet) and a depth of 200 feet, we relied upon regional velocity model data to develop the profiles.

The time domain modeling employed the General Quadratic/Hyperbolic Model (GC/H) soil model with non-Masing rules for hysteretic unloading and reloading. Shear modulus reduction curves are required to simulate the change of soil stiffness with shear strain, while damping curves represent the amount of energy dissipated by the soils with shear strain. The DEEPSOIL program includes a variety of pre-programmed relationships for shear modulus and damping. We selected the pressure-dependent Darendeli (2001) curves with the high strain values of shear modulus corrected for soil strength (Phillips and Hashash, 2009). In particular, we relied upon correlations to the Cone Penetration Test sounding data at the site for estimates of overconsolidation ratio and at-rest earth pressure. The material below the soil models was assumed to be an elastic half-space. Equivalent linear, frequency domain and nonlinear, effective stress analyses, were performed in parallel with the nonlinear, total stress analyses as a check of model outputs.

We followed ASCE 7-16 Chapter 21 procedures to develop the site-specific  $MCE_R$  response spectrum at the ground surface. That is, ratios of 5 percent damped response spectra of surface ground motions to input base ground motions were calculated at select periods and the ratio at each period was multiplied by the  $MCE_R$  response spectrum of the base motion. Figure 2 shows the site amplification factors as a function of oscillator period computed from the nonlinear total stress site response analyses. The red line in Figure 2 represents the average of the site amplification factors.

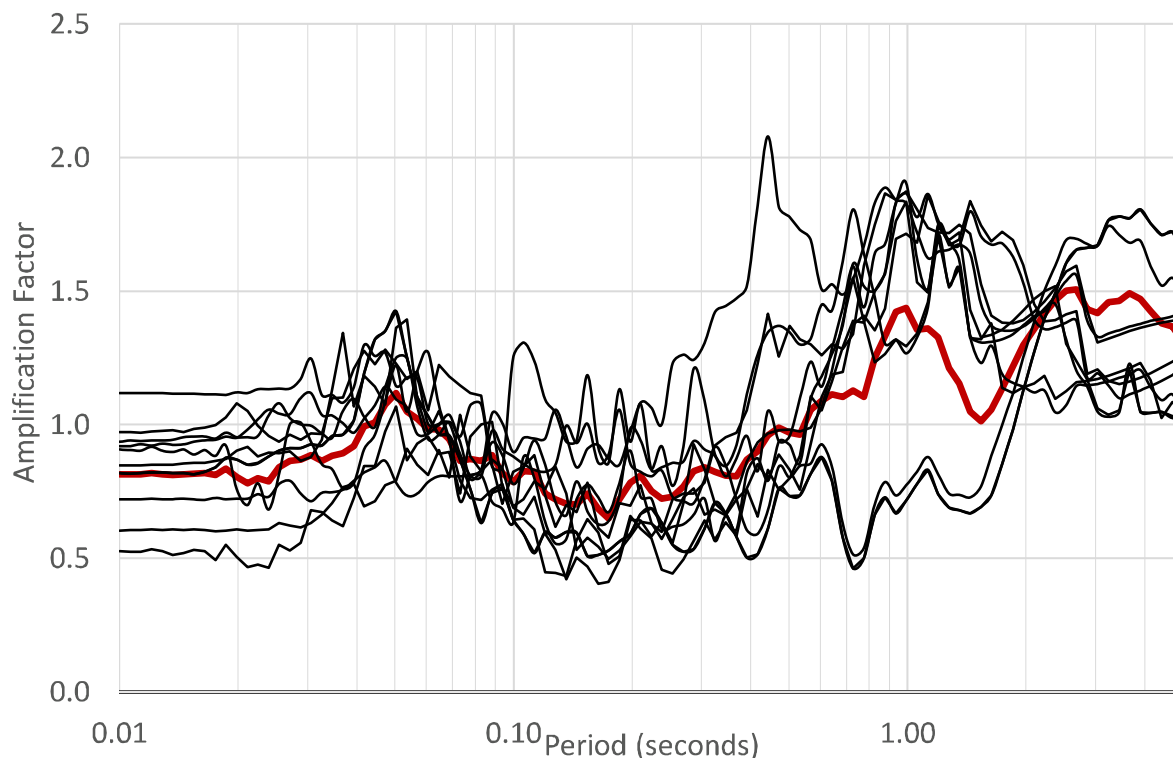
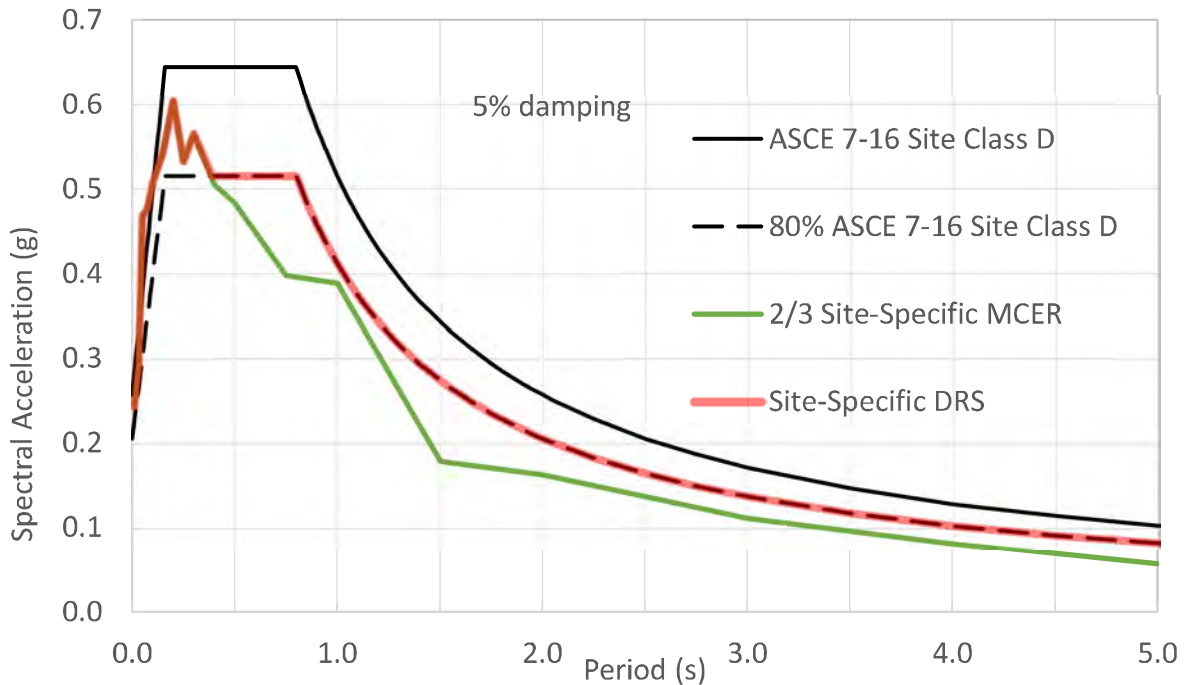


Figure 2. Computed Site Amplification Factors

### Design Response Spectrum and Design Acceleration Parameters

ASCE 7-16 Section 21.3 states that the design spectral response acceleration at any period shall be determined by reducing the site-specific  $MCE_R$  spectral response accelerations by one-third. However, the design spectral response acceleration at any period shall not be taken as less than 80 percent of the spectral acceleration determined in accordance with the general procedure where  $F_a = 1.17$  (Section 11.4) and  $F_v = 2.5$  (Section 21.3) for Site Class D. Figure 3 compares the general procedure design response spectra and the spectra from the site-specific study. As seen in Figure 3, the site-specific design response spectrum (DRS) is equivalent to two-thirds of the site-specific  $MCE_R$  spectrum below a period of 0.4 seconds and equivalent to 80 percent of the ASCE 7-16 Site Class D spectrum for periods equal to and greater than 0.4 seconds. The attached Table 2 lists the acceleration response spectral values (5 percent damping) and site amplification factors used to generate the site-specific DRS.





**Figure 3. Comparison of Design Response Spectra**

Using ASCE 7-16 Section 21.4, the site-specific seismic design parameters are defined as follows:

- $S_{DS} = 0.544g$ , based on the spectral acceleration at a period of 0.2 seconds (i.e.,  $S_{DS} = 0.9 * 0.604g$ )
- $S_{D1} = 0.412$ , based on the spectral acceleration at a period of 1.0 second
- $S_{MS} = 0.816g$ , based on 1.5 times  $S_{DS}$
- $S_{M1} = 0.618g$ , based on 1.5 times  $S_{D1}$

**Site-Specific Maximum Considered Earthquake Geometric Mean ( $MCE_G$ ) Peak Ground Acceleration**

According to ASCE 7-16 Section 21.5, the site-specific  $MCE_G$  peak ground acceleration,  $PGA_M$ , is equivalent to the probabilistic geometric mean peak ground acceleration provided it is not less than 80 percent of the  $PGA_M$  determined from the general procedure for Site Class D (see attached ATC hazards by location). For this site,  $PGA_M = 0.399g$  which is the probabilistic geometric mean value.

## **GENERAL COMMENTS**

The analysis and recommendations presented in this report are based upon the data obtained from explorations performed by Terracon and from other information discussed in this report. This report does not reflect variations that may occur between explorations, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either expressed or implied, are intended or made. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

## **CLOSURE**

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,  
**Terracon Consultants, Inc.**



David A. Baska, Ph.D., P.E., G.E.  
Principal Seismologist/Earthquake Engineer

Rick S. Greeley, E.I.  
Staff Engineer

Attachments: Table 2. Acceleration Response Spectra (5% damping) and Site Amplification Factors  
ATC Hazards by location accessed July 13, 2021

## REFERENCES

Abrahamson, N.A., Walter J. Silva, and Ronnie Kamai (2014) Summary of the ASK14 Ground Motion Relation for Active Crustal Regions. *Earthquake Spectra*: August 2014, Vol. 30, No. 3, pp. 1025-1055.

American Society of Civil Engineers (ASCE), 2016, Minimum Design Loads for Buildings and Other Structures, ASCE Standard 7-16. American Society of Civil Engineers/Structural Engineering Institute. Reston, VA.

American Society of Civil Engineers (ASCE), 2018, ASCE Standard 7-16 - Minimum Design Loads for Buildings and Other Structures – Supplement 1 Effective December 12, 2018. American Society of Civil Engineers/Structural Engineering Institute. Reston, VA.

Boore, D.M., Jonathan P. Stewart, Emel Seyhan, and Gail M. Atkinson (2014) NGA-West2 Equations for Predicting PGA, PGV, and 5% Damped PSA for Shallow Crustal Earthquakes. *Earthquake Spectra*: August 2014, Vol. 30, No. 3, pp. 1057-1085.

California Geological Survey, 2016, Earthquake Shaking Potential for California, Map Sheet 48 (revised 2016).

Campbell, K.W. and Bozorgnia, Y. (2014) NGA-West2 Ground Motion Model for the Average Horizontal Components of PGA, PGV, and 5% Damped Linear Acceleration Response Spectra. *Earthquake Spectra*: August 2014, Vol. 30, No. 3, pp. 1087-1115.

Chiou, B. S. J. and Robert R. Youngs (2014) Update of the Chiou and Youngs NGA Model for the Average Horizontal Component of Peak Ground Motion and Response Spectra. *Earthquake Spectra*: August 2014, Vol. 30, No. 3, pp. 1117-1153.

Darendeli M.B. (2001), Development of a New Family of Normalized Modulus Reduction and Material Damping Curves. Department of Civil, Architectural and Environmental Engineering, The University of Texas, Austin, Texas.

Hashash, Y.M.A., Musgrove, M.I., Harmon, J.A., Ilhan, O., Groholski, D.R., Phillips, C.A., and Park, D. (2017), DEEPSOIL 7.0, User Manual.

IBC (2018), 2018 International Building Code. International Code Council. Country Club Hills, IL.

Matasovic, N., and Vucetic, M. (1993), Cyclic Characterization of Liquefiable Sands. *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 119, No. 11, pp 1805-1822.

Matasovic, N., and Vucetic, M. (1995), Generalized Cyclic Degradation-Pore Pressure

## Report of Site-Specific Ground Motion Study

Dos Reis Ranch ■ Lathrop, California

August 16, 2021 ■ Terracon Project No. 81215116



Generation Model for Clays. ASCE Journal of Geotechnical and Geoenvironmental Engineering, Vol. 121, No. 1, pp 33-42.

Petersen, M.D., Moschetti, M.P., Powers, P.M., Mueller, C.S., Haller, K.M., Frankel, A.D., Zeng, Yuehua, Rezaeian, Sanaz, Harmsen, S.C., Boyd, O.S., Field, Ned, Chen, Rui, Rukstales, K.S., Luco, Nico, Wheeler, R.L., Williams, R.A., and Olsen, A.H., 2014, Documentation for the 2014 update of the United States national seismic hazard maps: U.S. Geological Survey Open-File Report 2014–1091, 243 p., <https://dx.doi.org/10.3133/ofr20141091>.

Phillips, C. and Hashash, Y. (2009), Damping Formulation for Non-Linear 1D Site Response Analyses. Soil Dynamics and Earthquake Engineering, Vol. 29, pp. 1143-1158.

Shahi, S.K. and Baker, J.W. (2014), NGA-West2 Models for Ground Motion Directionality. Earthquake Spectra, 30(3), pp. 1285-1300.

USGS (United States Geological Survey). 2017. "Building Seismic Safety Council 2014 Event Set." <https://earthquake.usgs.gov/scenarios/catalog/bssc2014/>.

**Table 2. Acceleration Response Spectra (5% damping) and Site Amplification Factors**

Period (sec)	Surface to Input Base Motion Site Amplification Factor	Input Base Motion MCE <sub>R</sub> (g)	Surface Site-Specific MCE <sub>R</sub> (g)	2/3 Site-Specific MCE <sub>R</sub> (g)	ASCE 7-16 Site Class D DRS(g)	80% ASCE 7-16 Site Class D DRS(g)	Site-Specific DRS(g)
0.01	0.813	0.449	0.365	0.243	0.258	0.226	0.243
0.03	0.877	0.498	0.436	0.291	0.306	0.264	0.291
0.05	1.117	0.629	0.703	0.469	0.354	0.303	0.469
0.075	0.867	0.826	0.716	0.477	0.379	0.351	0.477
0.1	0.786	0.969	0.762	0.508	0.439	0.400	0.508
0.15	0.723	1.127	0.814	0.543	0.500	0.496	0.543
0.2	0.788	1.149	0.906	0.604	0.620	0.515	0.604
0.25	0.729	1.095	0.799	0.532	0.644	0.515	0.532
0.3	0.837	1.013	0.848	0.565	0.644	0.515	0.565
0.4	0.880	0.862	0.758	0.505	0.644	0.515	0.515
0.5	0.971	0.747	0.725	0.484	0.644	0.515	0.515
0.75	1.116	0.534	0.597	0.398	0.644	0.515	0.515
1	1.428	0.408	0.583	0.389	0.644	0.412	0.412
1.5	1.027	0.262	0.269	0.179	0.515	0.275	0.275
2	1.314	0.186	0.245	0.163	0.343	0.206	0.206
3	1.421	0.118	0.167	0.111	0.258	0.137	0.137
4	1.452	0.084	0.122	0.082	0.172	0.103	0.103
5	1.312	0.065	0.085	0.057	0.129	0.082	0.082

# ATC Hazards by Location

## Search Information

<b>Coordinates:</b>	37.83119 , -121.29245
<b>Elevation:</b>	15 ft
<b>Timestamp:</b>	2021-07-13T16:26:34.811Z
<b>Hazard Type:</b>	Seismic
<b>Reference Document:</b>	ASCE7-16
<b>Risk Category:</b>	II
<b>Site Class:</b>	D



## Basic Parameters

Name	Value	Description
$S_S$	0.826	$MCE_R$ ground motion (period=0.2s)
$S_1$	0.309	$MCE_R$ ground motion (period=1.0s)
$S_{MS}$	0.966	Site-modified spectral acceleration value
$S_{M1}$	* null	Site-modified spectral acceleration value
$S_{DS}$	0.644	Numeric seismic design value at 0.2s SA
$S_{D1}$	* null	Numeric seismic design value at 1.0s SA

\* See Section 11.4.8

## Additional Information

Name	Value	Description
SDC	* null	Seismic design category
$F_a$	1.17	Site amplification factor at 0.2s
$F_v$	* null	Site amplification factor at 1.0s
$CR_S$	0.946	Coefficient of risk (0.2s)
$CR_1$	0.951	Coefficient of risk (1.0s)
PGA	0.344	$MCE_G$ peak ground acceleration
$F_{PGA}$	1.256	Site amplification factor at PGA
$PGA_M$	0.432	Site modified peak ground acceleration
$T_L$	8	Long-period transition period (s)

SsRT	0.826	Probabilistic risk-targeted ground motion (0.2s)
SsUH	0.873	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
SsD	1.5	Factored deterministic acceleration value (0.2s)
S1RT	0.309	Probabilistic risk-targeted ground motion (1.0s)
S1UH	0.325	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
S1D	0.6	Factored deterministic acceleration value (1.0s)
PGAd	0.5	Factored deterministic acceleration value (PGA)

\* See Section 11.4.8

*The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.*

## Disclaimer

Hazard loads are provided by the U.S. Geological Survey [Seismic Design Web Services](#).

While the information presented on this website is believed to be correct, ATC and its sponsors and contributors assume no responsibility or liability for its accuracy. The material presented in the report should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. ATC does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the report provided by this website. Users of the information from this website assume all liability arising from such use. Use of the output of this website does not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the report.





# **PARTNER**

**Engineering and Science, Inc.**



## **PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT**

**APN 192-020-140-000, 192-020-590-000, and 192-020-600-000**

Lathrop, California 95330

Report Date: March 8, 2021  
Partner Project No. 21-308862.1



Prepared for:

**Hodgdon Group Realty, Inc.**  
1461 East Cooley Drive, Suite 230  
Colton, California 92324

March 8, 2021

Mr. Sean Asmus  
Hodgdon Group Realty, Inc.  
1461 East Cooley Drive, Suite 230  
Colton, California 92324

Subject: Phase I Environmental Site Assessment  
APN 192-020-140-000, 192-020-590-000, and 192-020-600-000  
Lathrop, California 95330  
Partner Project No. 21-308862.1

Dear Mr. Asmus:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (704) 994-8423.

Sincerely,



Michael T. Chang  
Principal

## EXECUTIVE SUMMARY

---

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Hodgdon Group Realty, Inc. for the property located at APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, San Joaquin County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Hodgdon Group Realty, Inc. with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

### Property Description

The subject property is located on the northern side of Spartan Way, eastern and western sides of Golden Valley Parkway, western side of Manthey Road, and northern and southern sides of Don Reis Road within a mixed residential, commercial, and agricultural area of San Joaquin County. Please refer to the table below for further description of the subject property:

#### **Subject Property Data**

<b>Addresses (APNs):</b>	APN 192-020-140-000, 192-020-590-000, and 192-020-600-000, Lathrop, California
<b>Additional Address:</b>	14101 South Manthey Road
<b>Property Use:</b>	Vacant Land
<b>Land Acreage (Ac):</b>	126.49
<b>Assessor's Parcel Number (APN):</b>	192-020-140-000, 192-020-590-000, and 192-020-600-000
<b>Site Assessment Performed By:</b>	Christopher Olsen of Partner
<b>Site Assessment Conducted On:</b>	March 1, 2021

The subject property consists of three parcels of vacant land. Currently, there are no onsite operations and no permanent structures. Partner did not observe any evidence of any dumping of hazardous substances, surface staining, or distressed vegetation on the subject property. Partner observed soil piles, wood pile, and agricultural equipment on the subject property parcels.

According to available historical sources, the subject property was formerly developed with a residential-type building, outbuildings, and agricultural land from at least 1915 to 1968; agricultural land from at least 1975 to 1993; agricultural land and vacant cleared land in *circa* 2006; and vacant land since at least 2009.

The immediately surrounding properties consist of agricultural land, pond and pump equipment, and residence to the north; Don Reis Road, Spartan Way, agricultural land, vacant warehouse, residences and outbuildings, and a dirt-covered driveway to the south; vacant land and Manthey Road to the east beyond which is Interstate 5 and an Interstate 5 off-ramp; and a vacant warehouse and agricultural land to the west.

According to Status Environmental, Inc.'s July 28, 2009 Quarterly Groundwater Monitoring Report – Second Quarter 2009 for Joe's Truck Plaza – 15600 South Harlan Road (located approximately 2,000 feet south of the property) and topographic map interpretation, the depth to groundwater in the vicinity of

the subject property is inferred to be approximately ten to 15 feet below ground surface (bgs) and groundwater flow is inferred to be toward the west.

## Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- According to a historical review, the subject property has been used for agricultural purposes from at least 1915 until 2006. Since portions of the subject property parcel were historically used for agricultural purposes, there is a potential that agricultural related chemicals including pesticides, herbicides, and fertilizers may have been used and stored onsite. No evidence of pesticide or herbicide mixing areas or bulk storage areas was observed during the site reconnaissance or during Partner's review of historical aerial photographs. According to information provided by the client, the subject property is planned for commercial/warehouse development. The occupied areas of the subject property will either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil. Additionally, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely been present, if at all) will be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further

reduce the potential for exposure to residual agricultural chemicals (if any). Based on planned development activities, Partner concludes that the possible use of agricultural chemicals does not represent a recognized environmental condition or a human health risk, and no additional investigation is required. Additionally, based on this information, vapor migration is not expected to represent a significant environmental concern at this time.

### **Conclusions, Opinions, and Recommendations**

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, San Joaquin County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property; however, environmental issues were identified. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

# TABLE OF CONTENTS

---

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Purpose .....	1
1.2	Scope of Work .....	1
1.3	Limitations .....	2
1.4	User Reliance .....	2
1.5	Limiting Conditions .....	3
<b>2.0</b>	<b>SITE DESCRIPTION .....</b>	<b>4</b>
2.1	Site Location and Legal Description .....	4
2.2	Current Property Use .....	4
2.3	Current Use of Adjacent Properties .....	4
2.4	Physical Setting Sources .....	4
2.4.1	Topography .....	4
2.4.2	Hydrology .....	5
2.4.3	Geology/Soils .....	5
2.4.4	Flood Zone Information .....	5
<b>3.0</b>	<b>HISTORICAL INFORMATION.....</b>	<b>6</b>
3.1	Aerial Photograph Review .....	6
3.2	Fire Insurance Maps .....	7
3.3	City Directories .....	8
3.4	Historical Topographic Maps .....	8
<b>4.0</b>	<b>REGULATORY RECORDS REVIEW .....</b>	<b>10</b>
4.1	Regulatory Agencies .....	10
4.1.1	State Department .....	10
4.1.2	Health Department .....	10
4.1.3	Fire Department .....	10
4.1.4	Air Pollution Control Agency .....	11
4.1.5	Regional Water Quality Agency .....	11
4.1.6	Department of Toxic Substances Control .....	11
4.1.7	Building Department .....	12
4.1.8	Planning Department .....	12
4.1.9	Oil & Gas Exploration .....	12
4.1.10	Assessor's Office .....	12
4.2	Mapped Database Records Search .....	13
4.2.1	Regulatory Database Summary .....	13
4.2.2	Subject Property Listings .....	14
4.2.3	Adjacent Property Listings .....	14
4.2.4	Sites of Concern Listings .....	14
4.2.5	Orphan Listings .....	14
<b>5.0</b>	<b>USER PROVIDED INFORMATION AND INTERVIEWS.....</b>	<b>15</b>
5.1	Interviews .....	16
5.1.1	Interview with Owner .....	16
5.1.2	Interview with Report User .....	16

5.1.3	Interview with Key Site Manager .....	16
5.1.4	Interviews with Past Owners, Operators, and Occupants .....	16
5.1.5	Interview with Others .....	16
5.2	User Provided Information .....	16
5.2.1	Title Records, Environmental Liens, and AULs.....	16
5.2.2	Specialized Knowledge.....	16
5.2.3	Actual Knowledge of the User .....	17
5.2.4	Valuation Reduction for Environmental Issues .....	17
5.2.5	Commonly Known or Reasonably Ascertainable Information .....	17
5.2.6	Previous Reports and Other Provided Documentation .....	17
<b>6.0</b>	<b>SITE RECONNAISSANCE .....</b>	<b>18</b>
6.1	General Site Characteristics.....	18
6.2	Potential Environmental Hazards.....	19
6.3	Non-ASTM Services.....	20
6.3.1	Asbestos-Containing Materials (ACMs) .....	20
6.3.2	Lead-Based Paint (LBP) .....	20
6.3.3	Radon .....	20
6.3.4	Lead in Drinking Water.....	21
6.3.5	Mold.....	21
6.4	Adjacent Property Reconnaissance.....	21
<b>7.0</b>	<b>FINDINGS AND CONCLUSIONS.....</b>	<b>22</b>
<b>8.0</b>	<b>SIGNATURES OF ENVIRONMENTAL PROFESSIONALS .....</b>	<b>24</b>
<b>9.0</b>	<b>REFERENCES.....</b>	<b>25</b>

**Figures**

- Figure 1** Site Location Map
- Figure 2** Site Plan
- Figure 3** Topographic Map

**Appendices**

- Appendix A** Site Photographs
- Appendix B** Historical/Regulatory Documentation
- Appendix C** Regulatory Database Report
- Appendix D** Qualifications

## 1.0 INTRODUCTION

---

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, San Joaquin County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

### 1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

### 1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential



exposure to hazardous substances or petroleum products in the soil or groundwater on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

### **1.3 Limitations**

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

### **1.4 User Reliance**

Hodgdon Group Realty, Inc. engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Hodgdon Group

Realty, Inc.. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

## **1.5 Limiting Conditions**

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past owners, operators, and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner was not able to document the historical use of the subject property prior to 1915. The following sources were reviewed during the course of this assessment and found to be limited: aerial photographs were not available prior to 1937; city directories were not available prior to 1981; topographic maps prior to 1915 were not reasonably ascertainable from local agencies; and other historical sources such as fire insurance maps did not provide coverage of the subject property. This data failure is not considered critical and does not change the conclusions of this report, as the 1915 topographic map revealed the subject property to be agricultural land with roads and one structure. The 1937 aerial photograph indicated that the subject property was utilized for agricultural purposes and developed with a residential-type building, outbuildings, and roads. In addition, the adjacent and surrounding areas are also shown mostly as farmland with scattered residential development.
- Partner was unable to determine the property use at 5-year intervals, which constitutes a data gap. Except for property tax files and recorded land title records, which were not considered to be sufficiently useful, Partner reviewed all standard historical sources and conducted appropriate interviews.
- Partner's view of the ground during the site assessment was obstructed due to dense vegetation and ground cover. Based on information obtained from other historical sources, this limitation is not expected to alter the overall findings of this assessment.

## 2.0 SITE DESCRIPTION

---

### 2.1 Site Location and Legal Description

The subject property at APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, California is located on the northern side of Spartan Way, eastern and western sides of Golden Valley Parkway, western side of Manthey Road, and northern and southern sides of Don Reis Road. According to the San Joaquin County Assessor, the subject property is described as Assessor Parcel Numbers 192-020-140-000, 192-020-590-000, and 192-020-600-000. Ownership is currently vested in Don Reis Ranch, Inc.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

### 2.2 Current Property Use

The subject property consists of three parcels of vacant land.

The subject property is designated for commercial and industrial development by the City of Lathrop.

The subject property was identified as a National Pollutant Discharge Elimination System (NPDES) site in the regulatory database report, as further discussed in Section 4.2.

### 2.3 Current Use of Adjacent Properties

The subject property is located within a mixed residential, commercial, and agricultural area of San Joaquin County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

#### ***Immediately Surrounding Properties***

- North:** Agricultural land, pond and pump equipment, residence (42 De Lima Road) and a dirt-covered driveway
- South:** Don Reis Road, Spartan Way, agricultural land, vacant warehouse (240 Don Reis Road), residences and outbuildings (410 and 422 Don Reis Road), and a dirt-covered driveway
- East:** Vacant land and Manthey Road beyond which is Interstate 5 and an Interstate 5 off-ramp
- West:** A vacant warehouse (240 Don Reis Road) and agricultural land

No adjacent properties were identified in the regulatory database report of Section 4.2.

### 2.4 Physical Setting Sources

#### 2.4.1 Topography

The United States Geological Survey (USGS) *Lathrop, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately twelve feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping gently toward the west. Improvements with the exception of roadways are not depicted on the 2012 topographic map.

A copy of the most recent topographic map is included as Figure 3 of this report.

### **2.4.2 Hydrology**

According to topographic map interpretation, the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the west. The nearest surface water in the vicinity of the subject property is the San Joaquin River located approximately 3,000 feet west of the subject property. No settling ponds, lagoons, surface impoundments, wetlands, or natural catch basins were observed at the subject property during this assessment.

According to available information, a public water system operated by the City of Lathrop serves the subject property vicinity. According to the 2019 Water Quality Report, the source of public water for the City of Lathrop is groundwater from public wells located within the city limits.

According to Status Environmental, Inc.'s July 28, 2009 Quarterly Groundwater Monitoring Report – Second Quarter 2009 for Joe's Truck Plaza – 15600 South Harlan Road (located approximately 2,000 feet south of the property), the depth to groundwater in the vicinity of the subject property is inferred to be approximately ten to 15 feet bgs.

### **2.4.3 Geology/Soils**

The subject property is situated within the Central Valley physiographic province of the State of California. The uppermost geologic formation underlying the soils at the subject property is the Pleistocene and Holocene Age San Joaquin Valley formation. The San Joaquin Valley formation comprises the underlying stratigraphy and consists mostly of igneous, metamorphic and unconsolidated marine sediment deposits.

Based on information obtained from the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Bisgani loamy coarse sand (partially drained), Dello clay loam (drained), Timor loamy sand and Tinnin loamy coarse sand with zero to two percent slopes. The Bisgani soil series consists of poorly drained loamy coarse sand and coarse sand with a depth to 60 inches. The parent material is described as alluvium derived from granitic rock sources. The Dello soil series consists of very poorly drained clay loam and sand with a depth to 60 inches. The parent material is described as alluvium derived from granitic rock sources. The Timor soil series consists of moderately well drained loamy sand and cemented soil with a depth to 60 inches. The parent material is described as alluvium derived from granitic rock sources. The Tinnin soil series consists of well drained loamy coarse sand with a depth to 75 inches. The parent material is described as alluvium derived from granitic rock sources.

### **2.4.4 Flood Zone Information**

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 06077C0610F, dated October 16, 2009, the subject property appears to be located in Zone X, an area located outside of the 100-year and 500-year flood plains with an area of reduced flood risk due to a levee.

### 3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

<b>Historical Use Information</b>		
<b>Period/Date</b>	<b>Source</b>	<b>Description/Use</b>
1915-1968	Aerial Photographs, Topographic Map	Agricultural land and single-family residence
1975-1993	Aerial Photographs	Agricultural land
2006	Aerial Photograph	Agricultural land and vacant cleared land
2009-Present	Aerial Photographs, Onsite Observations, Interviews	Vacant land

According to a historical review, the subject property has been used for agricultural purposes from at least 1915 until 2006. Since portions of the subject property parcel were historically used for agricultural purposes, there is a potential that agricultural related chemicals including pesticides, herbicides, and fertilizers may have been used and stored onsite. No evidence of pesticide or herbicide mixing areas or bulk storage areas was observed during the site reconnaissance or during Partner’s review of historical aerial photographs. According to information provided by the client, the subject property is planned for commercial/warehouse development. The occupied areas of the subject property will either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil. Additionally, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely been present, if at all) will be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on planned development activities, Partner concludes that the possible use of agricultural chemicals does not represent a recognized environmental condition or a human health risk, and no additional investigation is required. Additionally, based on this information, vapor migration is not expected to represent a significant environmental concern at this time.

#### 3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources, Inc. (EDR) on February 22, 2021. The following was observed on the subject property and adjacent properties during the aerial photograph review:

<b>Date:</b>	<b>1937, 1940</b>	<b>Scale:</b>	<b>1"=500'</b>
<b>Subject Property:</b>	The subject property appears to be agricultural land with roads throughout the property. Residential-type buildings and outbuildings are located on the northern side of the subject property.		
<b>North:</b>	The area adjacent to the north appears to be agricultural land and developed with scattered residential-type buildings and outbuildings.		
<b>South:</b>	The area adjacent to the south appears to be agricultural land and roads.		
<b>East:</b>	The area adjacent to the east appears to be agricultural land and developed with scattered residential-type buildings, outbuildings and roads.		
<b>West:</b>	The area adjacent to the west appears to be agricultural land and roads.		

<b>Date:</b>	<b>1957, 1963, 1968</b>	<b>Scale:</b>	<b>1"=500'</b>
<b>Subject Property:</b>	No significant changes visible except several outbuildings have been razed.		
<b>North:</b>	No significant changes visible		
<b>South:</b>	The area adjacent to the south appears to be agricultural land, roads and developed with residential-type buildings and outbuildings.		
<b>East:</b>	The area adjacent to the east appears to be agricultural land and developed with scattered residential-type buildings, outbuildings and roads.		
<b>West:</b>	The area adjacent to the west appears to be agricultural land, and developed with residential-type buildings, outbuildings and roads.		

<b>Date:</b>	<b>1975, 1982, 1993</b>	<b>Scale:</b>	<b>1"=500'</b>
<b>Subject Property:</b>	The subject property appears to be agricultural land and roads. The previously identified structures at the northern end of the property appear to have been razed.		
<b>North:</b>	The area adjacent to the north appears to be developed with residential and agricultural-type buildings and contains agricultural land.		
<b>South:</b>	The area adjacent to the south appears to be agricultural land, roads and developed with residential-type buildings, warehouses and outbuildings.		
<b>East:</b>	The area adjacent to the east of a roadway appears to be vacant land and an I-5 off-ramp with I-5 farther east.		
<b>West:</b>	The area adjacent to the west appears to be agricultural land, and developed with residential-type buildings, warehouses, outbuildings and roads.		

<b>Date:</b>	<b>2006</b>	<b>Scale:</b>	<b>1"=500'</b>
<b>Subject Property:</b>	The subject property appears to be vacant cleared land with an area of agricultural land and/or pond at the southeastern end of the property.		
<b>North:</b>	The area adjacent to the north appears to be developed with residential-type buildings and contains agricultural land.		
<b>South:</b>	No significant changes visible		
<b>East:</b>	No significant changes visible		
<b>West:</b>	No significant changes visible		

<b>Date:</b>	<b>2009, 2012, 2016</b>	<b>Scale:</b>	<b>1"=500'</b>
<b>Subject Property:</b>	The subject property appears to be vacant and cleared land.		
<b>North:</b>	No significant changes visible		
<b>South:</b>	The area adjacent to the south appears to be developed with residential-type buildings, outbuildings, warehouse and a road, and contains vacant land.		
<b>East:</b>	No significant changes visible		
<b>West:</b>	No significant changes visible		

Copies of reviewed aerial photographs are included in Appendix B of this report.

### 3.2 Fire Insurance Maps

Partner requested copies from the collection of Sanborn Fire insurance maps from EDR on February 22, 2021. Sanborn map coverage was not available for the subject property.

A copy of the Certified Sanborn Map Report No Coverage Letter is included in Appendix B of this report.

### 3.3 City Directories

Partner reviewed historical city directories obtained from EDR on February 24, 2021 for past names and businesses that were listed for the subject property and adjacent properties. City directories were not identified for the subject property. However, city directory listings were identified for adjacent properties. The findings are presented in the following table:

<b>City Directory Search for Adjacent Properties</b>	
<b>Year(s)</b>	<b>Occupant Listed</b>
1981, 1985	No Listings (240 Don Reis Road); Residential (410 Don Reis Road); No Listings (422 Don Reis Road)
1992	No Listings (240 Don Reis Road); No Listings (410 Don Reis Road); No Listings (422 Don Reis Road)
1995	No Listings (240 Don Reis Road); Residential (410 Don Reis Road); No Listings (422 Don Reis Road)
2000	No Listings (240 Don Reis Road); No Listings (410 Don Reis Road); No Listings (422 Don Reis Road)
2005	Residential (240 Don Reis Road); Cal Tec Windshield Repair, Golf Gone Wild and Residential (410 Don Reis Road); Residential (422 Don Reis Road)
2010	No Listings (240 Don Reis Road); No Listings (410 Don Reis Road); Residential (422 Don Reis Road)
2014	Residential (240 Don Reis Road); No Listings (410 Don Reis Road); Residential (422 Don Reis Road)
2017	Residential (240 Don Reis Road); Residential (410 Don Reis Road); Residential (422 Don Reis Road)

Based on the city directory review, no environmentally sensitive listings were identified for the adjacent property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

### 3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on February 22, 2021. The following was observed on the subject property and adjacent properties during the topographic map review:

<b>Date: 1915</b>	
<b>Subject Property:</b>	The subject property is depicted as undeveloped land with roads and one structure.
<b>North:</b>	The area adjacent to the north is depicted as undeveloped land with roads.
<b>South:</b>	The area adjacent to the south is depicted as undeveloped land with a road.
<b>East:</b>	The area adjacent to the east is depicted as undeveloped land with roads.
<b>West:</b>	The area adjacent to the south is depicted as undeveloped land with a road.

**Date:** 1952

**Subject Property:** No significant changes depicted.  
**North:** The area adjacent to the north is depicted as undeveloped land with roads and two structures.  
**South:** The area adjacent to the south is depicted as undeveloped land with a road and two structures.  
**East:** The area adjacent to the east is depicted as undeveloped land with roads and two structures.  
**West:** The area adjacent to the south is depicted as undeveloped land with a road and one structure.

**Date:** 1968

**Subject Property:** No significant changes depicted.  
**North:** The area adjacent to the north is depicted as undeveloped land with roads and multiple structures.  
**South:** The area adjacent to the south is depicted as undeveloped land with a road and multiple structures.  
**East:** The area adjacent to the east is depicted as undeveloped land with Interstate 5 farther east.  
**West:** The area adjacent to the south is depicted as undeveloped land with roads.

**Date:** 1976, 1987, 1994, 1996

**Subject Property:** No significant changes depicted.  
**North:** The area adjacent to the north is depicted as undeveloped land with roads and multiple structures.  
**South:** The area adjacent to the south is depicted as undeveloped land with a road and multiple small structures and industrial warehouse-type buildings.  
**East:** The area adjacent to the east of a road is depicted as undeveloped land and Interstate 5.  
**West:** The area adjacent to the south is depicted as undeveloped land with multiple small structures, two industrial warehouse-type buildings and a road.

Copies of reviewed topographic maps are included in Appendix B of this report.



## 4.0 REGULATORY RECORDS REVIEW

---

### 4.1 Regulatory Agencies

#### 4.1.1 State Department

##### *Regulatory Agency Data*

<b>Name of Agency:</b>	California Environmental Protection Agency (CalEPA) Regulated Site Portal
<b>Point of Contact:</b>	Online Records
<b>Agency Address:</b>	1001 I Street, Sacramento, California 95812
<b>Agency Phone Number:</b>	(916) 323-2514
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Internet
<b>Summary of Communication:</b>	No records regarding hazardous substance use, storage or releases, or the presence of underground storage tanks (USTs) and activity use limitations (AULs) on the subject property were on file with the CalEPA.

#### 4.1.2 Health Department

##### *Regulatory Agency Data*

<b>Name of Agency:</b>	San Joaquin County Environmental Health Department (SJCEHD)
<b>Point of Contact:</b>	Dom Martorella
<b>Agency Address:</b>	1868 East Hazelton Avenue, Stockton, California 95205
<b>Agency Phone Number:</b>	(209) 468-0339
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Website and Email
<b>Summary of Communication:</b>	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the SJCEHD.

#### 4.1.3 Fire Department

##### *Regulatory Agency Data*

<b>Name of Agency:</b>	Lathrop-Manteca Fire District (LMFD)
<b>Point of Contact:</b>	Staff
<b>Agency Address:</b>	800 J Street, Lathrop, California 95330
<b>Agency Phone Number:</b>	(209) 858-2331
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Telephone
<b>Summary of Communication:</b>	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the LMFD.

#### 4.1.4 Air Pollution Control Agency

##### Regulatory Agency Data

<b>Name of Agency:</b>	San Joaquin Valley Air Pollution Control District (SJVAPCD)
<b>Point of Contact:</b>	Staff
<b>Agency Address:</b>	4800 Enterprise Way, Modesto, California 95356
<b>Agency Phone Number:</b>	(209) 557-6400
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Telephone
<b>Summary of Communication:</b>	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the SJVAPCD.

#### 4.1.5 Regional Water Quality Agency

##### Regulatory Agency Data

<b>Name of Agency:</b>	Regional Water Quality Control Board (RWQCB)
<b>Point of Contact:</b>	GeoTracker
<b>Agency Address:</b>	11020 Sun Center Drive, Suite 200, Rancho Cordova, California 95670
<b>Agency Phone Number:</b>	(916) 464-3291
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Website
<b>Summary of Communication:</b>	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

#### 4.1.6 Department of Toxic Substances Control

##### Regulatory Agency Data

<b>Name of Agency:</b>	California Department of Toxic Substances Control (DTSC)
<b>Point of Contact:</b>	EnviroStor and Hazardous Waste Tracking System (HWTS)
<b>Agency Address:</b>	1001 I Street, Sacramento, California 95814
<b>Agency Phone Number:</b>	(916) 255-3687
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Internet
<b>Summary of Communication:</b>	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with DTSC's EnviroStor database. There are no listings for the subject property in the HWTS database.

#### 4.1.7 Building Department

##### Regulatory Agency Data

<b>Name of Agency:</b>	Lathrop Building Department (LBD)
<b>Point of Contact:</b>	Staff
<b>Agency Address:</b>	390 Towne Centre Drive, Lathrop, California 95330
<b>Agency Phone Number:</b>	(209) 941-7290
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Telephone
<b>Summary of Communication:</b>	According to a representative of the LBD, there are no records for the subject property.

#### 4.1.8 Planning Department

##### Regulatory Agency Data

<b>Name of Agency:</b>	Lathrop Planning Department (LPD)
<b>Point of Contact:</b>	Staff
<b>Agency Address:</b>	390 Towne Centre Drive, Lathrop, California 95330
<b>Agency Phone Number:</b>	(209) 941-7290
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	In Person
<b>Summary of Communication:</b>	According to records reviewed, the subject property is zoned Neighborhood Park (NP/DS-CL), Commercial Office (CO/DS-CL), and Residential/Mixed Use (R/MU/DS-CL).

#### 4.1.9 Oil & Gas Exploration

##### Regulatory Agency Data

<b>Name of Agency:</b>	California Geologic Energy Management Division (CalGEM)
<b>Point of Contact:</b>	Online Records
<b>Agency Address:</b>	801 K Street, MS 20-22, Sacramento, California 95814
<b>Agency Phone Number:</b>	(916) 322-1110
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	Online CalGEM mapping system
<b>Summary of Communication:</b>	According to CalGEM's online mapping system, no oil or gas wells are located on or adjacent to the subject property.

#### 4.1.10 Assessor's Office

##### Regulatory Agency Data

<b>Name of Agency:</b>	San Joaquin County Assessor (SJCA)
<b>Point of Contact:</b>	Property Search
<b>Agency Address:</b>	44 North San Joaquin Street #230, Stockton, California 95202
<b>Agency Phone Number:</b>	(209) 468-2630
<b>Date of Contact:</b>	February 17, 2021
<b>Method of Communication:</b>	In Person
<b>Summary of Communication:</b>	According to records reviewed, the subject property is identified as Assessor Parcel Numbers (APN) 192-020-140-000, 192-020-590-000, and 192-020-600-000, which contains a total of 126.49 acres. No

## Regulatory Agency Data

additional pertinent information was included in the SJCA file.

### 4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

#### 4.2.1 Regulatory Database Summary

##### Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N/A	N/A
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N
State NPDES Site	Varies	Y	N	N

#### **4.2.2 Subject Property Listings**

The subject property was identified as a NPDES site in the regulatory database report, as discussed below:

- The subject property, identified as Dos Ries Ranch at 14101 Manthey Road, is listed on the NPDES database as a facility with an expired construction permit as of December 30, 2011. There are no listings pertaining to any spills or releases of hazardous substances associated with the subject property. No apparent construction activities were observed during the time period during a historical review of the subject property. Based on the nature of the permit for storm water management, lack of a documented release, and regulatory oversight, this listing is not considered a recognized environmental condition.

#### **4.2.3 Adjacent Property Listings**

The adjacent properties are not identified in the regulatory database report.

#### **4.2.4 Sites of Concern Listings**

No sites of concern are identified in the regulatory database report.

#### **4.2.5 Orphan Listings**

In some cases, location information supplied by the regulatory agencies is insufficient to allow the database companies to geocode facility locations. These facilities are listed under the non-geocoded section within the EDR report

No orphan listings of concern are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

## 5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Hodgdon Group Realty, Inc. (User of this report).

### ***User Responsibilities***

<b>Item</b>	<b>Provided By User</b>	<b>Not Provided By User</b>	<b>Discussed Below</b>	<b>Does Not Apply</b>
AAI User Questionnaire			X	
Title Records, Environmental Liens, and AULs			X	
Specialized Knowledge			X	
Actual Knowledge			X	
Valuation Reduction for Environmental Issues			X	
Identification of Key Site Manager	<b>Section 5.1.3</b>			
Reason for Performing Phase I ESA	<b>Section 1.1</b>			
Prior Environmental Reports			X	
Other				X

## **5.1 Interviews**

### **5.1.1 Interview with Owner**

The owner of the subject property, identified as Dos Reis Ranch, Inc., was not available to be interviewed at the time of the assessment. However, Mr. Sean Asmus, buyer's representative, completed a Pre-Survey Environmental Site Assessment Questionnaire. Based on review of the questionnaire, the property is approximately 130+/- acres in sized and is currently vacant land. Historically, the subject property was developed as agricultural land. Mr. Asmus was not aware of any USTs, ASTs, clarifiers, oil/water separators, spills or releases, waste treatment systems, groundwater monitoring wells, historical dry cleaning operations, or hazardous substance use/storage/generation on the subject property. Mr. Asmus was not aware of any environmental concerns with the surrounding properties.

### **5.1.2 Interview with Report User**

Please refer to Section 5.2 below for information requested from the Report User.

### **5.1.3 Interview with Key Site Manager**

A key site manager was not available to be interviewed at the time of this assessment based on the unoccupied agricultural use of the subject property. However, as previously discussed above, Mr. Asmus, buyer's representative completed a Pre-Survey Environmental Site Assessment Questionnaire which provides additional information about the subject property. Based on his responses, as well as a historical review of the subject property and a review of the regulatory database report, this data gap does not impact the conclusions of this assessment.

### **5.1.4 Interviews with Past Owners, Operators, and Occupants**

Interviews with past owners, operators, and occupants were not conducted since information regarding the potential for contamination at the subject property was obtained from other sources.

### **5.1.5 Interview with Others**

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

## **5.2 User Provided Information**

### **5.2.1 Title Records, Environmental Liens, and AULs**

Partner was provided with a copy of a Preliminary Title Report issued by Chicago Title Company dated January 28, 2021.

A copy of the document is provided in Appendix B of this report.

### **5.2.2 Specialized Knowledge**

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

### **5.2.3 Actual Knowledge of the User**

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

### **5.2.4 Valuation Reduction for Environmental Issues**

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

### **5.2.5 Commonly Known or Reasonably Ascertainable Information**

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

### **5.2.6 Previous Reports and Other Provided Documentation**

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.



## 6.0 SITE RECONNAISSANCE

---

The weather at the time of the site visit was sunny and clear. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

### *Site Assessment Data*

<b>Site Assessment Performed By:</b>	Christopher Olsen
<b>Site Assessment Conducted On:</b>	March 1, 2021

The table below provides the subject property personnel interviewed during the field reconnaissance:

Partner was not accompanied during the field reconnaissance.

No potential environmental concerns were identified during the onsite reconnaissance.

### **6.1 General Site Characteristics**

#### **6.1.1 Solid Waste Disposal**

Due to the vacant nature, solid waste is not currently generated at the subject property. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

#### **6.1.2 Sewage Discharge and Disposal**

Due to the vacant nature, sanitary discharges are not currently generated at the subject property. Sanitary discharges for the surrounding area are directed into the municipal sanitary sewer system. The City of Lathrop services the subject property vicinity. No wastewater treatment facilities or septic systems were observed or reported on the subject property.

#### **6.1.3 Surface Water Drainage**

Storm water naturally infiltrates the ground surface. The subject property is not connected to a municipal owned and maintained sewer system.

The subject property does not appear to be a designated wetland area, based on information obtained from the United States Fish and Wildlife Service; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

#### **6.1.4 Source of Heating and Cooling**

The subject property is not currently improved with structures; as such, no heating and cooling systems or domestic hot water equipment were observed on the subject property.

#### **6.1.5 Wells and Cisterns**

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

### **6.1.6 Wastewater**

Due to the vacant nature, domestic wastewater is not currently generated at the subject property.

### **6.1.7 Septic Systems**

No septic systems were observed or reported on the subject property during the site reconnaissance.

### **6.1.8 Additional Site Observations**

No additional general site characteristics were observed during the site reconnaissance.

## **6.2 Potential Environmental Hazards**

### **6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site**

No hazardous substances or petroleum products were observed on the subject property during the site reconnaissance.

### **6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)**

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

### **6.2.3 Evidence of Releases**

No spills, stains, or other indications that a surficial release has occurred at the subject property were observed during the site reconnaissance.

### **6.2.4 Polychlorinated Biphenyls (PCBs)**

No potential PCB-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc.) was observed on the subject property during Partner's reconnaissance.

### **6.2.5 Strong, Pungent, or Noxious Odors**

No strong, pungent, or noxious odors were evident during the site reconnaissance.

### **6.2.6 Pools of Liquid**

No pools of liquid were observed on the subject property during the site reconnaissance.

### **6.2.7 Drains, Sumps, and Clarifiers**

No drains, sumps, or clarifiers were observed on the subject property during the site reconnaissance.

### **6.2.8 Pits, Ponds, and Lagoons**

No pits, ponds, or lagoons were observed on the subject property during the site reconnaissance.

### **6.2.9 Stressed Vegetation**

No stressed vegetation was observed on the subject property during the site reconnaissance.

### **6.2.10 Additional Potential Environmental Hazards**

No additional environmental hazards, including landfill activities or radiological hazards, were observed during the site reconnaissance.

## **6.3 Non-ASTM Services**

### **6.3.1 Asbestos-Containing Materials (ACMs)**

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building that have not been appropriately tested are "presumed asbestos-containing material" (PACM).

The subject property is not currently improved with permanent structures; as such, an asbestos evaluation was not considered within the scope of this assessment.

### **6.3.2 Lead-Based Paint (LBP)**

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm<sup>2</sup> (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

The subject property is not currently improved with permanent structures; as such, lead-based paint was not considered within the scope of this assessment.

### **6.3.3 Radon**

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

<b>EPA Radon Zones</b>		
<b>EPA Zones</b>	<b>Average Predicted Radon Levels</b>	<b>Potential</b>
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 3. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

#### **6.3.4 Lead in Drinking Water**

According to available information, a public water system operated by the City of Lathrop serves the subject property vicinity. According to the 2019 Water Quality Report, the source of public water for the City of Lathrop is groundwater from public wells located within the city limits. The exact location of the wells could not be determined. No evidence of water supply wells was observed on or adjacent to the subject property. According to the City of Lathrop and the 2019 Annual Water Quality Report, water supplied to the subject property is in compliance with all State and Federal regulations pertaining to drinking water standards, including lead and copper.

#### **6.3.5 Mold**

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g. in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

The subject property is not currently improved with structures; as such, a visual assessment of mold was not considered within the scope of this assessment.

### **6.4 Adjacent Property Reconnaissance**

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. No items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs, strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards.

## 7.0 FINDINGS AND CONCLUSIONS

---

### Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- According to a historical review, the subject property has been used for agricultural purposes from at least 1915 until 2006. Since portions of the subject property parcel were historically used for agricultural purposes, there is a potential that agricultural related chemicals including pesticides, herbicides, and fertilizers may have been used and stored onsite. No evidence of pesticide or herbicide mixing areas or bulk storage areas was observed during the site reconnaissance or during Partner's review of historical aerial photographs. According to information provided by the client, the subject property is planned for commercial/warehouse development. The occupied areas of the subject property will either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil. Additionally, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely been present, if at all) will be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on planned

development activities, Partner concludes that the possible use of agricultural chemicals does not represent a recognized environmental condition or a human health risk, and no additional investigation is required. Additionally, based on this information, vapor migration is not expected to represent a significant environmental concern at this time.

### **Conclusions, Opinions, and Recommendations**

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, San Joaquin County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property; however, environmental issues were identified. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

## 8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

---

Partner has performed a Phase I Environmental Site Assessment of the property located at APN 192-020-140-000, 192-020-590-000, and 192-020-600-000 in Lathrop, San Joaquin County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:



Christopher Olsen  
Environmental Professional

Reviewed By:



Jenna Plymell  
Senior Author



Michael T. Chang  
Principal

## 9.0 REFERENCES

---

### Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Aerial Photographs (1937-2016)

EDR, City Directory Image Report, February 2021

EDR, Radius Report, February 2021

EDR, Topographic Maps (1915-2012)

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, March 2021

United States Department of Agriculture, Natural Resources Conservation Service, accessed via internet, March 2021

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, March 2021

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, March 2021

United States Geological Survey, accessed via the Internet, March 2021

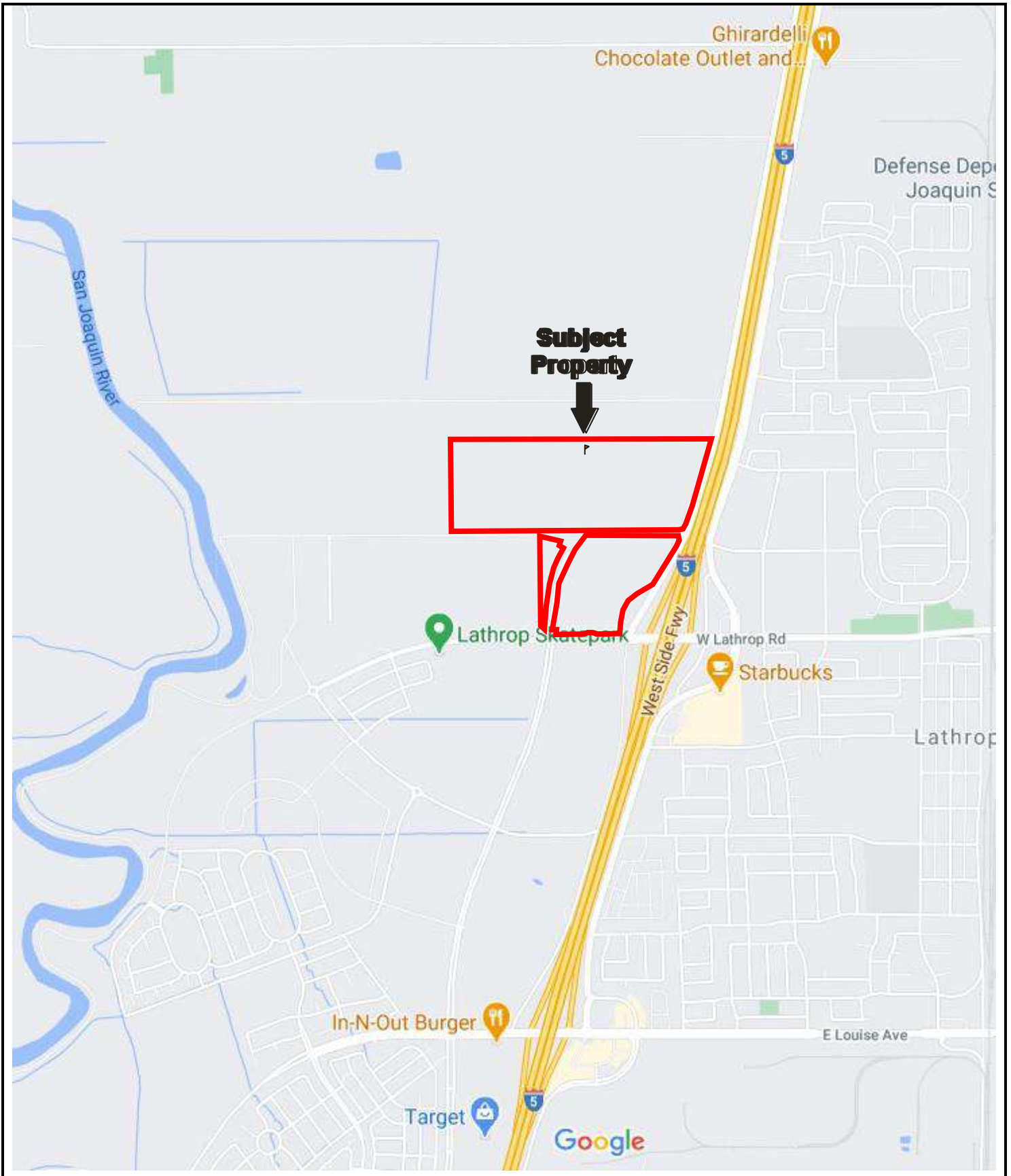
United States Geological Survey Topographic Map 2012, 7.5-minute series, accessed via internet, March 2021



## **FIGURES**

---

- 1 SITE LOCATION MAP**
- 2 SITE PLAN**
- 3 TOPOGRAPHIC MAP**



Drawing Not To Scale

KEY:  
Subject Property 

**FIGURE 1: SITE LOCATION MAP**  
Project No. 21-308862.1

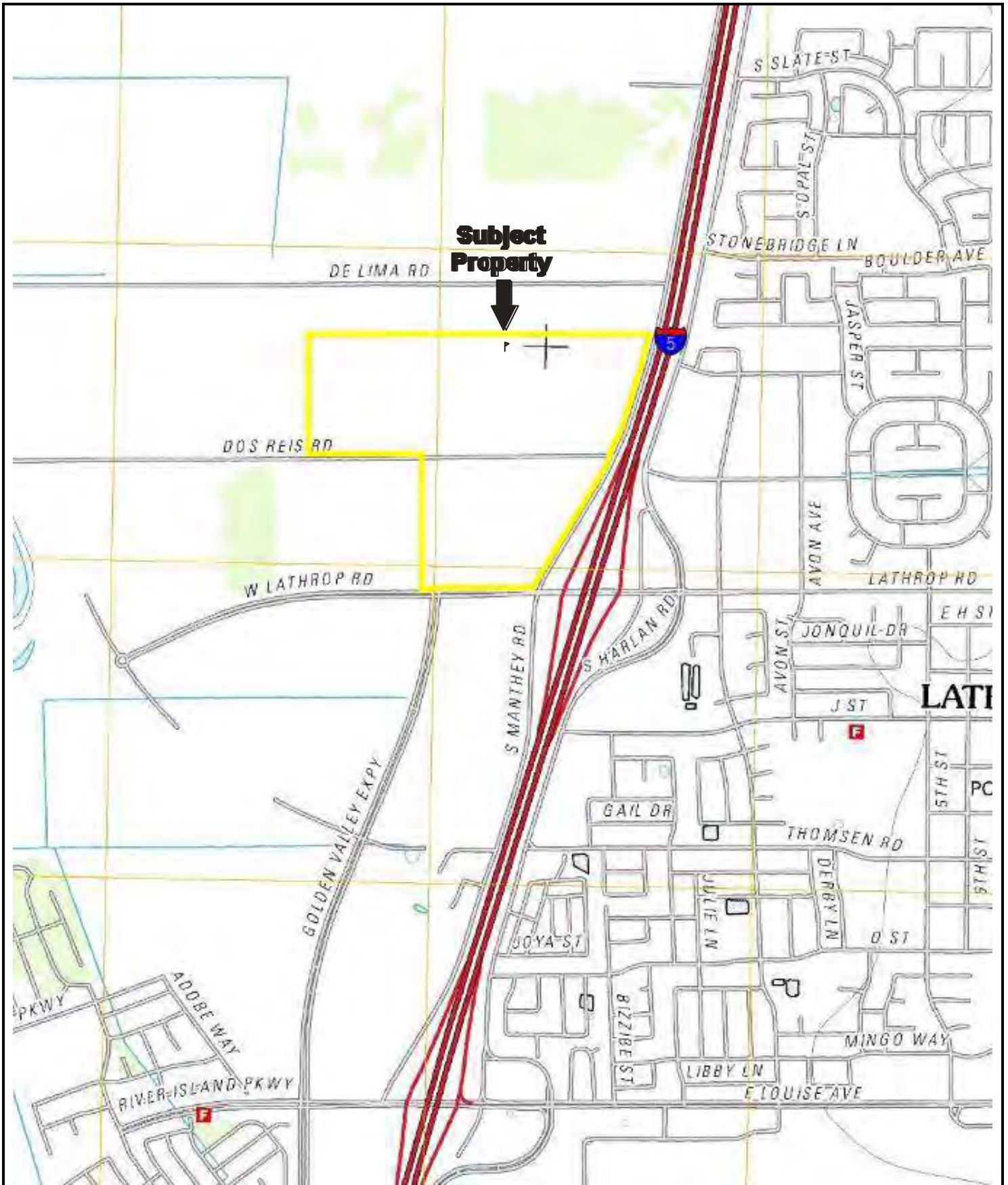


**GROUNDWATER FLOW**



KEY:  
Subject Property

**FIGURE 2: SITE PLAN**  
Project No. 21-308862.1



USGS 7.5 Minute *Lathrop, California* Quadrangle  
 Created: 2012

KEY:  
 Subject Property 

**FIGURE 3: TOPOGRAPHIC MAP**  
 Project No. 21-308862.1

## **APPENDIX A: SITE PHOTOGRAPHS**

---



1. View north of Parcel 192-020-590



2. View south of Parcel 192-020-590



3. View south of Parcel 192-020-590



4. View east of Parcel 192-020-600



5. View east of Parcel 192-020-600



6. View north of Parcel 192-020-600



7. View of wood debris on the northern side of Parcel 192-020-600



8. Signage at the southwestern corner of Parcel 192-020-600



9. Agricultural equipment on Parcel 192-020-600



10. Power pole at the northern end of Parcel 192-020-600



11. Dirt road connecting the northern terminus of Golden Valley Pkwy with Don Reis Road



12. View north of Parcel 192-020-140



13. View north of Parcel 192-020-140



14. View north of Parcel 192-020-140



15. View west of Parcel 192-020-140



16. View west of Parcel 192-020-140



17. View of the western end of Parcel 192-020-140



18. View of soil piles on Parcel 192-020-140





19. Vacant land south of Spartan Way



20. Intersection of Spartan Way and Golden Valley Parkway and vacant land south of Spartan Way



21. Vacant warehouse adjacent to the west of Parcel 192-020-590



22. Residence south of Parcel 192-020-140



23. Residence south of Parcel 192-020-140



24. Agricultural land west of Parcel 192-020-140



25. Residence north of Parcel 192-020-140



26. Residence north of Parcel 192-020-140



27. Pond, water tank, and pump equipment south of Parcel 192-020-140



28. Equipment enclosure and driveway to pond south of Parcel 192-020-140

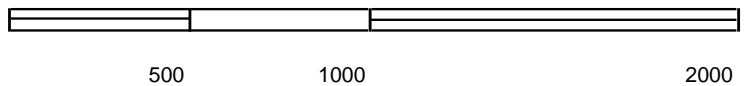
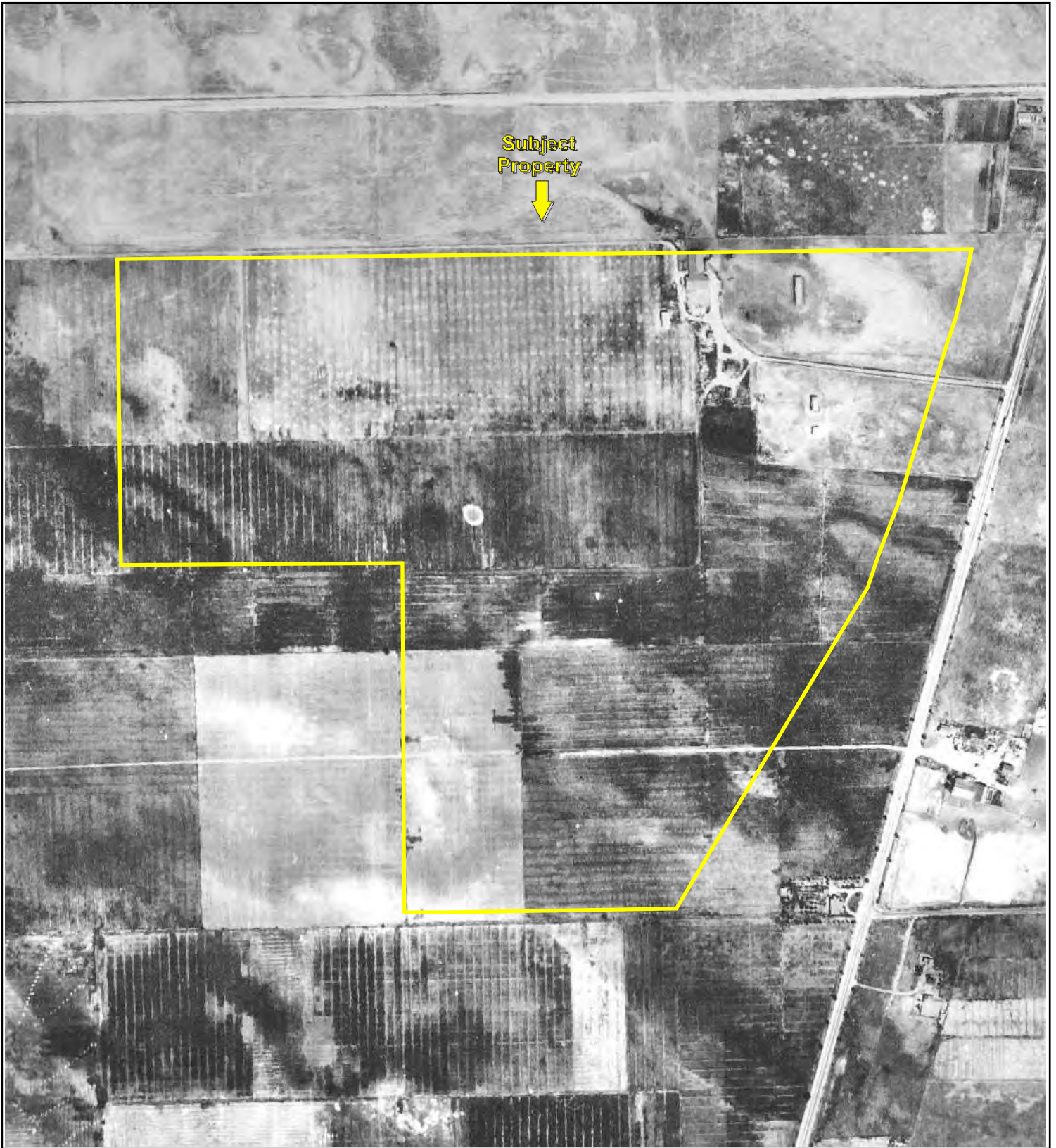


29. Agricultural land south of Parcel 192-020-140

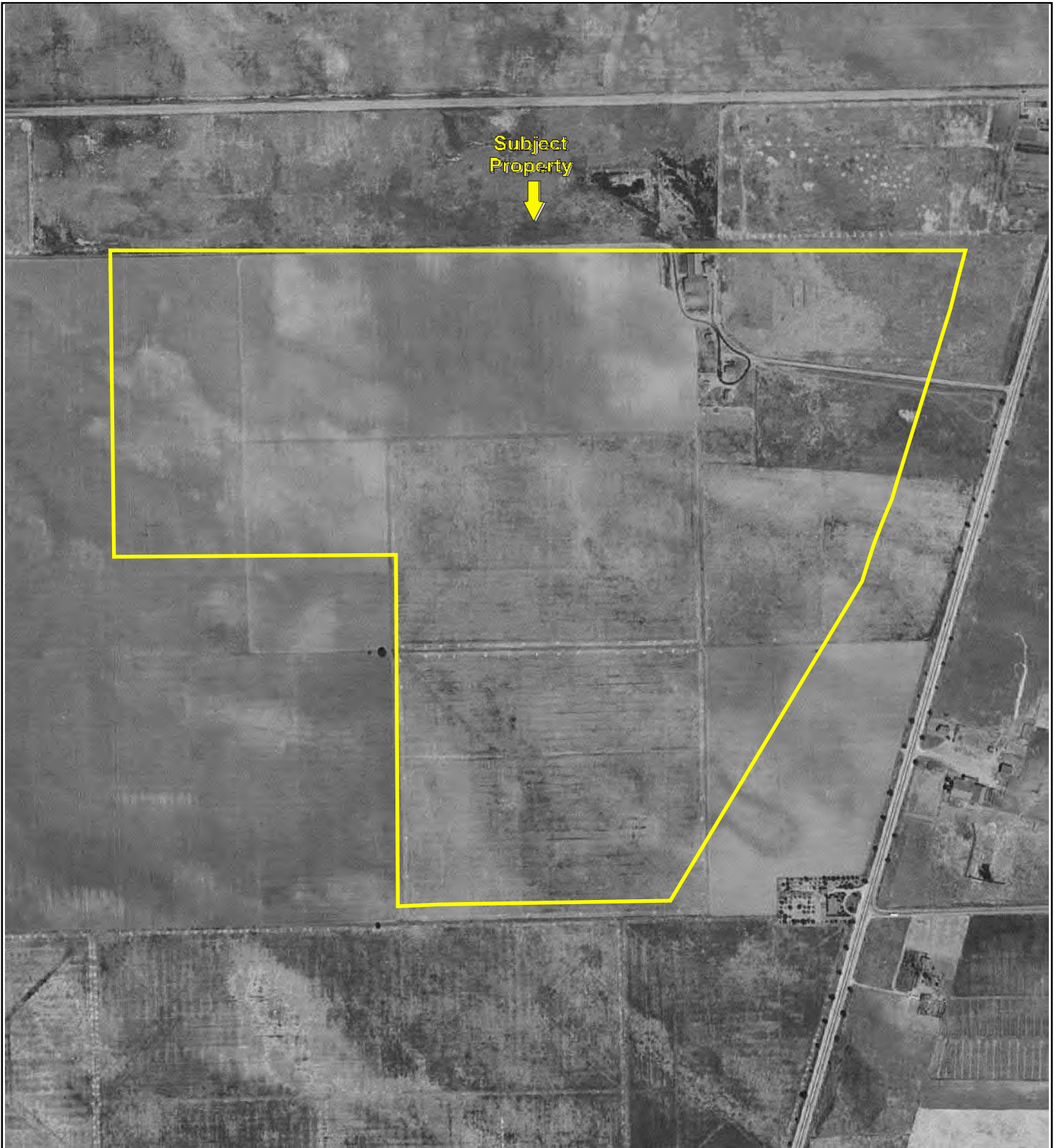


30. Agricultural land south of Parcel 192-020-140

## **APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION**



Key: Subject Property 

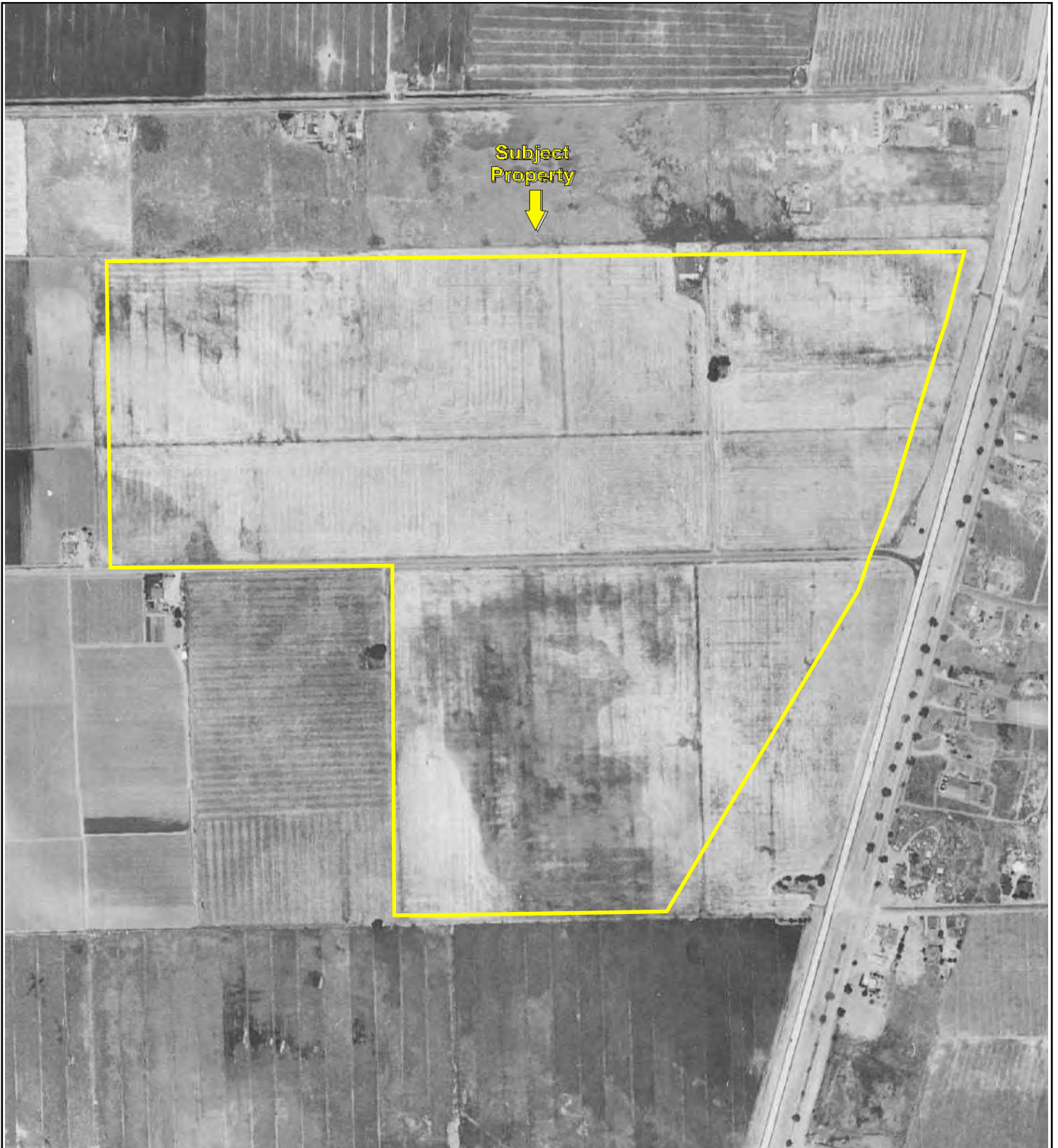


500

1000

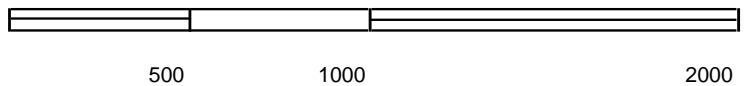
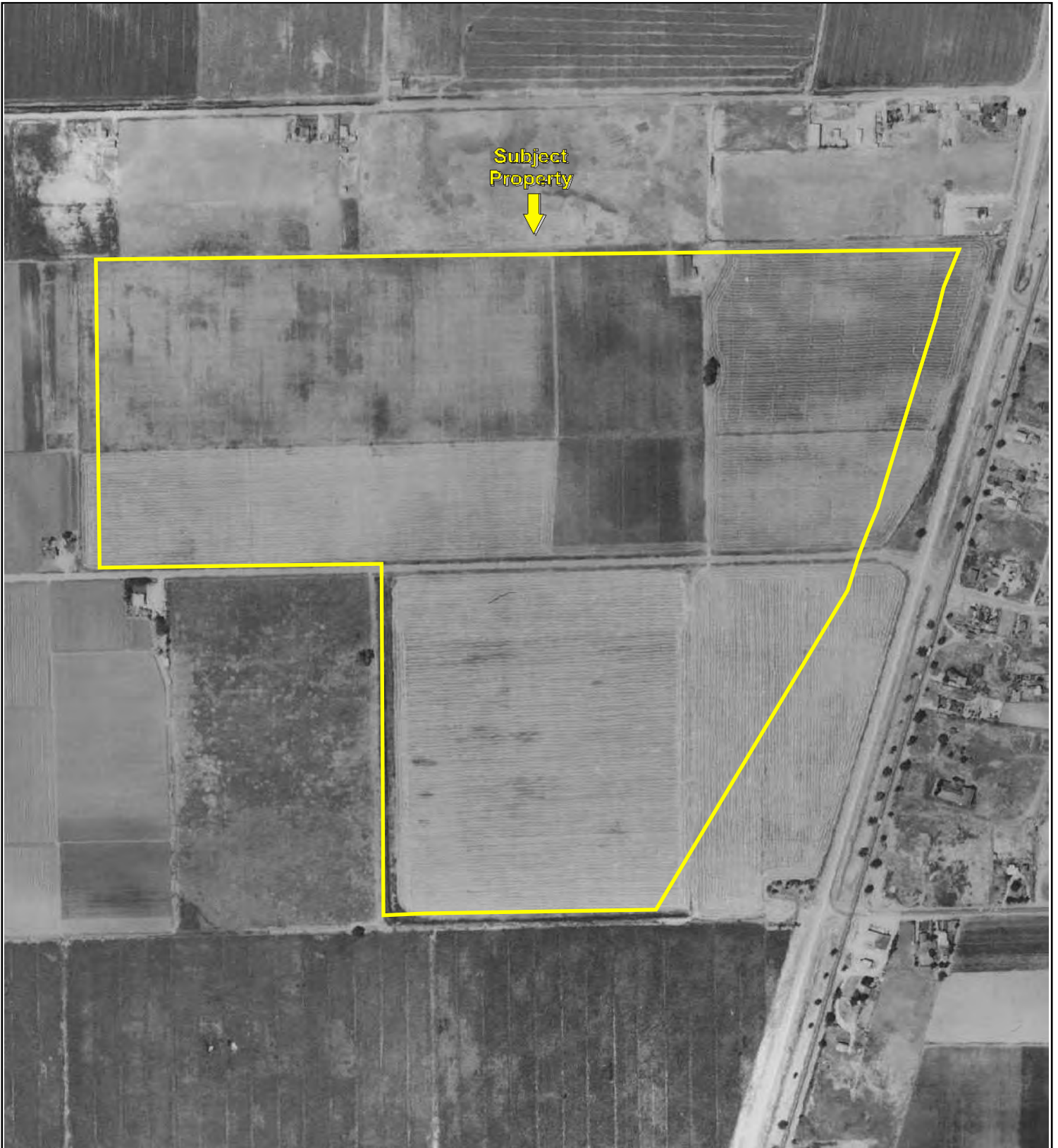
2000

Key: Subject Property 

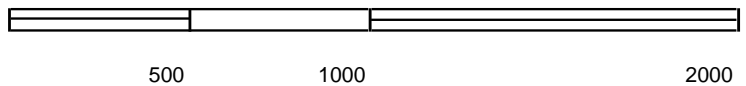
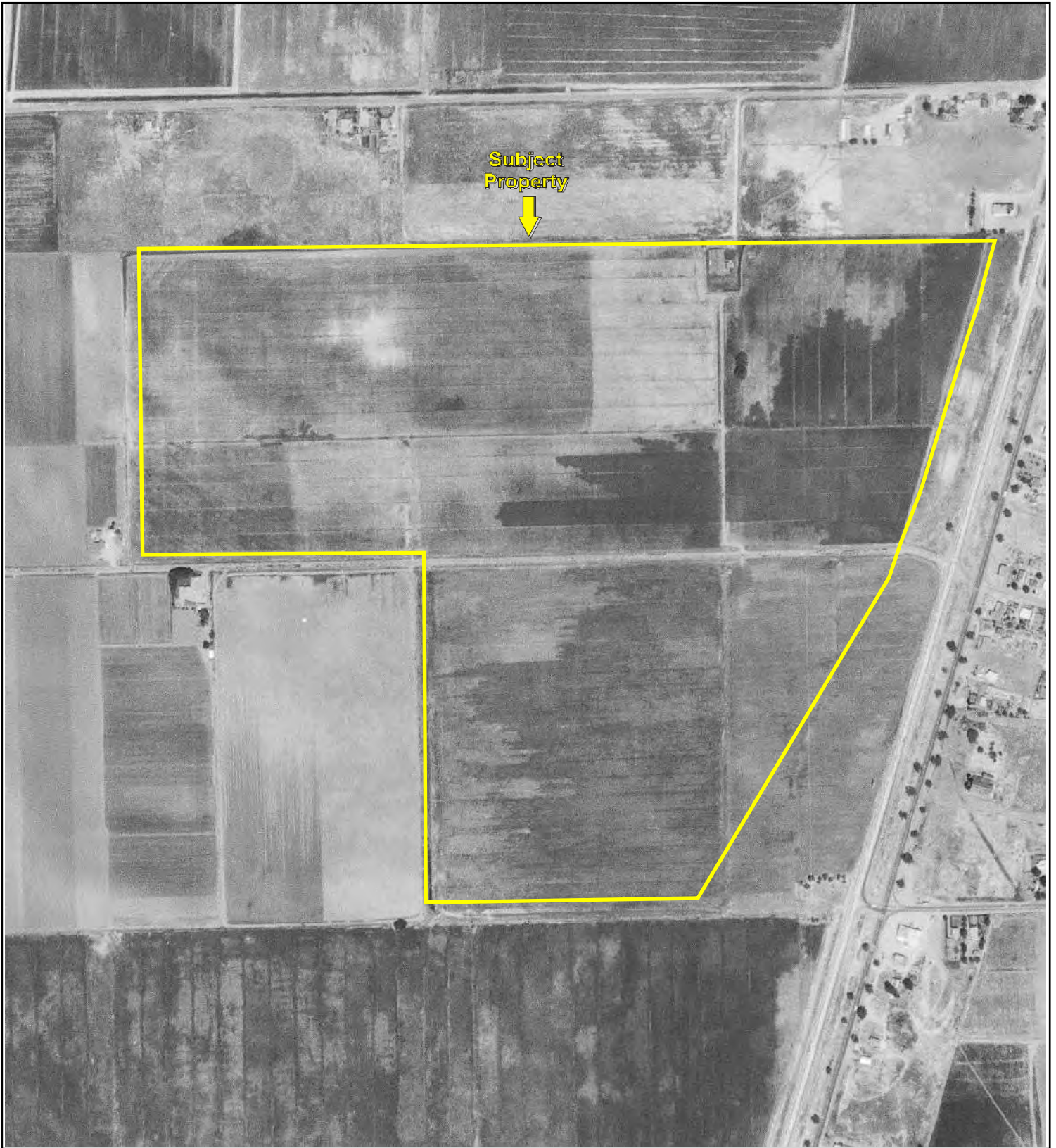


500 1000 2000

Key: Subject Property 

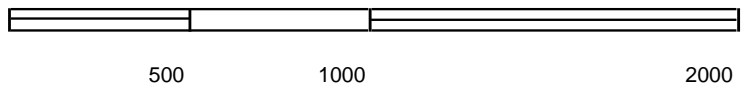
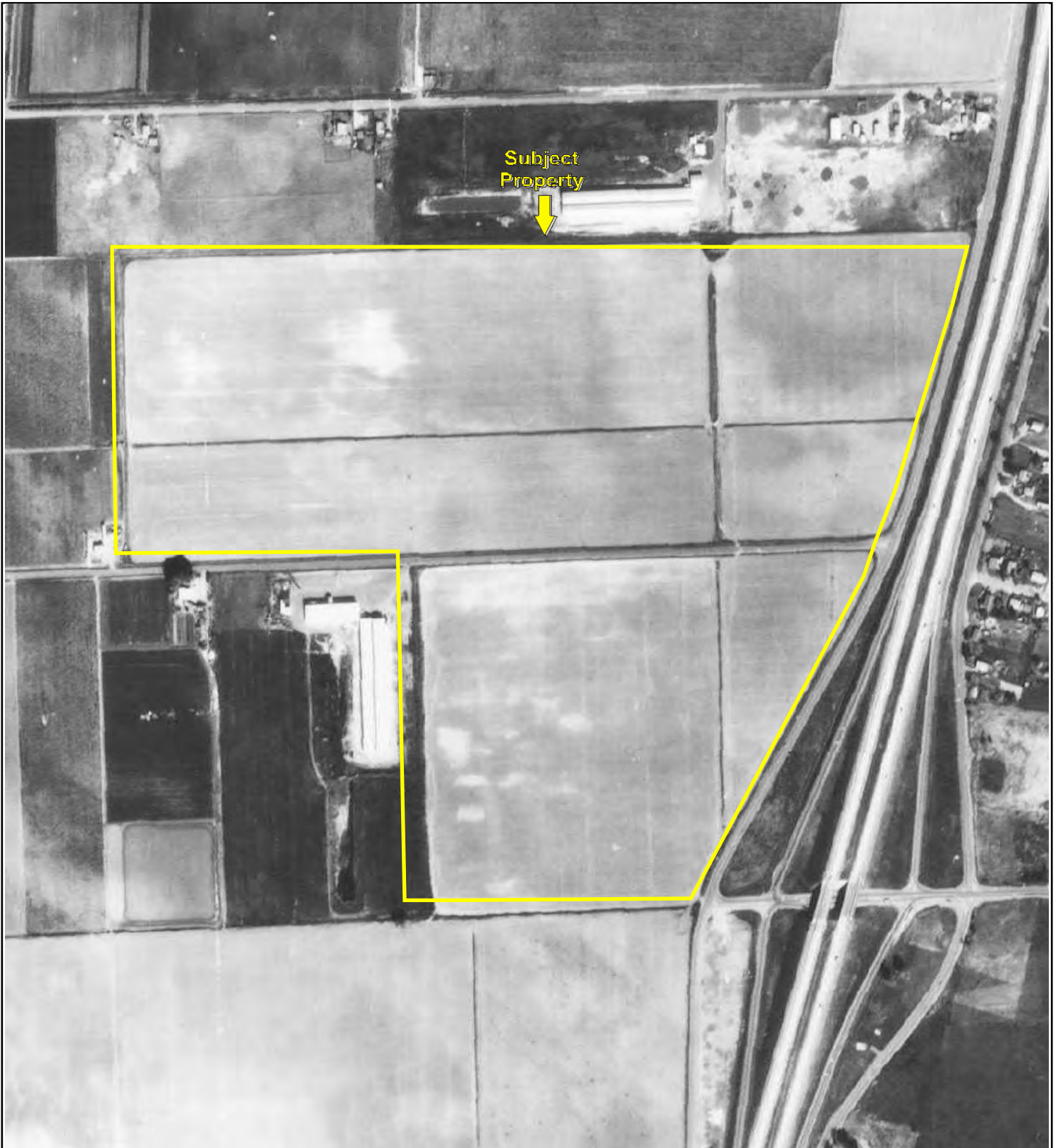


Key: Subject Property 

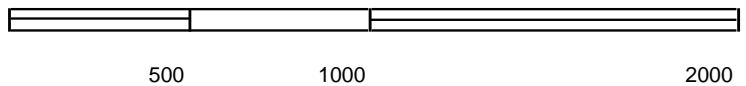


Key: Subject Property 

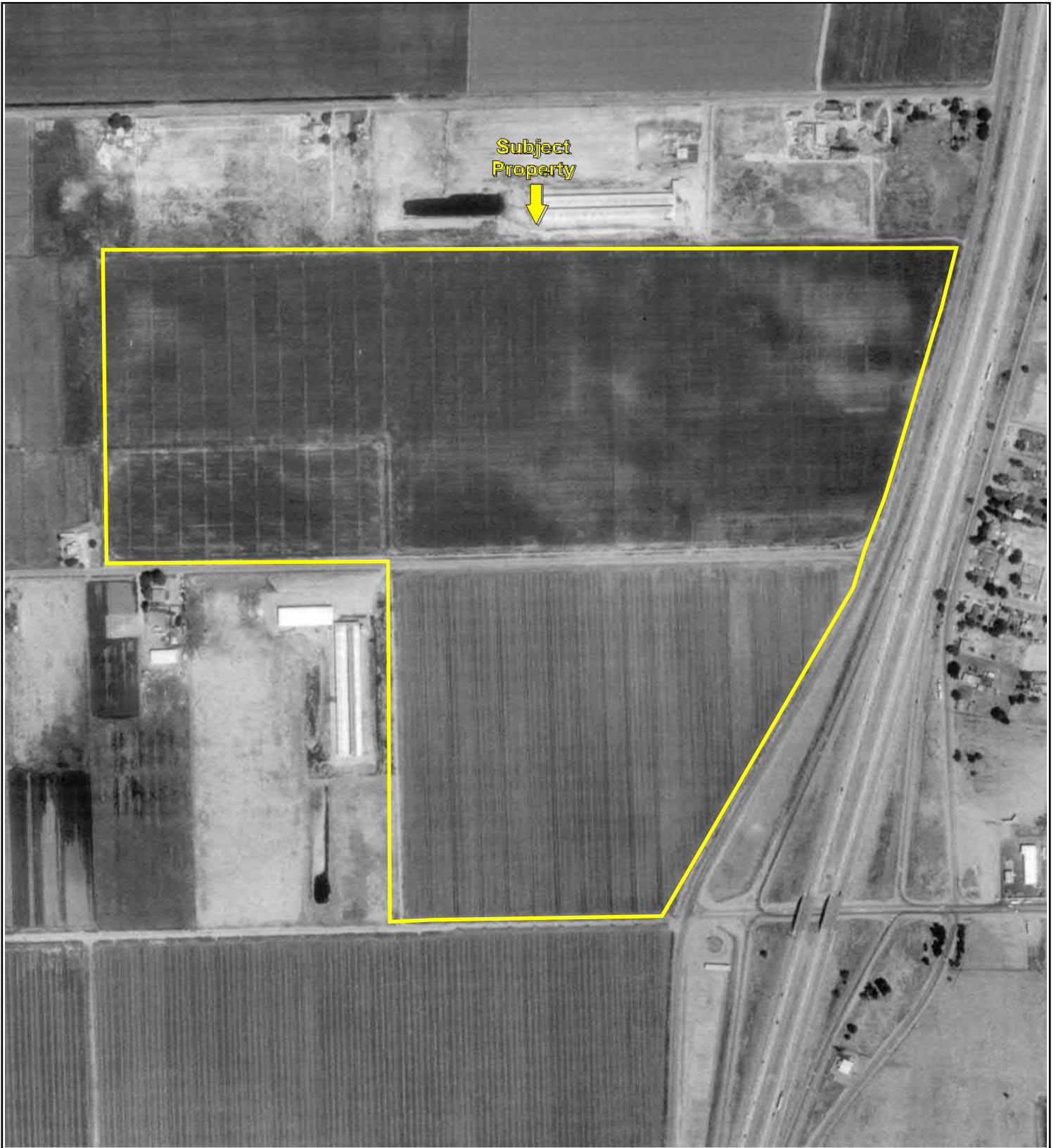




Key: Subject Property 



Key: Subject Property 



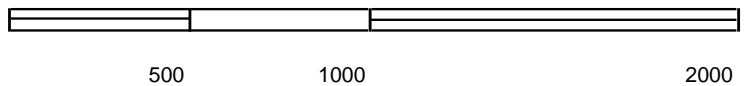
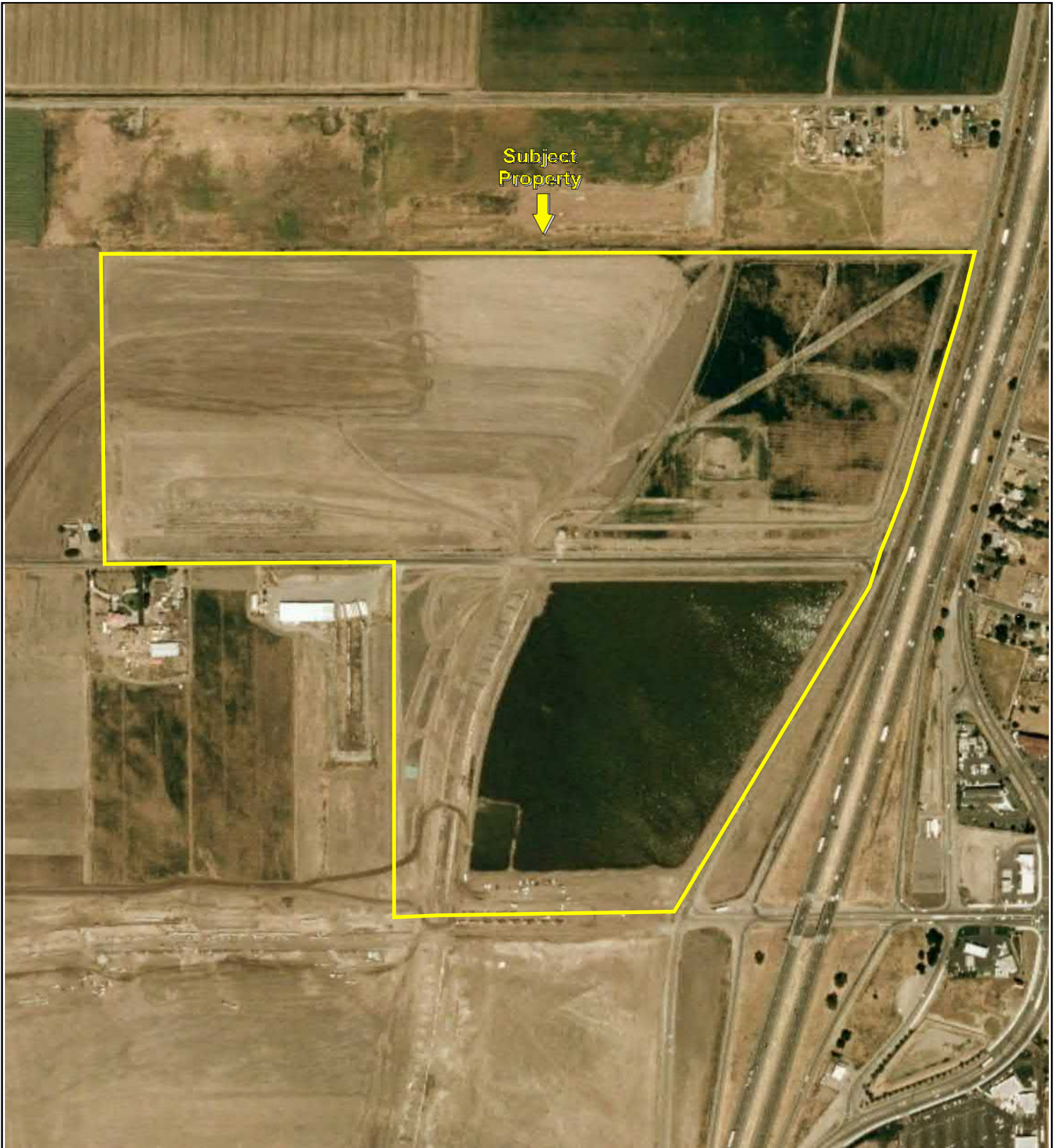
500

1000

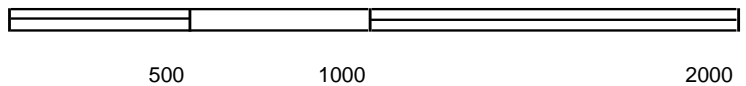
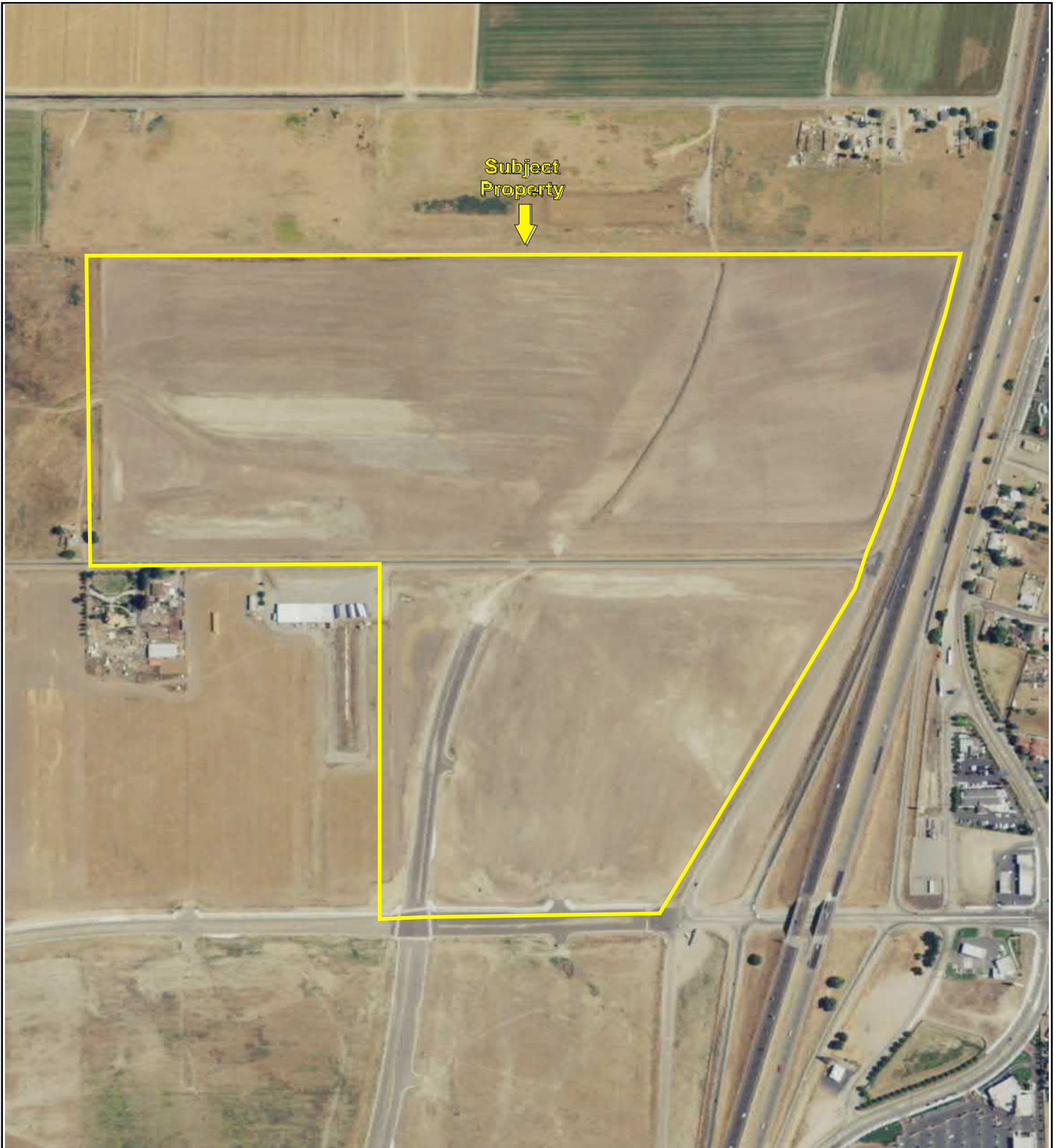
2000



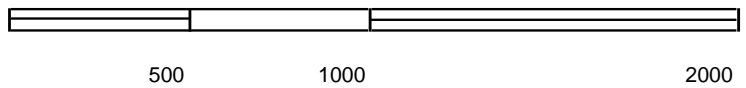
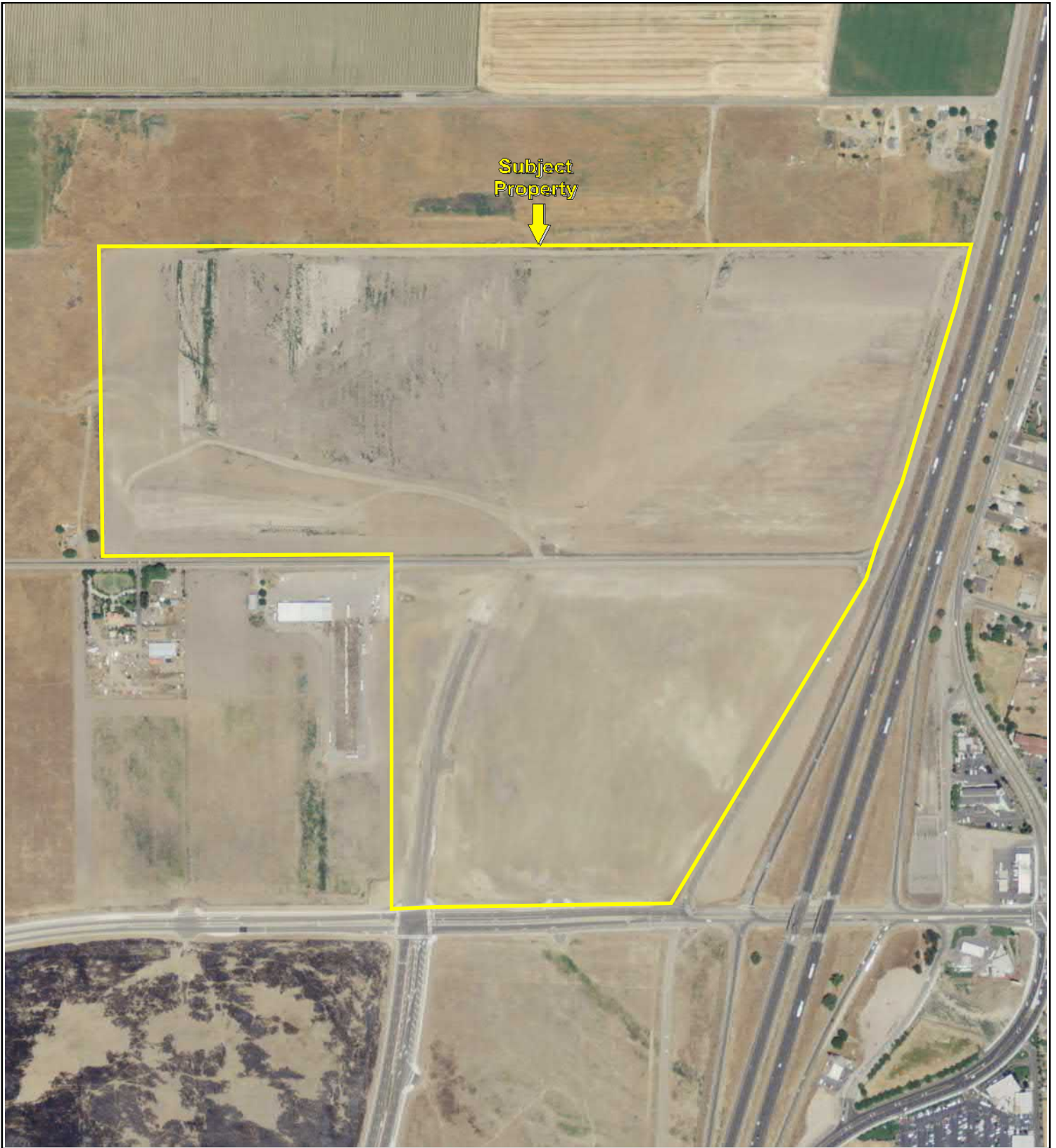
Key: Subject Property 



Key: Subject Property 



Key: Subject Property 



Key: Subject Property 



Subject  
Property



500

1000

2000



Key: Subject Property 

APN 191-220-14, 191-220-59, and 191-220-60

14101 S Manthey Rd

Lathrop, CA 95330

Inquiry Number: 6375198.3

February 22, 2021

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



# Certified Sanborn® Map Report

02/22/21

**Site Name:**

APN 191-220-14, 191-220-59,  
14101 S Manthey Rd  
Lathrop, CA 95330  
EDR Inquiry # 6375198.3

**Client Name:**

Partner Engineering and Science, Inc.  
2154 Torrance Blvd, Suite 200  
Torrance, CA 90501-0000  
Contact: Vanessa Pina



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Partner Engineering and Science, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## Certified Sanborn Results:

**Certification #** 79B4-46D7-A8F3

**PO #** 21-308862.1

**Project** 21-308862.1

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 79B4-46D7-A8F3

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

### Limited Permission To Make Copies

Partner Engineering and Science, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

### Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice. Copyright 2021 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

**APN 191-220-14, 191-220-59, and 191-220-60**

14101 S Manthey Rd  
Lathrop, CA 95330

Inquiry Number: 6375198.5  
February 24, 2021

# The EDR-City Directory Image Report

## TABLE OF CONTENTS

### SECTION

Executive Summary

Findings

City Directory Images

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

### **Disclaimer - Copyright and Trademark Notice**

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.



### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1986	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1985	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1981	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1978	<input type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1973	<input type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO
1968	<input type="checkbox"/>	<input type="checkbox"/>	POLK DIRECTORY CO



## FINDINGS

### TARGET PROPERTY STREET

14101 S Manthey Rd  
Lathrop, CA 95330

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
<b><u>DE LIMA RD</u></b>			
2017	pg A1	EDR Digital Archive	
2014	pg A6	EDR Digital Archive	
2010	pg A10	EDR Digital Archive	
2005	pg A14	EDR Digital Archive	
2000	pg A17	EDR Digital Archive	
1995	pg A19	EDR Digital Archive	
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1985	pg A25	Haines Criss-Cross Directory	
1981	pg A29	Haines Criss-Cross Directory	
1978	-	POLK DIRECTORY CO	Street not listed in Source
1973	-	POLK DIRECTORY CO	Street not listed in Source
1968	-	POLK DIRECTORY CO	Street not listed in Source

### **DOS REIS RD**

2017	pg A2	EDR Digital Archive	
2014	pg A7	EDR Digital Archive	
2010	pg A11	EDR Digital Archive	
2005	pg A15	EDR Digital Archive	
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	pg A20	EDR Digital Archive	
1992	pg A22	EDR Digital Archive	
1985	pg A26	Haines Criss-Cross Directory	
1981	pg A30	Haines Criss-Cross Directory	
1978	-	POLK DIRECTORY CO	Street not listed in Source
1973	-	POLK DIRECTORY CO	Street not listed in Source
1968	-	POLK DIRECTORY CO	Street not listed in Source

## FINDINGS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
<b><u>GOLDEN VALLEY PKWY</u></b>			
2017	pg A3	EDR Digital Archive	
2014	pg A8	EDR Digital Archive	
2005	-	EDR Digital Archive	Target and Adjoining not listed in Source
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1978	-	POLK DIRECTORY CO	Street not listed in Source
1973	-	POLK DIRECTORY CO	Street not listed in Source
1968	-	POLK DIRECTORY CO	Street not listed in Source

### **GOLDEN VLY**

2017	pg A4	EDR Digital Archive	
------	-------	---------------------	--

### **GOLDEN VLY PKWY**

2010	pg A12	EDR Digital Archive	
------	--------	---------------------	--

### **S MANTHEY RD**

2017	pg A5	EDR Digital Archive	
2014	pg A9	EDR Digital Archive	
2010	pg A13	EDR Digital Archive	
2005	pg A16	EDR Digital Archive	
2000	pg A18	EDR Digital Archive	
1995	pg A21	EDR Digital Archive	
1992	pg A24	EDR Digital Archive	
1985	pg A27	Haines Criss-Cross Directory	
1985	pg A28	Haines Criss-Cross Directory	
1981	pg A31	Haines Criss-Cross Directory	
1981	pg A32	Haines Criss-Cross Directory	
1978	-	POLK DIRECTORY CO	Street not listed in Source
1973	-	POLK DIRECTORY CO	Street not listed in Source
1968	-	POLK DIRECTORY CO	Street not listed in Source

## FINDINGS

### CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### DOS REIS RD

1992	pg. A23	EDR Digital Archive
------	---------	---------------------



## **City Directory Images**

**DE LIMA RD 2017**

62	BLACK, MELISSA
80	CORTEZ, RUTH
88	DEROSE, MARJORIE
600	WIDMER, DONALD L
1020	LEAL, LOUIS T
1287	HOGAN, RICHARD J

**DOS REIS RD 2017**

240	TAA, ROGER B
410	NAVARRO, RAMONN
422	TAA, ROMULO
525	GENES CONTRACT SERVICES MENOR, GENE
644	JUCUTAN, DARRELL D
700	ROCK, JOHN T
835	DOYLE, SONIA A
890	BANNING, JIM

**GOLDEN VALLEY PKWY 2017**

16858 TARGET  
VZW AT TARGET 2347 LATHROP  
17259 TRIAD FAMILY SERVICES  
17270 IMAGE CHANGERS CHURCH  
T J FIG



-

**GOLDEN VLY 2017**

16858 CVS PHARMACY

**S MANTHEY RD 2017**

10431 ACOBA, FRANK  
10465 ACOBA, MATTHEW M  
10499 SERRANO, MICHAEL A  
10549 BECKWITH, DOUGLAS D  
10623 ZAREVICH, WILLIAM G  
11161 ALAREZ, SANJUANA  
11163 SIMON, JUANA  
11165 SUAREZ, EDUARDO  
11199 SINGH, MATAB  
11293 KELLY, GURDIP  
11401 AQUINO, ROGER T  
11471 ROBERTSON, TESSIE L  
11591 AQUINO, THEODORE V  
12333 SOPOLIGA, MICHELLE L  
12423 MENDIOLA, SABRINA A  
12565 SILVER CHASE SELF STORAGE  
UHAUL  
12965 WIDMER, GEORGIANN  
15929 AA SIGN IMAGE  
15933 CREATIVE OUTDOOR ENVIRONMENTS INC  
16444 JAQUES, THOMAS A  
16456 EDEN GARDEN SUPPLY  
17211 BITE & BABY  
17261 THRIVE CHURCH IN  
17395 CHEVRON  
17600 CHRIS TRIPI DVM  
KECIA VALDEZ DVM  
LATHROP VETERINARY CENTER  
17605 DELTA POWER SPORTS  
NATIONWIDE FLEET  
18426 AVILA, JESUS  
18666 AGUILAR, TERESA J

**DE LIMA RD 2014**

34 OCCUPANT UNKNOWN,  
42 PEREZ, PADILLA C  
44 MIZE, MAGEN B  
ROBERTS, EUGENE M  
SALAZAR, DAVID  
62 BLACK, MELISSA  
80 BLACK, MONICA A  
88 DEROSE, MARJORIE  
600 WIDMER, DONALD L  
1020 LEAL, LOUIS T  
1287 LEDDY, PAT  
1967 NAIMYAR, OSMAN M

**DOS REIS RD 2014**

240	TAA, ROGER B
422	TAA, ROMULO B
525	MENOR, SAMANTHA A
627	OCCUPANT UNKNOWN,
631	MENOR, DELIA T
644	JUCUTAN, DARRELL D
660	OCCUPANT UNKNOWN,
682	OCCUPANT UNKNOWN,
700	ROCK, JOHN T
835	DOYLE, SONIA A
890	BANNING, JIM



**GOLDEN VALLEY PKWY 2014**

16858 TARGET  
VZW AT TARGET 2347 LATHROP  
17270 ANDERSON, LISA  
IMAGE CHANGERS CHURCH  
TJ FIG

**S MANTHEY RD 2014**

10365 MUNGUIA, JOHN  
10377 BOBBITT, P A  
10431 ACOBA, FRANK  
10465 ACOBA, MATTHEW M  
10499 OCCUPANT UNKNOWN,  
10523 BECKWITH, DOUGLAS D  
10549 BECKWITH, DOUGLAS D  
10623 ZAREVICH, WILLIAM G  
10910 LUNDQUIST FOODS  
11161 DIXON, JESSIE  
11163 OCCUPANT UNKNOWN,  
11165 OCCUPANT UNKNOWN,  
11168 WEST, DONALD  
11199 MIRAMONTES, ALBERT R  
11293 KELLY, GURDIP  
11401 AQUINO, ROGER T  
11471 HERNANDEZ, JAIME G  
ROBERTSON, TERESITA L  
11591 AQUINO, THEODORE V  
12333 MONTOYA, JEREMIAH R  
12423 MENDIOLA, JASON J  
12565 SILVER CHASE SELF STORAGE  
12965 WIDMER, GEORGIANN  
15791 COTTON, SHARON M  
15929 AA SIGN IMAGE  
15933 CREATIVE OUTDOOR ENVIRONMENTS INC  
OCCUPANT UNKNOWN,  
16351 SANDOVAL, FRANCES  
16444 OCCUPANT UNKNOWN,  
16456 CLASSY GRASS TURF  
EDEN GARDEN & LANDSCAPE SUPPLY  
17395 CHEVRON  
17600 LATHROP VETERINARY CENTER  
TRIFI CHRIS DVM  
VALDEZ KECIA DVM  
17601 MAILLOT, FREDRICK  
17605 DELTA POWER SPORTS  
NATIONWIDE FLEET  
18426 AVILA, JESUS  
18502 RUTH, JAMES A  
18570 KNESEK, EDWARD W  
18666 CARAVALHO, DANIEL

**DE LIMA RD 2010**

34 OCCUPANT UNKNOWN,  
42 PEREZ, PADILLA C  
44 FARIA, JACQUELYN  
MIZE, MAGEN B  
62 OCCUPANT UNKNOWN,  
80 AGUIRRE, MIGUEL  
88 DEROSE, FRANK A  
456 KAUR, KIRANJIT  
600 WIDMER, DONALD L  
1020 LEAL, JOSE  
1050 AURELIO, S  
1287 LEDDY, PAT  
1967 NAIMYAR, OSMAN M

**DOS REIS RD 2010**

422	TAA, JOSE A
443	ROMENA, ISAAC R
525	CRUZ, ALAIN F
627	OCCUPANT UNKNOWN,
631	MENOR, PERRY S
644	JUCUTAN, DARRELL D
660	OCCUPANT UNKNOWN,
682	OCCUPANT UNKNOWN,
700	ROCK, JOHN T
835	DOYLE, SONIA
870	FIELD, BILL L
890	BANNING, JIM

**GOLDEN VLY PKWY 2010**

16858 TARGET  
TARGET PHARMACY  
17600 LATHROP VETERINARY CTR

**S MANTHEY RD 2010**

10365 MUNGUIA, JOHN  
10377 BOBBITT, P A  
10431 ACOBA, CHRISTINA H  
10465 OCCUPANT UNKNOWN,  
10499 APOSTOL, ROMERO V  
10523 BECKWITH, DOUGLAS D  
10549 BECKWITH, DOUGLAS D  
10623 ZAREVICH, WILLIAM G  
11161 ALANIZ, ANTONIO R  
11163 OJEDA, IRENE  
11165 DIAZ, DAYCY  
11168 WEST, DONALD  
11199 OCCUPANT UNKNOWN,  
11293 KELLEY, KANWAR S  
11471 ROBERTSON, TESSIE L  
11591 AQUINO, TEDDY V  
12333 GIGLIS HAY CO  
12423 GRANATO, STEPHANIE D  
12565 BUDGET TRUCK RENTAL  
SILVER CHASE SELF STORAGE  
12715 BLUE RHINO  
12833 NATIONAL RENT A FENCE  
PRESTON PIPELINES INC  
12965 WIDMER, ALICE J  
15791 COTTON, MAURICE  
15933 CREATIVE OUTDOOR ENVIRONMENTS  
PEREZ, FELIPE  
16444 OCCUPANT UNKNOWN,  
16456 EDEN GARDEN & LANDSCAPE SUPPLY  
17201 BIG DANS NEIGHBORHOOD DINNER  
17601 MAILLOT, FREDRICK  
17605 DELTA POWERSPORTS INC  
17772 LORA, GLORIA  
18019 MONTGOMERY, SCOTT E  
18426 AVILA, JESUS  
18502 LUCKEY, CATHIE A  
18570 GARY, GOLDEN  
18666 CARAVALHO, DANIEL

**DE LIMA RD 2005**

34 SINGH, TOSHA  
44 SINGH, TOSHA  
80 GUZMAN, RAUL  
88 DEROSE, FRANK A  
120 OCCUPANT UNKNOWN,  
310 OCCUPANT UNKNOWN,  
322 OCCUPANT UNKNOWN,  
456 JACK, WILLIAM  
600 WIDMER, DONALD L  
1020 LEAL, JOSE  
1050 AURELIO, S  
1967 SCHENDEL, WILLIAM M

**DOS REIS RD 2005**

240	SERRANO, JUAN M
410	CAL TEC WINDSHIELD REPAIR GOLF GONE WILD VERMILLION, HEIDI
422	TA, THAO P
443	ROMENA, ISAAC R
525	MENOR, FLORIAN D
627	GRAY, AUBREY E
631	MENOR, PERRY S
644	JUCUTAN, DARRELL D
660	OCCUPANT UNKNOWN,
682	OCCUPANT UNKNOWN,
700	ROCK, JOHN T
732	BAKERS PLUS FERNANDEZ, E SANTOS STYLE KENNELS
742	OCCUPANT UNKNOWN,
790	SAMORANO, DAVID A
808	OCCUPANT UNKNOWN,
835	DOYLE, BEVERLY J
870	FIELD, BILL L
890	KARP, LIZ



**S MANTHEY RD 2005**

10365 JOHNSON, JOSHUA E  
 10377 BOBBITT, P A  
 10431 ACOBA, CHRISTINA H  
 10465 OCCUPANT UNKNOWN,  
 10499 APOSTOL, ROMERO V  
 10523 BECKWITH, DOUGLAS D  
 10549 OCCUPANT UNKNOWN,  
 10623 OCCUPANT UNKNOWN,  
 10910 LUNDQUIST FOODS  
 LUNDQUIST GOURMET DOG FOOD  
 11161 DIXON, JESSIE  
 11163 OCCUPANT UNKNOWN,  
 11165 LOPEZ, MIKE  
 11168 WEST, DONALD  
 11199 BEARD, WILLIAM C  
 11293 KELLEY, KANWARJIT S  
 11401 OCCUPANT UNKNOWN,  
 11471 OCCUPANT UNKNOWN,  
 11591 AQUINO, GERRY P  
 12333 ERICKSON, BROOKE M  
 GIGLIS HAY CO  
 12965 ADAMS, GREG  
 15791 COTTON, MAURICE  
 15933 AIRRINGTON, CHERYL L  
 16444 OCCUPANT UNKNOWN,  
 16456 EDEN GARDEN & LANDSCAPE SUPPLY  
 17287 LOURDES, MARIA  
 17599 OCCUPANT UNKNOWN,  
 17601 MAILLOT, FREDRICK  
 17772 LORA, GLORIA  
 18007 RANCHEY, AJAY  
 18019 OCCUPANT UNKNOWN,  
 18041 OCCUPANT UNKNOWN,  
 18263 OCCUPANT UNKNOWN,  
 18426 AVILA, JESUS  
 18502 LUCKEY, CATHIE A  
 18666 CARAVALHO, DANIEL

**DE LIMA RD**

**2000**

34 FLORES, ENRIQUE  
42 SEKHON, RAY R

**S MANTHEY RD 2000**

10910 LUNDQUIST FOODS  
11161 DIXON, JESSIE  
11293 CHASTIAN, GINA M  
11471 HERNANDEZ, JAIME G  
12333 GOEDE, DAMIAN  
12565 C & G EGGS DISTRIBUTORS  
CREAM OF THE VALLEY INCORPORATED  
K & D ORIENTAL AMERICA PROCUCE INCORPORATED  
12965 WIDMER, JOS  
17287 OSBORN, DONNA J  
18043 ROY, ERIC  
18426 AVILA, JESUS  
18666 CARAVALHO, DANIEL  
CONNORS, PHILLIP J



-

**DE LIMA RD**

**1995**

62      ROBERTS, GERRIE

**DOS REIS RD**

**1995**

410 CABALBAG, EDWARD  
443 ROMENA, ISAAC

**S MANTHEY RD 1995**

10623 ZAREVICH, MICHAEL  
11161 DIXON, JESSIE  
11199 BEARD, BILL  
15225 HENLEY, SUSAN  
17601 MEAD, CYNTHIA  
18019 MACKAY, ROSE  
18041 MARTIN, LEO  
18043 SHARP, BONNIE  
18426 AVILA, JESUS  
18502 CUNNINGHAM, PEGGY  
18570 SAUNDERS, DENNIS W  
18666 CARAVALHO, DANIEL

**DOS REIS RD**

**1992**

732	COFFMAN, ALVIN
	COFFMAN, ALVIN
835	DOYLE, DANIEL
	DOYLE, DANIEL

**DOS REIS RD**

**1992**

732	COFFMAN, ALVIN
	COFFMAN, ALVIN
835	DOYLE, DANIEL
	DOYLE, DANIEL



**S MANTHEY RD 1992**

10910 LUNDQUIST FOODS  
11161 DIXON, JESSIE  
12565 CREAM OF THE VALLEY  
HAYRES EGG PRDCR  
18426 AVILA, JESUS  
18570 SAUNDERS, DENNIS W  
18666 CARAVALHO, DANIEL

## DE LIMA RD 1985

DE LIMA RD W 95330  
LATHROP

34	VALVERGE M	982-0286	7
44	XXXX	00	
52	YEPEZ EUFEMIA	882-0489	
68	XXXX	00	
80	ARANOA ARTHUR	982-5037	+ 5
64	XXXX	00	
68	DEROSE FRANK	982-0271	0
	DEROSE TERESA	983-0299	+ 5
120	GONZALEZ FRANCISCO	982-4407	+ 5
310	XXXX	00	
322	KEETER CARL B	982-5719	9
476	KENDRICK W C	982-1836	
1050	BUNGCAYAO M	982-1444	9
*	0 BUS	13 RES	3 NEW

DOS REIS RD

1985

# DOS REIS RD W 95330

## LATHROP

410	CABALBAG EDUARDO C	982-0431	1
414	XXXX	00	
443	ROMENA ISAAC	982-0386	
525	MENOR SEOUNDO	982-0703	3
526	XXXX	00	
627	GRAY AUBREY E	982-4798	9
631	MENOR PERRY	982-4383	2
644	JUCUTAN DARRELL O	982-5141	9
682	COOK SHARON	982-1182	+ 5
732	HUDSON JERRY	858-2015	4
808	XXXX	00	
835	DOYLE DAN	982-1363	8
	DOYLE DANIEL	858-4403	9
890	BEATTY RONALD A	983-0295	4
	0 BUS	14 RES	1 NEW

## S MANTHEY RD 1985

10365	XXXX	00
10431	XXXX	00
10499	BECKWITH CLINTON D	982-1775 3
10549	BECKWITH M B	982-0442 7
10623	XXXX	00
10910	LUNDOQUIST FOODS	983-0515 4
11161	DIXON JESSIE	858-4417 +5
11163	FLAHERTY MATT	983-0570 4
11165	HICKS RICHARD P	983-0408 +5
11199	COOK NOLAN FAYNE	982-0453
11401	XXXX	00
11471	HIM SAY	982-0384 +5
	YU SAM HUN	983-0610 4
11591	XXXX	00
12423	CARLISLE EMMETT E	982-0440 4
12565	CREAM OF THE VALLEY	982-5077 9
	NAYRES EGG PRODCA	982-1151 8
	NAYRES EGG PRODCA	982-1494 3
	NAYRES EGG PRODCA	982-1407 1
	NAYRES EGG PRODUCER	982-1164 4

## S MANTHEY RD 1985

Target Street	Cross Street	Source
MANTHEY RD S		95330 CONT
127 5	WIDMER JOS	982-1517 3
152 5	XXXX	00
1579 1	XXXX	00
15933	PHILLIPS WM JR	982-1675 3
16444	XXXX	00
17601	RATTO VERNON	982-0389 3
18041	MCCALL BETTY	982-0746 + 5
18043	PERRY ALLEN	982-0445 0
	PERRY J	982-4305 2
	PERRY JACK TAUDOMY	982-1647 4
18283	VALLENTYNE DON	952-5794 2
18426	AYLA JESUS	856-2742 2
	KING WILLIE A	982-0174 2
18502	MOLLESON RICHARD	982-0424 2
18570	SAUNDERS DENNIS W	858-2258 2
18586	CARVALHO DANIEL	856-4470 2
	CARVALHO DANL	582-4178 + 5
	B BUS 30 RES	6 NEW

## DE LIMA RD 1981

# DE LIMA RD W 95330

## LATHROP

34	VALVERDE M	982-0286	7
44	ARANDA ARTHUR	982-5037	9
62	YEPEZ EUFEMIA	982-0489	
68	XXXX	00	
80	XXXX	00	
84	ARROYO GUILLERMO D	982-1648	9
88	DEROSE FRANK	982-0271	0
120	XXXX	00	
322	KEETER CARL B	982-5719	9
476	KENDRICK W C	982-1836	
1050	BUNGAYAO M	982-1444	9
★	0 BUS	11 RES	0 NEW

DOS REIS RD 1981

# DOS REIS RD W 95330

## LATHROP

410	CABALBAGS EDDIE	982-0431 +1
414	XXXX	00
443	ROMENA ISAAC	982-0386
525	MENOR SEGUNDO	982-0703 3
526	XXXX	00
627	GRAY A E	982-4798 9
631	MENOR PERRY	982-4463 +1
644	JUCUTAN DARRELL D	982-5141 9
682	XXXX	00
700½	LAIGO ANNETTA	982-4860 +1
732	GRAVES JAMES	982-5799 +1
808	AVEN JOE P	982-5389 6
835	DOYLE DAN	982-1363 8
	DOYLE DANIEL	858-4403 9
★	0 BUS	14 RES 4 NEW

## S MANTHEY RD 1981

# MANTHEY RD S 95330

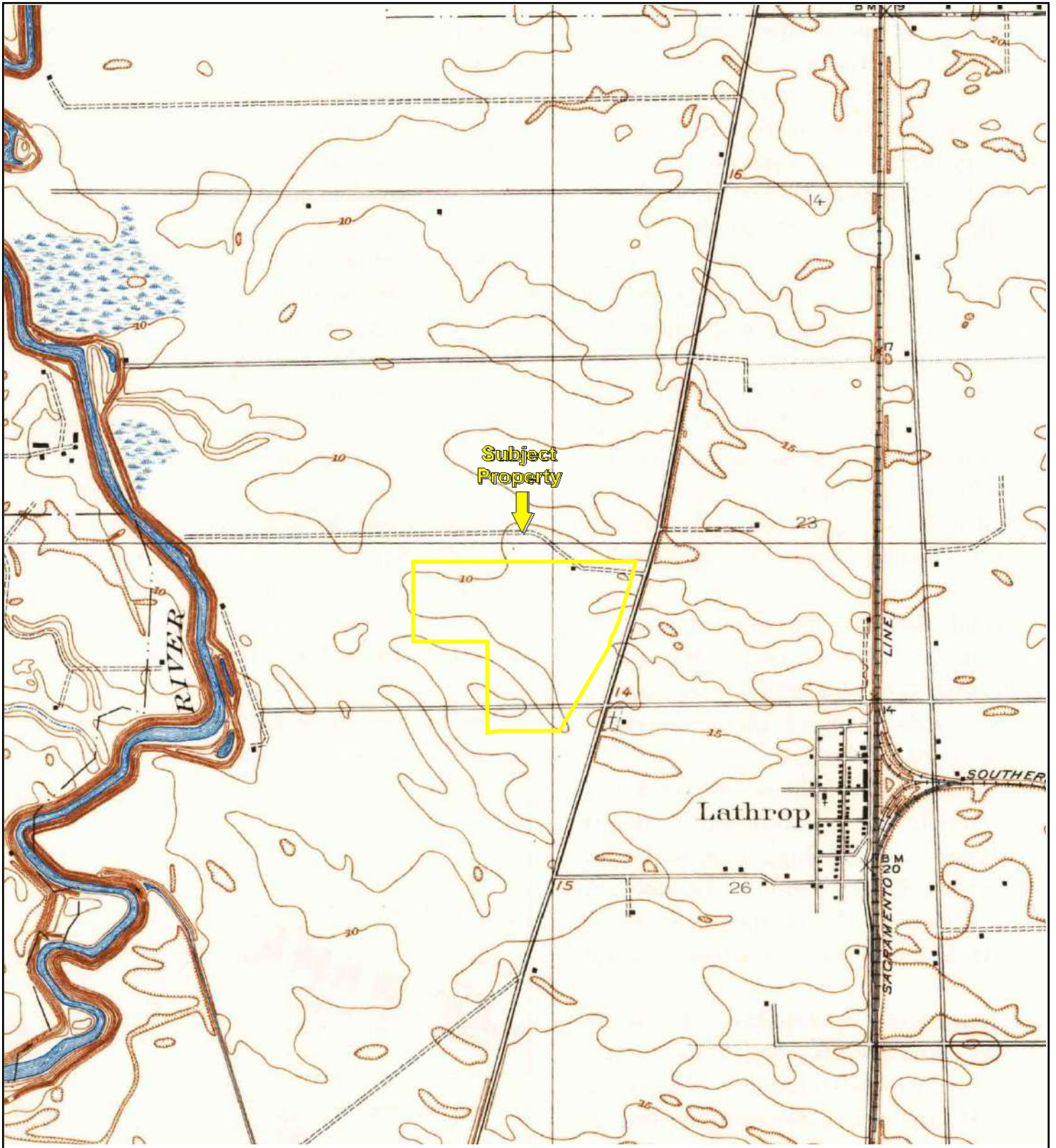
## LATHROP

10365	XXXX	00	
10431	XXXX	00	
10499	BECKWITH CLINTON D	982-1775	3
10549	BECKWITH M B	982-0442	7
10623	XXXX	00	
11161	BOONE B G	982-1357	3
11165	XXXX	00	
11199	COOK NOLAN FAYNE	982-0453	4
11401	RUATOS MAGDALENA	982-1027	+1
11471	COLOMA ALFREDO	982-5347	+1
11591	XXXX	00	
12423	CARLISLE EMMETT E	982-0440	9
12565	CREAM OF THE VALLEY	982-5077	9
	HAYRES EGG PRDCR	982-1151	8
	HAYRES EGG PRDCR	982-1494	3

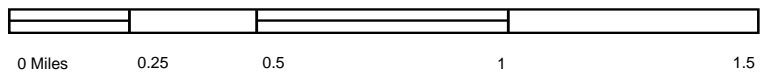


## S MANTHEY RD 1981

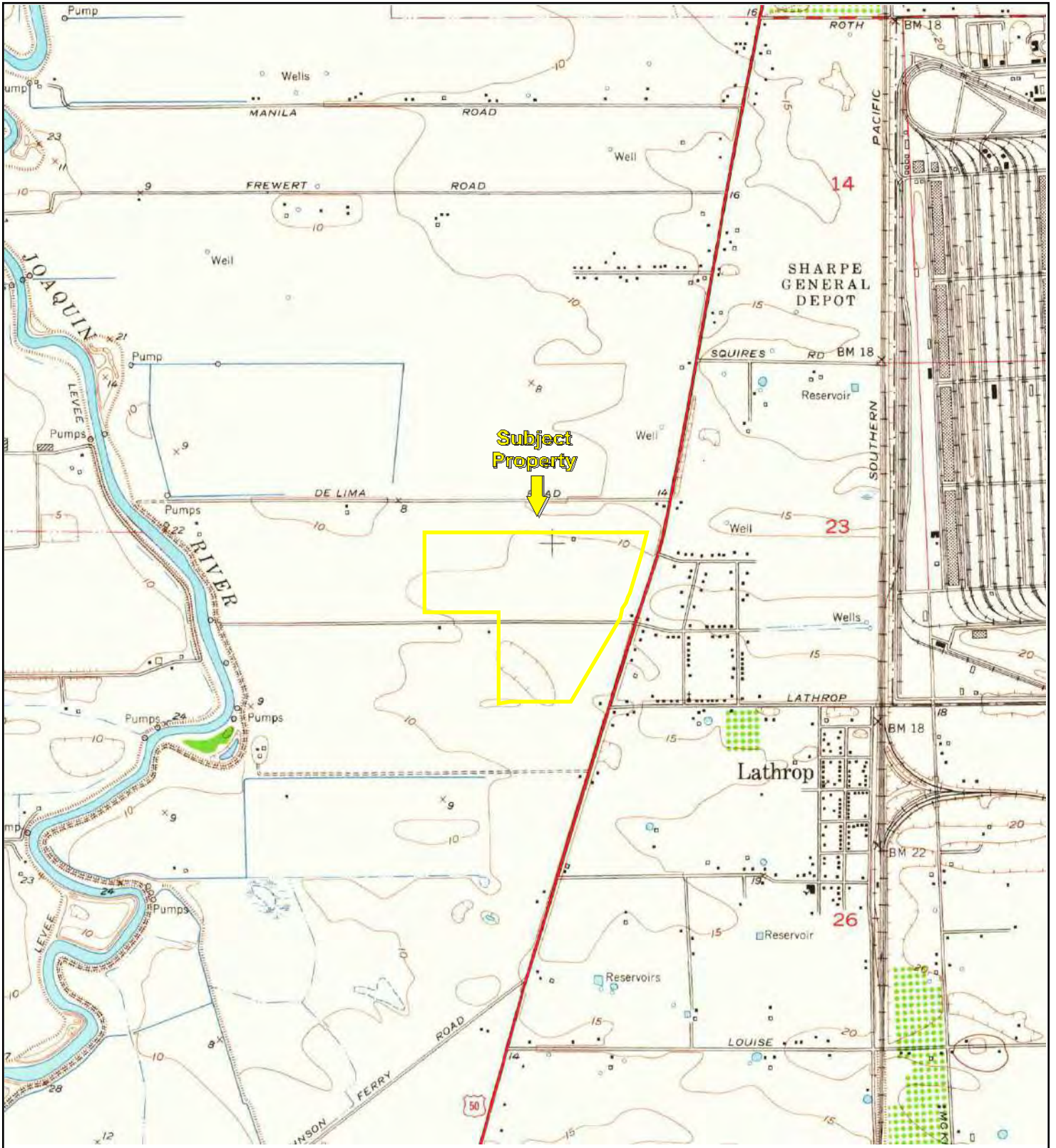
	MANTHEY RD S	95330 CONT
B	HAYRES EGC PROCR	982-1487 + 1
1	12965 WIDMER JOS	982-1517 3
1	15225 PIATLE E M	982-0870 3
1	15791 XXXX	00
1	15933 PHILLIPS WM JR	982-1675 3
1	16444 EDWARDS RON	982-5336 9
0	17601 RATIO VERNON	982-0389 3
9	13041 MCCALL BETTY	982-0746 4
0	MCCALL JUNE	858-4210 8
8	18043 PERRY ALLEN	982-0445 0
0	PERRY J	982-1647 8
9	18263 VALLENTYNES RANCH	982-5391 5
0	18426 XXXX	00
1	18502 XXXX	00
0	18666 CARAVALHO DANL	982-0852 + 1
9	★ 5 BUS	4 NEW
1	25 RES	



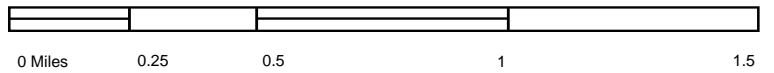
TP, Lathrop, 1915, 7.5-minute



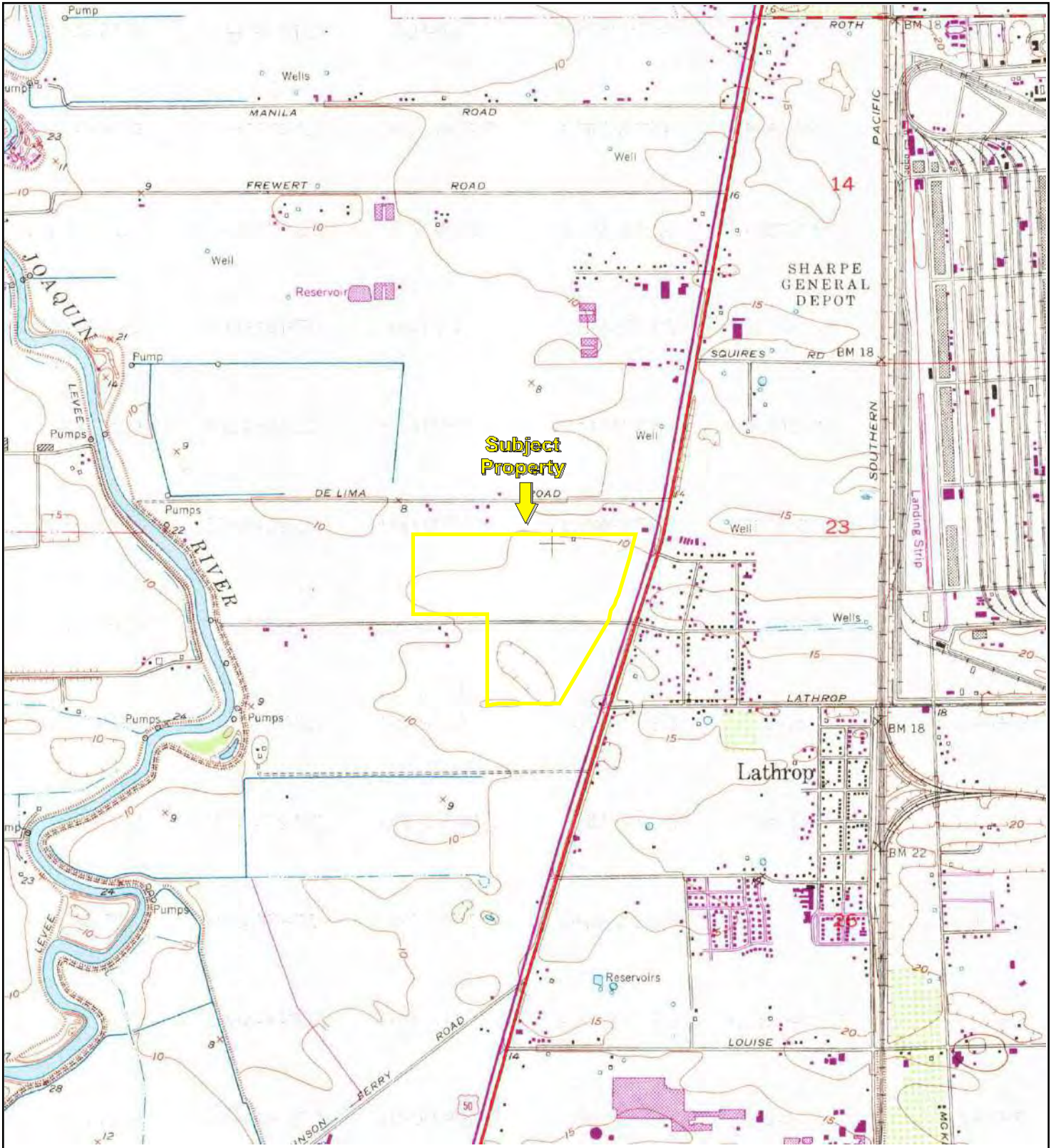
Key: Subject Property 



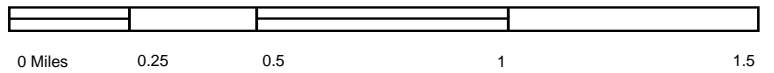
TP, Lathrop, 1952, 7.5-minute



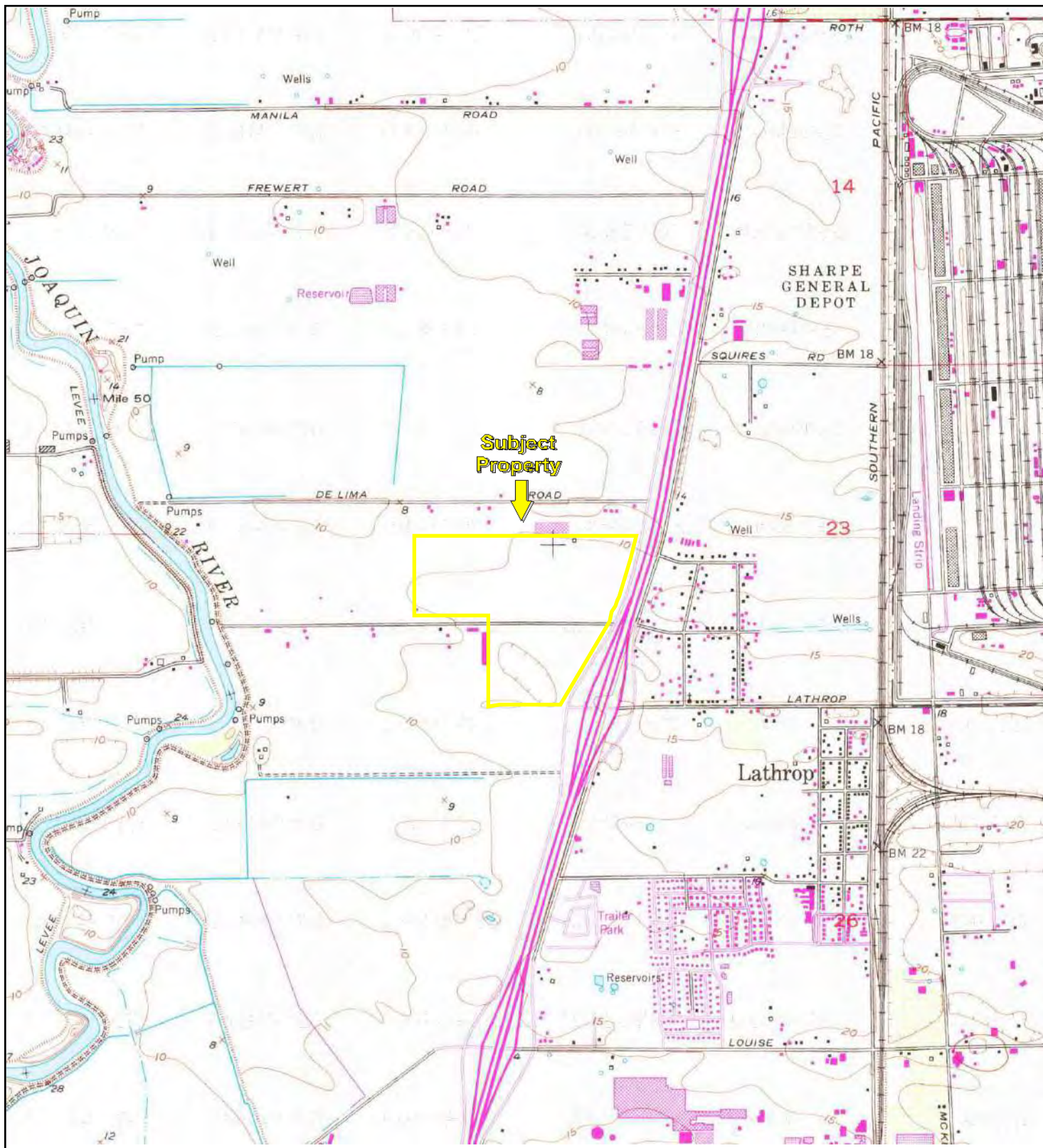
Key: Subject Property



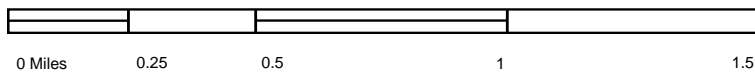
TP, Lathrop, 1968, 7.5-minute



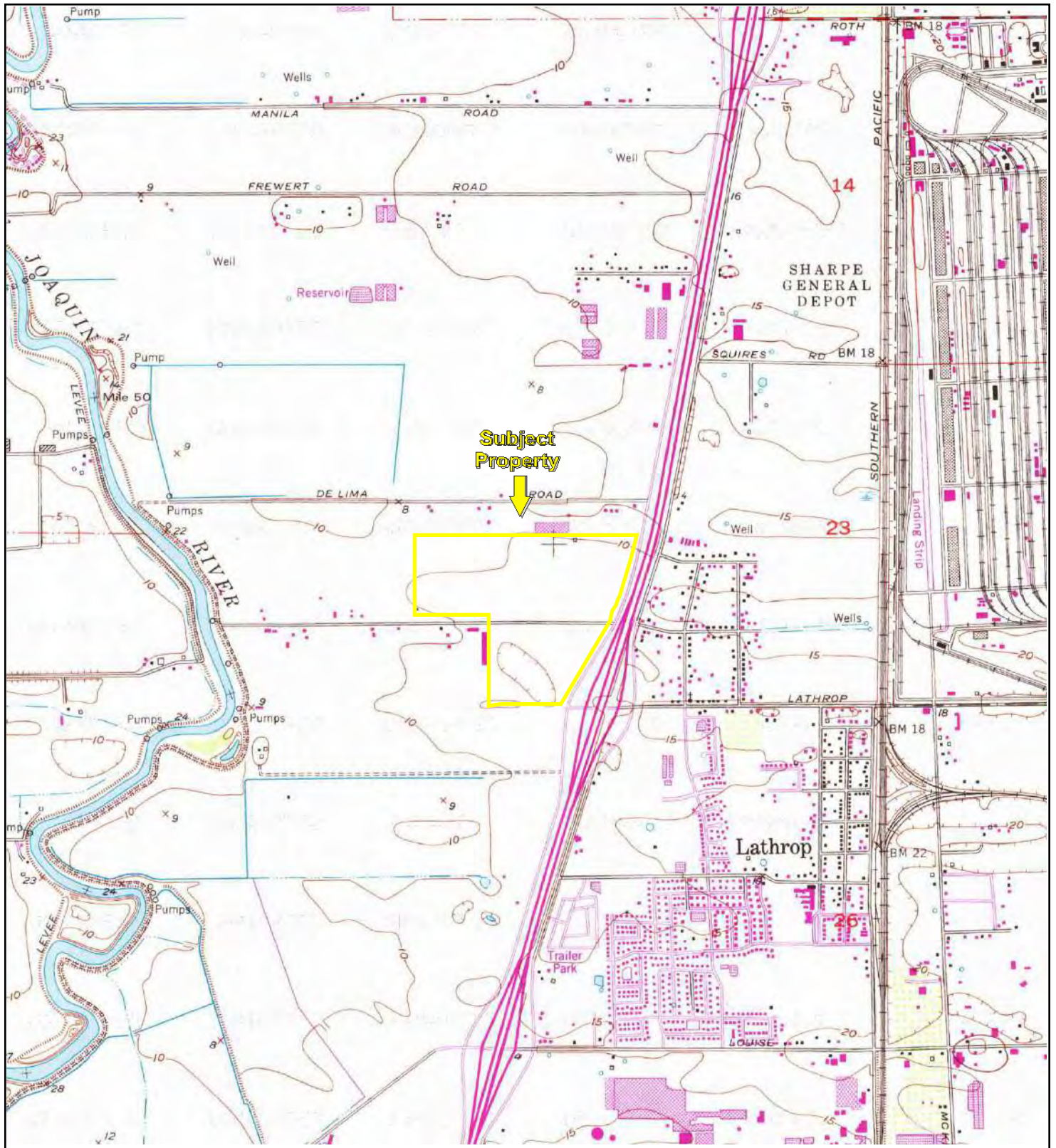
Key: Subject Property 



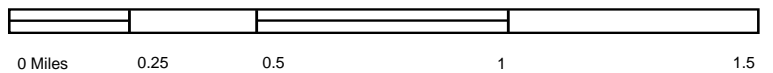
TP, Lathrop, 1976, 7.5-minute



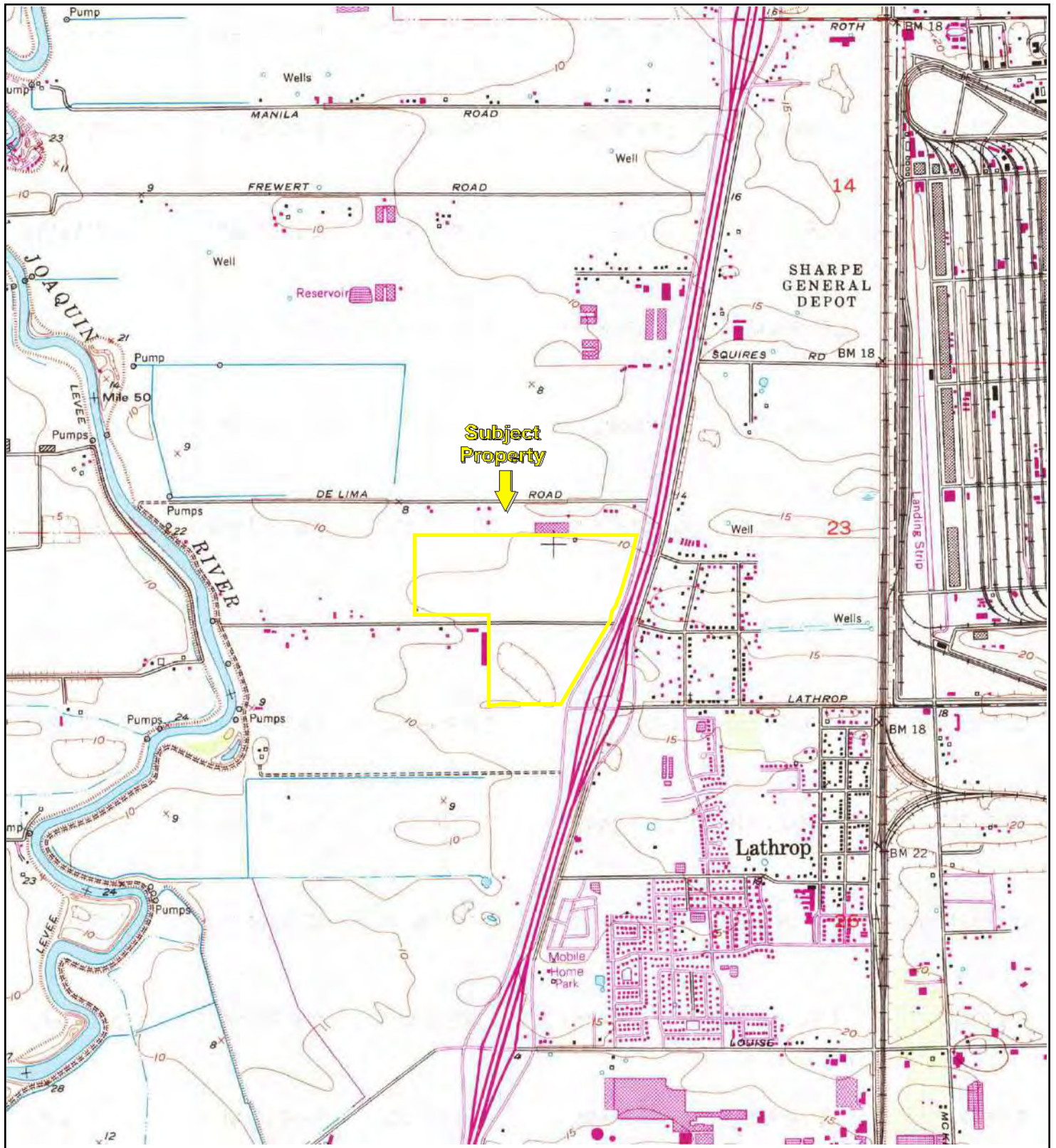
Key: Subject Property 



TP, Lathrop, 1987, 7.5-minute

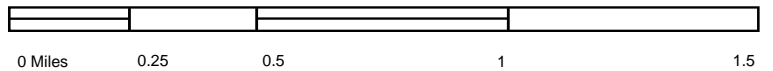


Key: Subject Property 

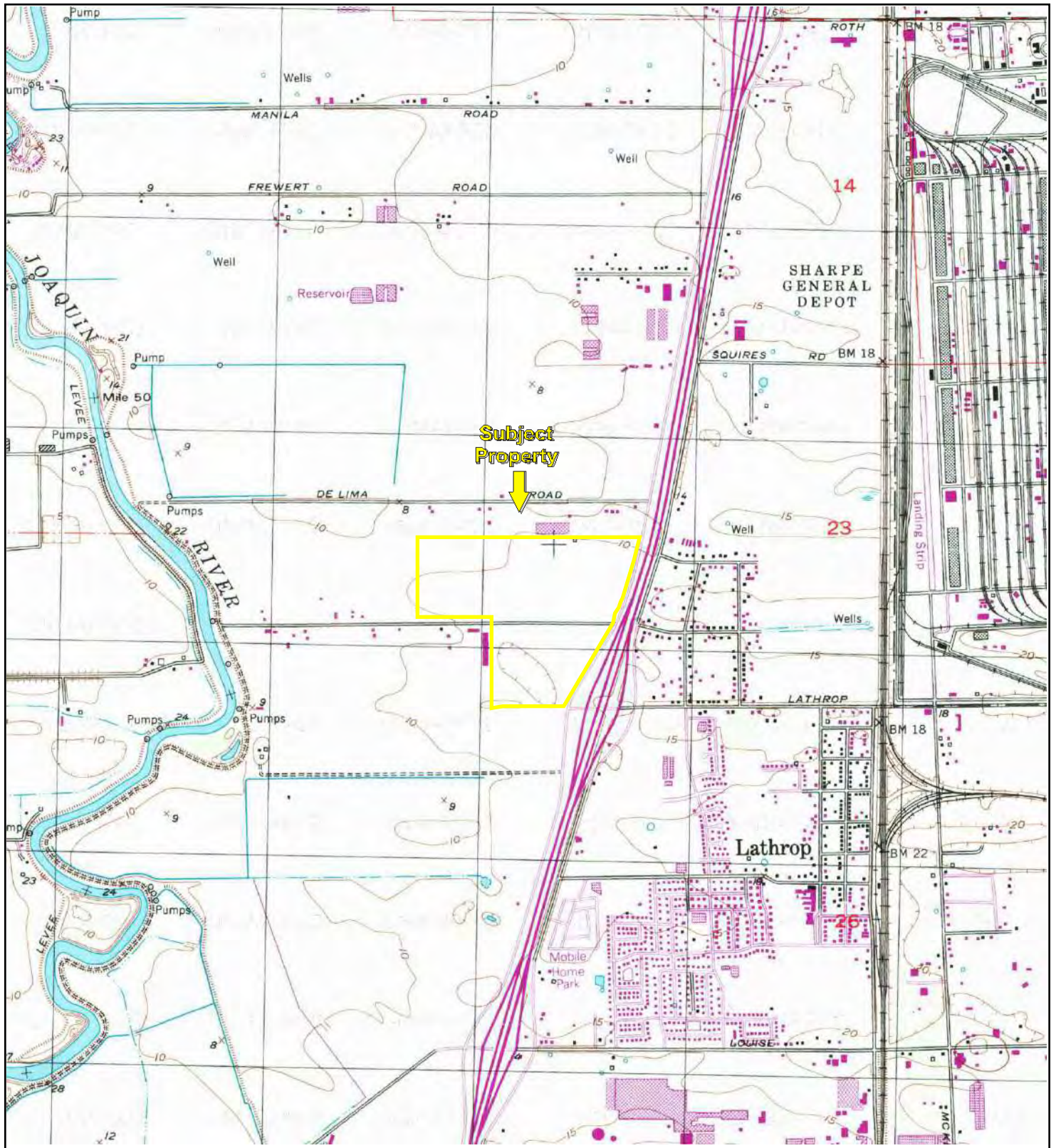


Subject Property  
↓

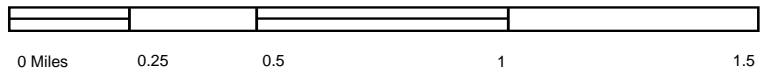
TP, Lathrop, 1994, 7.5-minute



Key: Subject Property 

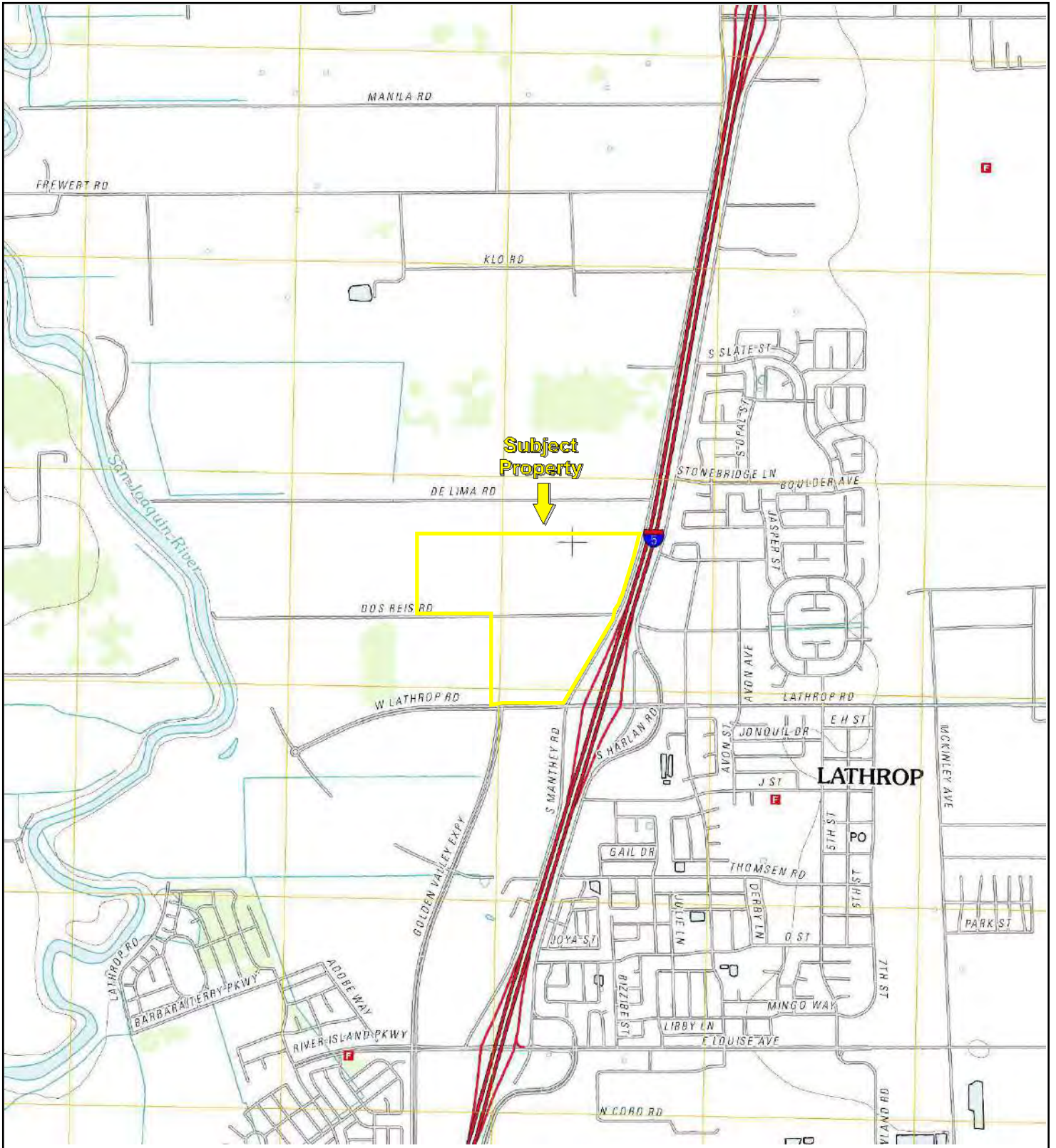


TP, Lathrop, 1996, 7.5-minute

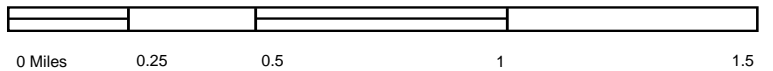


Key: Subject Property 





TP, Lathrop, 2012, 7.5-minute



Key: Subject Property 

### General Information

Parcel # (APN): **192-020-140-000**  
 Owner: [See Full Detail](#)  
 Mailing Address: **7000 S INLAND DR STOCKTON CA 95206**  
 Legal Description:  
 Use Type: **AGRICULTURAL**  
 Tax Rate Area: **007-014**

### Assessment

Total Value:	<b>\$706,469</b>	Year Assd:	<b>2020</b>
Land:	<b>\$706,469</b>	Zoning:	
Structures:		Use Code:	<a href="#">See Full Detail</a>
Other:		Census Tract:	
% Improved:	<a href="#">See Full Detail</a>	Price/SqFt:	
Exempt Amt:			
HO Exempt:	<b>N</b>		



**Full Detail \$14.95** [Add to Cart](#) The Full Property Detail includes everything displayed here plus completed information for those fields where "See Full Detail" is shown. If a field is empty on this page, no data is available, and the field will also be empty on the Full Property Detail.

### Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:				
Document Number:				
Document Type:				
Transfer Amount:				
Seller (Grantor):				

### Property Characteristics

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: <b>89.820</b>	Spaces:	Site Influence:
Lot SqFt: <b>3,912,559</b>	Garage SqFt:	Timber Preserve:
Year Built:		Ag Preserve:
Effective Year:		

**General Information**

Parcel # (APN): **192-020-590-000**  
 Owner: [See Full Detail](#)  
 Mailing Address: **7000 S INLAND DR STOCKTON CA 95206**  
 Legal Description:  
 Use Type: **AGRICULTURAL**  
 Tax Rate Area: **007-014**

**Assessment**

Total Value:	<b>\$22,537</b>	Year Assd:	<b>2020</b>
Land:	<b>\$22,537</b>	Zoning:	
Structures:		Use Code:	<a href="#">See Full Detail</a>
Other:		Census Tract:	<a href="#">See Full Detail</a>
% Improved:	<a href="#">See Full Detail</a>	Price/SqFt:	
Exempt Amt:			
HO Exempt:	<b>N</b>		



**Full Detail \$14.95** [Add to Cart](#) The Full Property Detail includes everything displayed here plus completed information for those fields where "See Full Detail" is shown. If a field is empty on this page, no data is available, and the field will also be empty on the Full Property Detail.

**Sale History**

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:				
Document Number:				
Document Type:				
Transfer Amount:				
Seller (Grantor):				

**Property Characteristics**

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: <b>2.810</b>	Spaces:	Site Influence:
Lot SqFt: <b>122,403</b>	Garage SqFt:	Timber Preserve:
Year Built:		Ag Preserve:
Effective Year:		

### General Information

Parcel # (APN): **192-020-600-000**  
 Owner: See Full Detail  
 Mailing Address: **7000 S INLAND DR STOCKTON CA 95206**  
 Legal Description:  
 Use Type: **AGRICULTURAL**  
 Tax Rate Area: **007-014**

### Assessment

Total Value:	<b>\$271,222</b>	Year Assd:	<b>2020</b>
Land:	<b>\$271,222</b>	Zoning:	
Structures:		Use Code:	See Full Detail
Other:		Census Tract:	See Full Detail
% Improved:	See Full Detail	Price/SqFt:	
Exempt Amt:			
HO Exempt:	<b>N</b>		



**Full Detail \$14.95** [Add to Cart](#) The Full Property Detail includes everything displayed here plus completed information for those fields where "See Full Detail" is shown. If a field is empty on this page, no data is available, and the field will also be empty on the Full Property Detail.

### Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:				
Document Number:				
Document Type:				
Transfer Amount:				
Seller (Grantor):				

### Property Characteristics

Bedrooms:	Fireplace:	Units:
Baths (Full):	A/C:	Stories:
Baths (Half):	Heating:	Quality:
Total Rooms:	Pool:	Building Class:
Bldg/Liv Area:	Park Type:	Condition:
Lot Acres: <b>33.860</b>	Spaces:	Site Influence:
Lot SqFt: <b>1,474,941</b>	Garage SqFt:	Timber Preserve:
Year Built:		Ag Preserve:
Effective Year:		

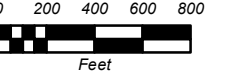
SEC.22, & POR. OF SECS. 21 & 23, T.1S. R.6E., M.D.B.&M  
 E- POR. LAND PARK AT LATHROP - PHASE 1

191-22

THIS MAP IS FOR ASSESSMENT PURPOSES ONLY AND IS NOT FOR THE INTENT OF INTERPRETING LEGAL BOUNDARY RIGHTS, ZONING REGULATIONS AND/OR LEGALITY OF LAND DIVISION LAWS



MAPPING/GIS



LEGEND

Example of a Standard Assessment/ FeeParcel Number

000-000-000-000

Book Page Parcel Internal or Number Use Block

R.M. = Recorded Subdivision Map

P.M. = Recorded Parcel Map

R.S. = Recorded Survey Map

Williamson Act Parcel

Assessors Book Boundary

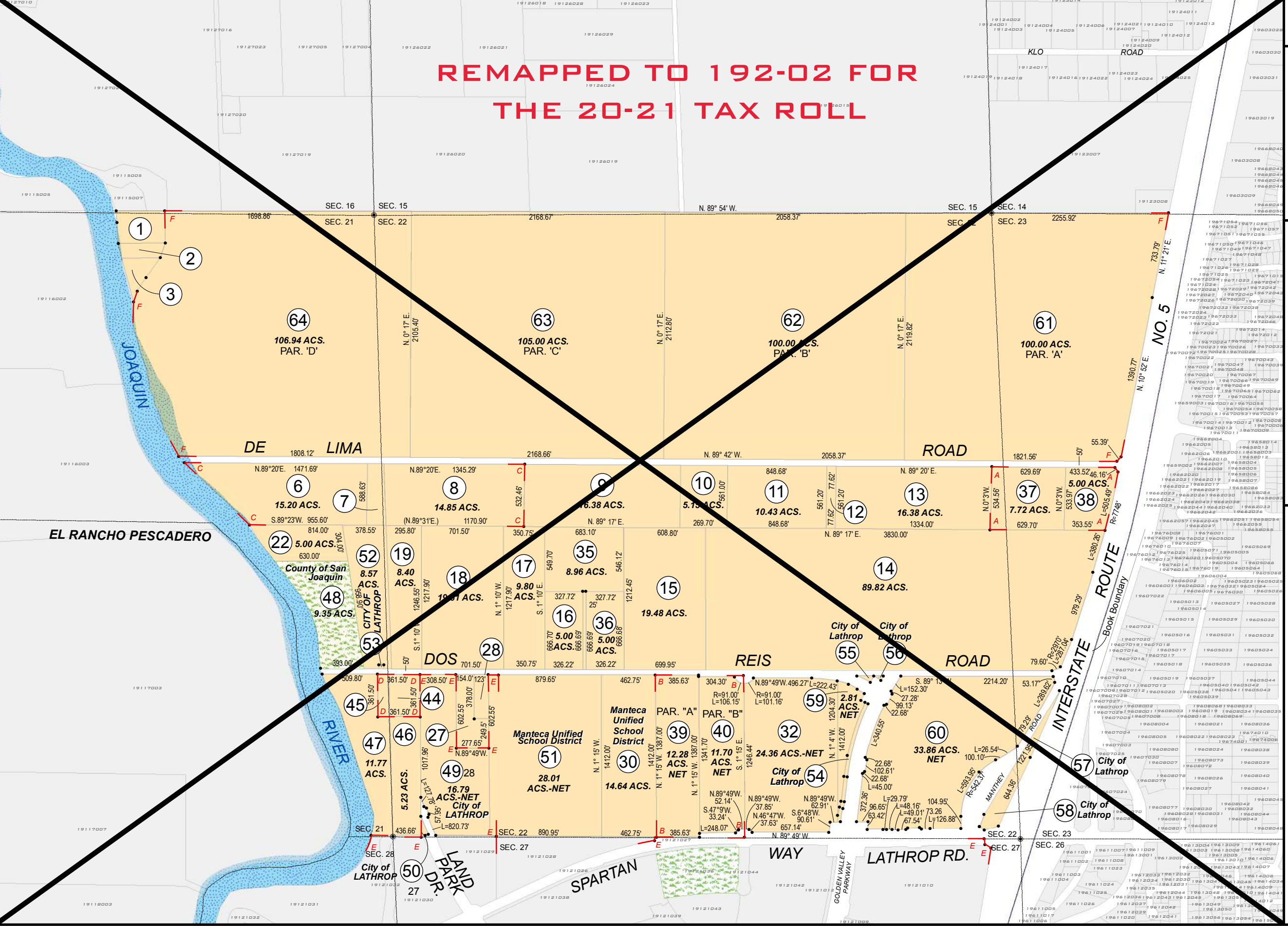
- A - R.S. Bk. 26 Pg. 165
- B - P.M. Bk. 02 Pg. 092
- C - R.S. Bk. 28 Pg. 195
- D - P.M. Bk. 11 Pg. 084
- E - R.M. Bk. 40 Pg. 100

SAN JOAQUIN COUNTY ASSESSMENT/ FEE PARCEL NUMBER ISSUED PER ROLL YEAR		
ROLL YR.	ASMT#	ASMT#
06-07	48	-
07-08	51	-
10-11	53	-
14-15	60	-
-	-	-
-	-	-
-	-	-

BK. 191 PG. 22  
 COUNTY OF SAN JOAQUIN, CA  
 ALL RIGHTS RESERVED  
 COPYRIGHT COUNTY OF SAN JOAQUIN ASSESSOR MAPPING/GIS 2019

REMAPPED TO 192-02 FOR THE 20-21 TAX ROLL

**DISCLAIMER**  
 The sole purpose of this document is for the assessment and collection of County property taxes. County makes no representation or warranty, express or implied, about the completeness, accuracy, reliability or authenticity of the information set forth in this document. Therefore, this document should not be relied upon to determine the legal ownership of any specific parcel(s), nor to facilitate any real property transaction(s) between private parties. County is not liable for any loss or damage whatsoever arising from or in connection with the use of or reliance upon this document(s).



# National Flood Hazard Layer FIRMette



121°17'57"W 37°50'9"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000  
 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

<p><b>SPECIAL FLOOD HAZARD AREAS</b></p>	<ul style="list-style-type: none"> <li> Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i></li> <li> With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i></li> <li> Regulatory Floodway</li> </ul>
<p><b>OTHER AREAS OF FLOOD HAZARD</b></p>	<ul style="list-style-type: none"> <li> 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i></li> <li> Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i></li> <li> Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i></li> <li> Area with Flood Risk due to Levee <i>Zone D</i></li> </ul>
<p><b>OTHER AREAS</b></p>	<ul style="list-style-type: none"> <li> NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i></li> <li> Effective LOMRs</li> <li> Area of Undetermined Flood Hazard <i>Zone D</i></li> </ul>
<p><b>GENERAL STRUCTURES</b></p>	<ul style="list-style-type: none"> <li> Channel, Culvert, or Storm Sewer</li> <li> Levee, Dike, or Floodwall</li> </ul>
<p><b>OTHER FEATURES</b></p>	<ul style="list-style-type: none"> <li> 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation</li> <li> 17.5 Coastal Transect</li> <li> Base Flood Elevation Line (BFE)</li> <li> Limit of Study</li> <li> Jurisdiction Boundary</li> <li> Coastal Transect Baseline</li> <li> Profile Baseline</li> <li> Hydrographic Feature</li> </ul>
<p><b>MAP PANELS</b></p>	<ul style="list-style-type: none"> <li> Digital Data Available</li> <li> No Digital Data Available</li> <li> Unmapped</li> </ul>

N  
 The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **3/3/2021 at 10:59 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**CITY PROPER**

- PUD, Planned Unit Development
- R-1-5, R One Family Residential
- R-1-6, R One Family Residential
- RM-1.5, Multi-Family Residential
- RM-2, Multi-Family Residential
- RM-3, Multi-Family Residential
- UR, Urban Reserve
- PO, Professional Office
- CC, Central Commercial
- CH, Highway Commercial
- CH (HS), Highway Commercial
- CN, Neighborhood Commercial
- CS, Commercial Service
- IL, Limited Industrial
- IG, General Industrial
- IG (M2), General Industrial

**CENTRAL LATHROP**

- DS, Development Standard District Overlay
- VR/DS-CL, Variable Density Residential
- R/MU/DS-CL, Residential/Mixed Use
- HR/DS-CL, High Density Residential
- OC/VR/WWTP/DS-CL, Office Commercial/Variabile Res1 Wastewater Treatment Plant
- CO/DS-CL, Commercial Office
- NC/DS-CL, Neighborhood Commercial
- SPC/DS-CL, Speciality Commercial
- HS/DS-CL, High School
- K-8/DS-CL, K-8 School
- P-SP/DS/NC/CL, Public / Semi-Public
- CP/DS-CL, Community Park
- NP/DS-CL, Neighborhood Park
- OS/DS-CL, Open Space

**MOSSDALE VILLAGE**

- REC RES-MV, Recreational Residential
- RL-MV, Low Density Residential
- RM-MV, Medium Density Residential
- RH-MV, High Density Residential
- CH-MV, Highway Commercial
- CS-MV, Service Commercial
- CV-MV, Village Commercial
- OS-MV, Open Space
- P-MV, Public Schools Parks Open Space

**LATHROP GATEWAY**

- CO-LG, Commercial Office
- CS-LG, Commercial Service
- IL-LG, Limited Industrial

**SOUTH LATHROP SPECIFIC PLAN**

- CO-SL, Commercial Office
- IL-SL, Limited Industrial
- PF-SL, Public Facilities
- OS-SL, Open Space

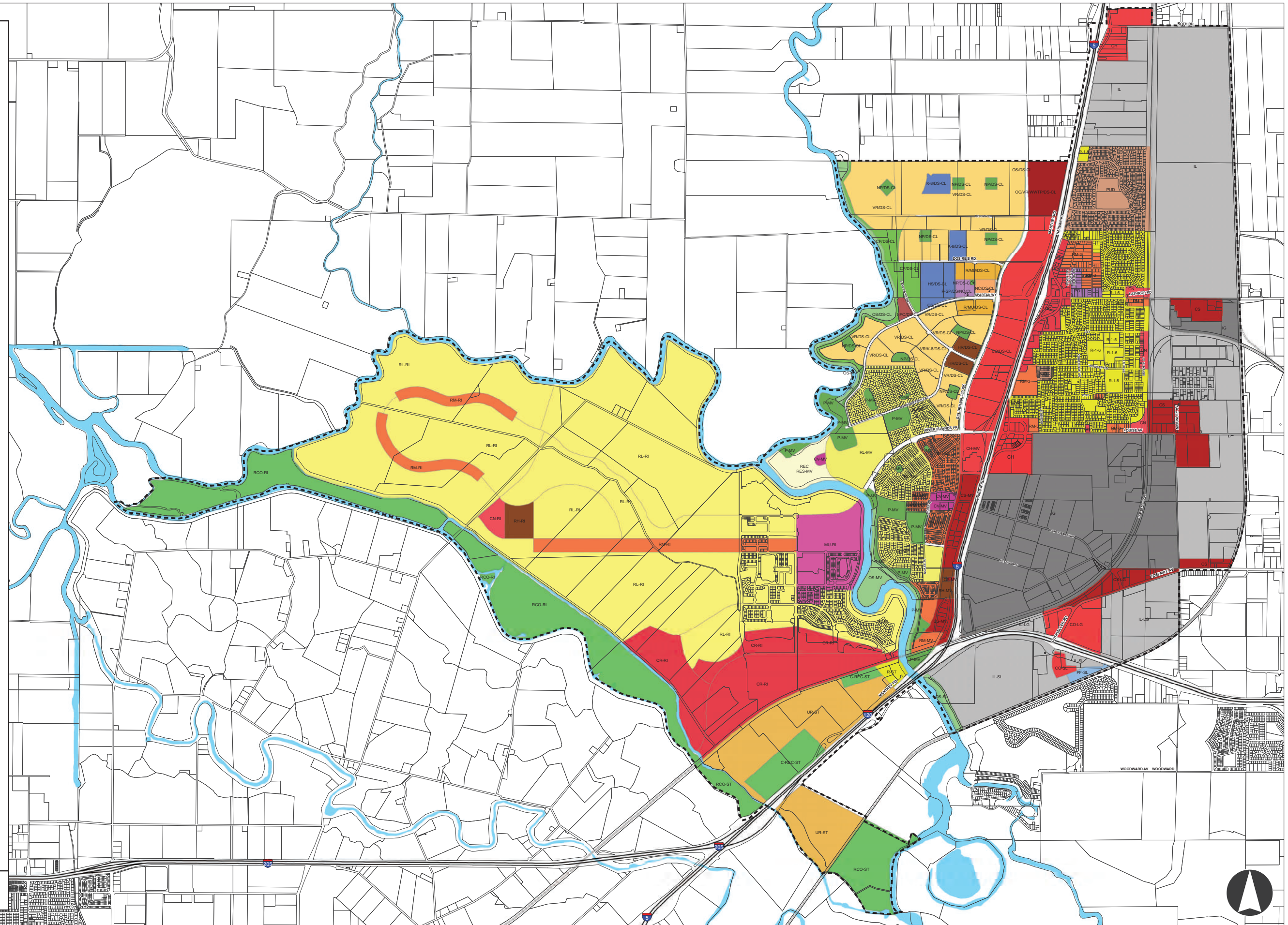
**RIVER ISLANDS**

- RL-RI, Residential Low
- RM-RI, Residential Medium
- RH-RI, Residential High
- CN-RI, Neighborhood Commercial
- CR-RI, Regional Commercial
- MU-RI, Mixed Use Town Center
- RCO-RI, Resource Conservation

**STEWART TRACT**

- R-REC-ST, Recreational Residential
- R-ST, Residential - Stewart Tract
- UR-ST, Urban Reserve
- C-REC-ST, Commercial Recreation
- CR-ST, Regional Commercial
- MX-ST, Mixed Use
- RCO-ST, Resource Conservation

- City Limits
- Parcels

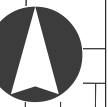
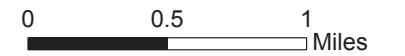


Date: 10/16/2017

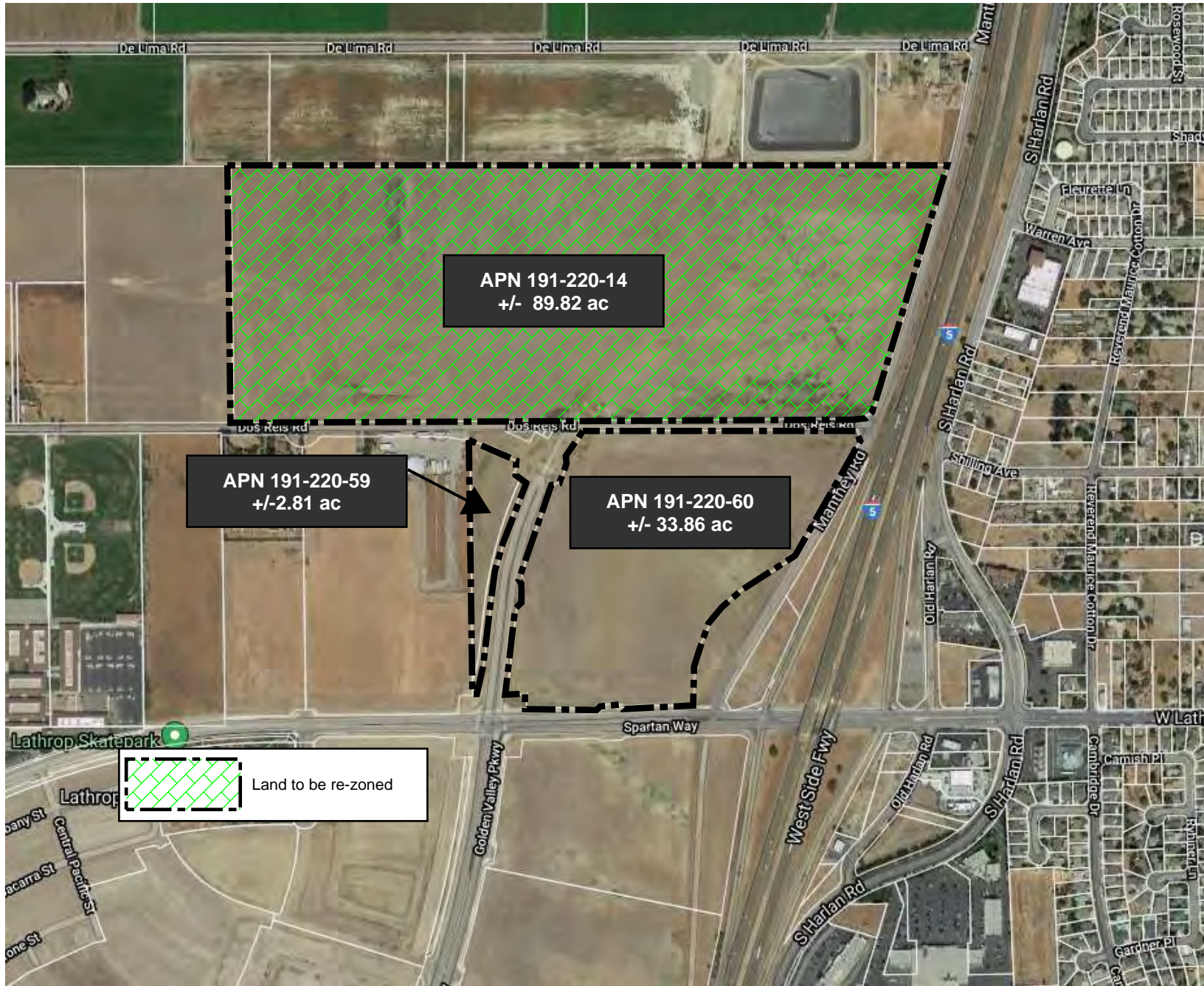
Document Path: S:\GIS\Armando\CDD\Zoning\2017\_10\_25\_Zoning\_V5\_36x24.mxd

# Zoning Map City of Lathrop

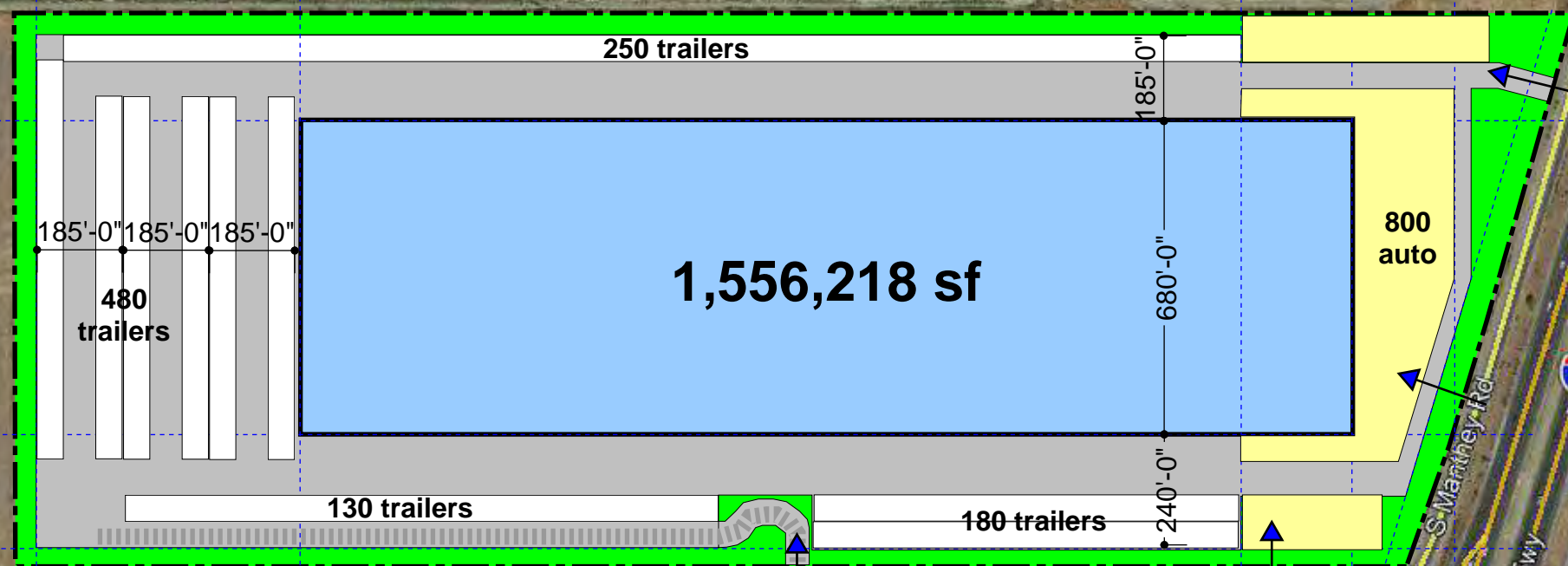
Disclaimer: Data shown may not be accurate and is for mapping purposes only. Contact the City for more information.



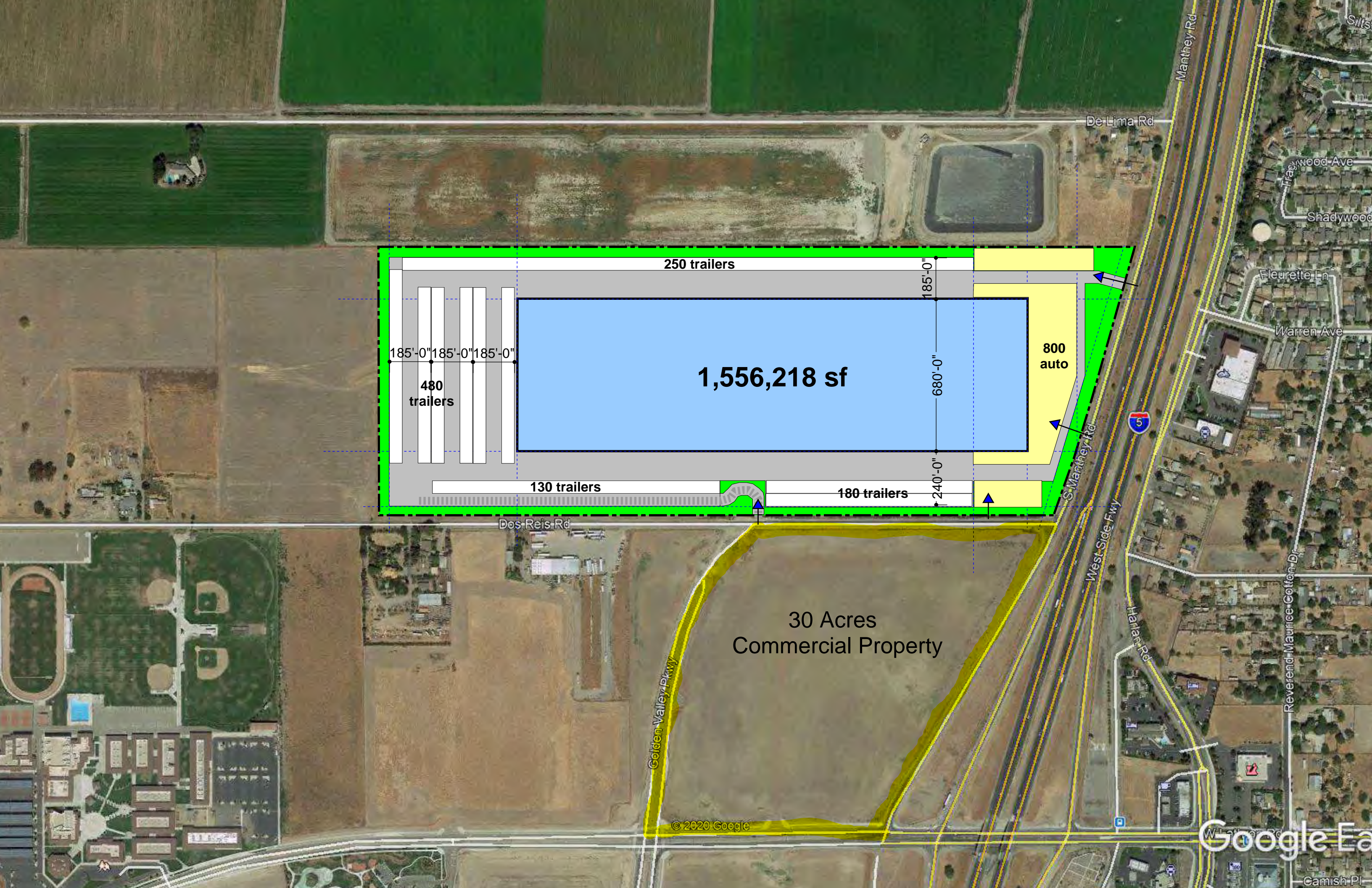
# EXHIBIT A







30 Acres  
Commercial Property



## PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

---

The following questionnaire is required by the ASTM Standard E 1527-13, which adheres to the All Appropriate Inquiries (AAI) Rule (United States Environmental Protection Agency) (40 CFR 312).

As defined by ASTM, the User of the report is the “party seeking to use Practice E 1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The user has specific obligations for completing a successful application of this practice.”

<b>PROPERTY ADDRESS:</b>	
<b>PROPERTY CITY, STATE ZIP:</b>	

---

### 1. Environmental liens that are filed or recorded against the property (40 CFR 312.25)

Did a search of recorded land title records (or judicial records) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?

YES       NO

---

### 2. Activity and use limitations (AULs) that are in place on the property or that have been filed or records against the property (40 CFR 312.26(a)(1)(v) and (vi))

Did a search of recorded land title records (or judicial records) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

YES       NO

---

### 3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28)

Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

YES       NO

---

**4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29)**

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

YES       NO

---

**5. Commonly known or reasonably ascertainable information about the Property (40 CFR 312.30)**

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases?

YES       NO

---

a. Do you know the past uses of the property?

YES       NO

---

b. Do you know of specific chemicals that are present or once were present at the property?

YES       NO

---

c. Do you know of spills or other chemical releases that have taken place at the property?

YES       NO

---

d. Do you know of any environmental cleanups that have taken place at the property?

YES       NO

---

e. Do you have any prior knowledge that the property was developed as a gas station, dry cleaner, manufacturing/industrial facility in the past?

YES       NO

---

f. Are you aware of historical use of hazardous materials or petroleum products used or present on the property?

YES       NO

---

g. Do you know if the property is currently or was formerly equipped with underground storage tanks (USTs) or septic tanks?

YES       NO

---

h. Do you know of any past, threatened or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?

YES       NO

---

**6. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**

Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

YES       NO

---

---

Signature of User/Person Interviewed: \_\_\_\_\_

Name of User/Person Interviewed: \_\_\_\_\_

Title/Relationship to Property: \_\_\_\_\_

Phone Number/Email: \_\_\_\_\_

Date: \_\_\_\_\_

Contact for additional information:

Name: \_\_\_\_\_

Relationship to Property: \_\_\_\_\_

Phone Number/Email: \_\_\_\_\_

# Title Report

Chicago Title Company  
4911 Birch Street  
Newport Beach, CA 92660  
Attn: SuZanne Kennedy

Escrow Officer: SuZanne Kennedy  
Email: SuZanne.Kennedy@ctt.com  
File No.: FSST-TO21000914  
Escrow No.: 145089

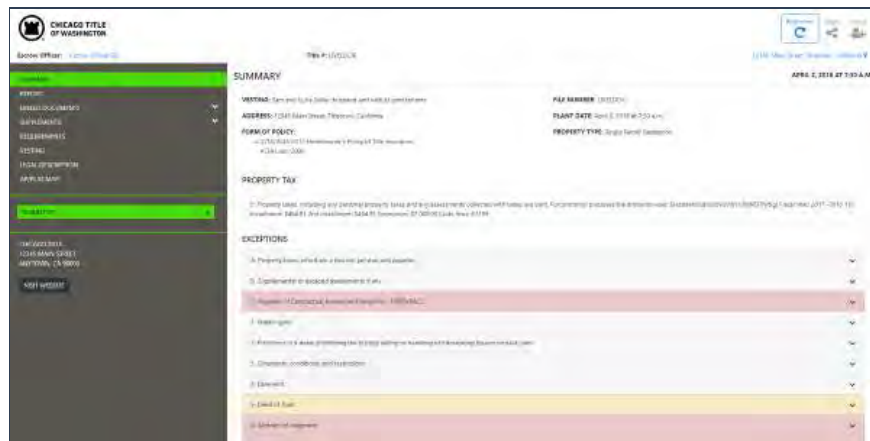
Property Address: Vacant Land, Lathrop, CA

## Introducing LiveLOOK

LiveLOOK title document delivery system is designed to provide 24/7 real-time access to all information related to a title insurance transaction.

Access title reports, exception documents, an easy-to-use summary page, and more, at your fingertips and your convenience.

[To view your new Chicago Title LiveLOOK report, Click Here](#)



**Effortless, Efficient, Compliant, and Accessible**



# CHICAGO TITLE COMPANY

## PRELIMINARY REPORT

*In response to the application for a policy of title insurance referenced herein, **Chicago Title Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.*

*The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.*

*This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.*

*The policy(ies) of title insurance to be issued hereunder will be policy(ies) of Chicago Title Insurance Company, a Florida corporation.*

***Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.***

***It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.***

**Chicago Title Insurance Company**

By:

\_\_\_\_\_  
President

Attest:

\_\_\_\_\_  
Secretary

Countersigned By:

\_\_\_\_\_  
Authorized Officer or Agent



Visit Us on our Website: [www.ctic.com](http://www.ctic.com)



**ISSUING OFFICE:** 3127 Transworld Drive, #130, Stockton, CA 95206

**FOR SETTLEMENT INQUIRIES, CONTACT:**

Chicago Title Company  
4911 Birch Street • Newport Beach, CA 92660  
949-724-3107 • FAX

**Another Prompt Delivery From Chicago Title Company Title Department  
Where Local Experience And Expertise Make A Difference**

## PRELIMINARY REPORT

Title Officer: Ritch Boyatt  
Email: [ritch.boyatt@fnf.com](mailto:ritch.boyatt@fnf.com)  
Title No.: FSST-TO21000914

Escrow Officer: SuZanne Kennedy  
Email: [SuZanne.Kennedy@ctt.com](mailto:SuZanne.Kennedy@ctt.com)  
Escrow No.: 145089

TO: Chicago Title Company  
4911 Birch Street  
Newport Beach, CA 92660  
Attn: SuZanne Kennedy

**PROPERTY ADDRESS(ES):** Vacant Land, Lathrop, CA

**EFFECTIVE DATE:** January 28, 2021 at 07:30 AM

The form of policy or policies of title insurance contemplated by this report is:

ALTA Owner's Policy 2006

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A Fee

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

Dos Reis Ranch, Inc., a California corporation

3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

# EXHIBIT "A"

## Legal Description

For [APN/Parcel ID\(s\): 192-020-14, 192-020-60 and 192-020-59](#)

---

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LATHROP, COUNTY OF SAN JOAQUIN, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

### Parcel One:

A portion of the South half of Sections 22 and 23, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, more particularly described as follows:

Beginning at an iron pipe at the intersection of the West line of State Highway U.S. 50 with the South line of said Section 23; thence along the West line of State Highway U.S. 50, North 16°35'30" East.1479.5 feet to an iron pipe at the Southeast corner of the land described in Deed to John J. Domingo recorded in Book of Official Records, [Book 1159, at Page 278, San Joaquin County Records](#); thence along the South line of said land described in above mentioned Deed to John J. Domingo, South 89°13' West, 2214.2 feet to the iron pipe; thence along an irrigation pipeline, South 1°04'30" East, 1412.0 feet to an iron pipe in the South line of said Section 22; thence along the South line of said Sections 22 and 23, North 89°13' East 1765.3 feet to the point of beginning.

EXCEPTING THEREFROM that portion described in Deed to the County of San Joaquin recorded June 23, 1955 in Book of Official Records, Book 1762, at Page 191, San Joaquin County Records.

ALSO EXCEPTING THEREFROM that portion described in Deed to the State of California recorded July 19, 1955 in Book of Official Records, [Book 1770, at Page 594, San Joaquin County Records](#).

ALSO EXCEPTING THEREFROM an undivided one-half interest in all oil, gas, minerals and other hydrocarbon substances as conveyed by Deed executed by John J. Barkett, et ux to John J. Domingo and Susan Domingo, his wife recorded September 7, 1955 in Book of Official Records, [Book 1787, at Page 91, San Joaquin County Records](#).

ALSO EXCEPTING THEREFROM that portion described in Deed to the State of California recorded August 10, 1970 in Book of Official Records, [Book 3421, at Page 382, San Joaquin County Records](#).

ALSO EXCEPTING THEREFROM that portion conveyed in deed recorded July 10, 1980, as [Instrument No. 80044833](#), San Joaquin County Records.

ALSO EXCEPTING THEREFROM those portions of land granted to the City of Lathrop, a municipal corporation recorded December 6, 2013, as [Instrument No. 2013-150030](#), San Joaquin County Records.

ALSO EXCEPTING THEREFROM those portions of land granted to the City of Lathrop, a municipal corporation recorded December 6, 2013, as [Instrument No. 2013-150031](#), San Joaquin County Records.

Being known as "Resultant Parcel 1" pursuant to Certificate of Compliance/Notice of Lot Line Adjustment recorded May 27, 2020, as [Instrument No. 2020-061685, of Official Records](#).

[APN: 092-020-60](#)

### Parcel Two:

All that portion of that certain parcel of land described in deed to State of California recorded July 19, 1955 in Book of Official Records, [Book 1770, Page 594](#), San Joaquin County Records situated in Sections 22 and 23, Township 1 South, Range 6 East, Mount Diablo Base and Meridian lying Northwesterly of the following described line:

Beginning at a point bearing North 76°18'53" West 404.62 feet from the intersection of the Southerly line of Shilling



**EXHIBIT "A"**  
**Legal Description**  
 (continued)

Avenue with the Easterly line of State Highway Route 5 as shown on map entitled Lathrop Acres recorded April 10, 1947 in Book of Maps, [Book 11, Page 136](#), San Joaquin County Records; thence from a tangent that bears South 25°47'20" West along a curve concave to the Northwest having a radius of 2970.00 feet through an angle of 5°35'14", an arc distance of 289.62 feet; thence South 31°22'34" West 455.97 feet to the Westerly boundary of said parcel recorded July 19, 1955.

Being known as "Resultant Parcel 2" pursuant to Certificate of Compliance/Notice of Lot Line Adjustment recorded May 27, 2020, as [Instrument No. 2020-061685, of Official Records](#).

[APN: 192-020-59](#)

**Parcel Three:**

A portion of Sections 22 and 23, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, described as follows:

BEGINNING at the intersection of the Westerly line of State Highway U.S. 50 with the North line of the land now or formerly owned by John J. Domingo as described in Deed recorded December 15, 1948 in [Vol. 1159 of Official Records, Page 278](#), San Joaquin County Records; thence South 89°17' West along said North line, 3830 feet; thence continue along said North line, South 89°31' West, 608.80 feet to the center line of a ditch thence South 0°54' East along the said center line of ditch 1237.45 feet to the aforementioned West line of State Highway; thence North 16°35'30" East along said West line of State Highway, 1288.6 feet to the point of beginning.

EXCEPT THEREFROM that portion described in Deed to the State of California recorded July 19, 1955 in [Vol. 1770 of Official Records, Page 594](#), San Joaquin County Records.

ALSO EXCEPT that portion described in Deed to State of California, recorded August 10, 1970 in [Vol. 3421 of Official Records, page 382](#), San Joaquin County Records.

ALSO EXCEPT that portion described in Deed to State of California, recorded August 10, 1970 in Vol. 3421 of Official Records, page 382, San Joaquin County Records.

ALSO EXCEPT THE FOLLOWING:

A portion of Section 22, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, described as follows:

COMMENCING at the intersection of the Westerly line of State Highway U.S. 50, as shown upon Survey filed for record March 21, 1950 in Volument 8 of Surveys, Page 57, San Joaquin County Records, with the North line of the land formerly owned by John J. Domingo, as described in Deed, recorded December 15, 1948 in [Vol. 1159 of Official Records, page 278](#), San Joaquin County Records; thence South 89°17' West along said North line, 3830 feet; thence continuing along said North line, South 89°31' West, 608.80 feet to the center line of a ditch and the Northwest corner of the land described in Deed to John S. Barkett recorded October 16, 1953 in Vol. 1569 of Official Records, page 402, San Joaquin County Records, and the true point of beginning of the herein described tract; thence South 0°54' East along the said center line of ditch, 1237.45 feet to a 2 inch pipe; thence North 89°13' East 699.95 feet; thence North 0°54' West to a point in the said North line of the land formerly owned by John J. Domingo; thence Westerly along said North line, 699.95 feet to the true point of beginning.

[APN: 192-020-14](#)

**AT THE DATE HEREOF, EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:**

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2021-2022.

2. Property taxes, including any personal property taxes and any assessments collected with taxes are as follows:

Code Area: 007-014  
[Tax Identification No.:](#) 192-020-59  
Fiscal Year: 2020-2021  
1st Installment: \$159.39 PAID  
2nd Installment: \$159.39 OPEN  
Land: \$22,537.00

3. Property taxes, including any personal property taxes and any assessments collected with taxes are as follows:

Code Area: 007-014  
[Tax Identification No.:](#) 192-020-60  
Fiscal Year: 2020-2021  
1st Installment: \$1,822.89 PAID  
2nd Installment: \$1,822.89 OPEN  
Land: \$271,222.00

4. Property taxes, including any personal property taxes and any assessments collected with taxes are as follows:

Code Area: 007-014  
[Tax Identification No.:](#) 192-020-14  
Fiscal Year: 2020-2021  
1st Installment: \$4,856.49 PAID  
2nd Installment: \$4,856.49 OPEN  
Land: \$706,469.00

5. Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.

**EXCEPTIONS**  
(continued)

6. The herein described property lies within the boundaries of a Mello-Roos Community Facilities District (CFD) as follows:

CFD No.: 2006-1  
 For: Central Lathrop Specific Plan Phase 1 Infrastructure  
 Disclosed by: Notice of Special Tax Lien  
 Recording Date: June 15, 2006  
[Recording No.: 2006-130333](#)

This property, along with all other parcels in the CFD, is liable for an annual special tax. This special tax is included with and payable with the general property taxes of the City of Lathrop, County of San Joaquin. The tax may not be prepaid.

Further information may be obtained by contacting: San Joaquin County Tax Collector's Office at (209) 468-2133 or fax (209) 468-2158

7. The herein described property lies within the boundaries of a Mello-Roos Community Facilities District (CFD) as follows:

CFD No.: 2006-2  
 For: Central Lathrop Specific Plan Services  
 Disclosed by: Notice of Special Tax Lien  
 Recording Date: June 15, 2006  
[Recording No.: 2006-130334](#)

This property, along with all other parcels in the CFD, is liable for an annual special tax. This special tax is included with and payable with the general property taxes of the City of Lathrop, County of San Joaquin. The tax may not be prepaid.

Further information may be obtained by contacting: San Joaquin County Tax Collector's Office at (209) 468-2133 or fax (209) 468-2158

8. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.
9. Water rights, claims or title to water, whether or not disclosed by the public records.
10. Rights of the public and/or Reclamation District in and to highways, roads, ditches, canals and levees within the boundaries of the Land described herein.
11. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company, a California corporation  
 Purpose: Electrical facilities  
 Recording Date: June 26, 1950  
 Recording No.: 17314, [Book 1262, Page 342, of Official Records](#)  
 Affects: a portion of Parcel Three

**EXCEPTIONS**  
(continued)

Reference is hereby made to said document for full particulars.

12. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Pacific Telephone & Telegraph Company, a corporation  
 Purpose: Communication facilities  
 Recording Date: August 29, 1951  
 Recording No.: 27401, [Book 1364, Page 400, of Official Records](#)  
 Affects: a portion of Parcel Two

13. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Pacific Telephone & Telegraph Company, a corporation  
 Purpose: Communication facilities  
 Recording Date: March 22, 1952  
 Recording No.: [Book 1405, Page 505, of Official Records](#)  
 Affects: a portion of Parcel Two

14. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Pacific Telephone & Telegraph Company, a corporation  
 Purpose: Communication facilities  
 Recording Date: March 22, 1952  
 Recording No.: [Book 1405, Page 503, of Official Records](#)  
 Affects: a portion of Parcel Two

15. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Lathrop County Water District, a County Water District of the State of California  
 Purpose: Sanitary sewer; domestic water facilities; storm drainage facilities consisting of underground gravity storm pipes, underground pressure force mains, storm drainage pumping plants, manholes and necessary appurtenances with rights of ingress and egress  
 Recording Date: March 27, 1968  
 Recording No.: Instrument No. 13954, in [Book 3197, at Page 731](#)  
 Affects: a Northeasterly portion of Parcel One

Reference is hereby made to said document for full particulars.

16. Covenants and restrictions imposed by a Land Conservation Contract executed pursuant to Section 51200 et seq. California Government Code (Williamson Act) authorizing the establishment of agricultural preserves. The use of the land within the preserve may be restricted by the contract to agricultural, recreational, open-space, and other approved compatible uses.

Dated: March 7, 1972  
 Executed by: The County of San Joaquin and Isaac Newton Robinson, Jr., et ux  
 Recording Date: March 10, 1972  
 Recording No.: Instrument No. 11090, in [Book 3629, at Page 234](#)

**EXCEPTIONS**  
(continued)

Said contract is subject to the following document:

Entitled: Certificate of Final Rescission of California Land Conservation Contral Number  
72-C1-223  
Recording Date: June 28, 2006  
[Recording No.: 2006-139935](#)

Affects: The herein described Land and other land.

17. Matters contained in that certain document

Entitled: Certificate of Completion - Dos Reis Detachment from the Lathrop County Water  
District (LAFC 37-90)  
Dated: February 7, 1991  
Executed by: LAFCo  
Recording Date: February 7, 1991  
[Recording No.: 91011264](#)

Reference is hereby made to said document for full particulars.

18. Matters contained in that certain document

Entitled: Annexation Agreement and Development Agreement by and between The City of  
Lathrop and Richland Planned Communities, Inc., Relating to the Central Lathrop Specific Plan (The  
"CLSP Development Agreement")  
Executed by: The City of Lathrop and Richland Planned Communities, Inc.  
Recording Date: January 28, 2005  
[Recording No.: 2005-020320](#)

Reference is hereby made to said document for full particulars.

An Assignment and Amendment of Development Agreement by and between The City of Lathrop,  
Saybrook CLSP, LLC and Lathrop Land Acquisition, LLC Relating to The Central Lathrop Specific Plan  
(The CLSP Development Agreement) recorded January 18, 2017, [Instrument No. 2017-007992, of Official  
Records.](#)

19. Matters contained in that certain document

Entitled: Annexation Agreement and Development Agreement by and between The City of  
Lathrop and Richland Planned Communities, Inc., Relating to the Central Lathrop Specific Plan (The  
"CLSP Development Agreement")  
Executed by: The City of Lathrop and Richland Planned Communities, Inc.  
Recording Date: January 28, 2005  
[Recording No.: 2005-020321](#)

Reference is hereby made to said document for full particulars.

**EXCEPTIONS**  
(continued)

20. Matters contained in that certain document

Entitled: Certificate of Completion - Robinson-Widmer Reorganization (LAFC 18-02)  
 Dated: September 2, 2005  
 Executed by: San Joaquin LAFCo  
 Recording Date: September 2, 2005  
Recording No.: [2005-220381](#)

Reference is hereby made to said document for full particulars.

21. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document;

Reserved by: City of Lathrop  
 Purpose: Public service easement  
 Recording Date: August 23, 2006  
Recording No.: [2006-180268](#)

Reference is hereby made to said document for full particulars.

22. Matters contained in that certain document

Entitled: Resolution No. 09-2748 - A Resolution of the City Council of the City of Lathrop Accepting Lathrop Road (Land Park Drive to Manthey Road) Right of Way and a Portion of the Public Improvements  
 Executed by: The City of Lathrop  
 Recording Date: April 21, 2009  
Recording No.: [2009-059500](#)

Reference is hereby made to said document for full particulars.

23. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

24. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

25. Any lien or right to a lien for services, labor or material not shown by the Public Records.

26. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other matters which a correct survey would disclose and which are not shown by the public records.

27. Any easements not disclosed by the public records as to matters affecting title to real property, whether or not said easements are visible and apparent.

**EXCEPTIONS**  
(continued)

28. Matters which may be disclosed by an inspection and/or by a correct ALTA/NSPS Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.
29. The Company will require an ALTA/NSPS LAND TITLE SURVEY. If the owner of the Land that is the subject of this transaction is in possession of a current ALTA/NSPS LAND TITLE SURVEY, the Company will require that said survey be submitted for review and approval; otherwise, a new survey, satisfactory to the Company, must be prepared by a licensed land surveyor and supplied to the Company prior to the close of escrow.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

30. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below.

Name of Corporation: Dos Reis Ranch Inc.

- a. A Copy of the corporation By-laws and Articles of Incorporation.
- b. An original or certified copy of a resolution authorizing the transaction contemplated herein.
- c. If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

31. The Company will require that an Owner's Affidavit be completed by the party(s) named below before the issuance of any policy of title insurance.

Party(ies): Dos Reis Ranch, Inc., a California corporation

The Company reserves the right to add additional items or make further requirements after review of the requested Affidavit.

32. This transaction requires high liability approval prior to close of escrow together with an inspection of the subject property.

Please advise title department with an estimated date that your transaction will close so we can schedule the necessary approvals and inspections.

33. Prior to the close of escrow and the issuance of an ALTA Coverage Policy, an inspection of the property will be required.

**EXCEPTIONS**  
(continued)

34. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below:

Name of Corporation: Ashley Furniture Industries, Inc., a Wisconsin corporation

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent
- d) A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

35. The transaction contemplated in connection with this Report is subject to the review and approval of the Company's Corporate Underwriting Department. The Company reserves the right to add additional items or make further requirements after such review.

**END OF EXCEPTIONS**



## NOTES

- Note 1.** Note: The name(s) of the proposed insured(s) furnished with this application for title insurance is/are:  
Name(s) furnished: Ashley Furniture Industries, Inc., a Wisconsin corporation  
If these name(s) are incorrect, incomplete or misspelled, please notify the Company.
- Note 2.** Note: The only conveyance(s) affecting said Land, which recorded within 24 months of the date of this report, are as follows:  
Grantor: Dos Reis Ranch, Inc., a California corporation  
Grantee: Dos Reis Ranch, Inc., a California corporation  
Recording Date: May 27, 2020  
[Recording No.: 2020-061686, of Official Records](#)
- Note 3.** Note: The charge for a policy of title insurance, when issued through this title order, will be based on the Basic Title Insurance Rate.
- Note 4.** Note: If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.
- Note 5.** Note: Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of a Company agent, an authorized employee of the insured lender, or by using Bancserv or other Company-approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.
- Note 6.** Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
- Note 7.** The application for title insurance was placed by reference to only a street address or tax identification number. The proposed Insured must confirm that the legal description in this report covers the parcel(s) of Land requested to be insured. If the legal description is incorrect, the proposed Insured must notify the Company and/or the settlement company in order to prevent errors and to be certain that the legal description for the intended parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.
- Note 8.** Note: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.

**NOTES**  
(continued)

- Note 9.** Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.

**END OF NOTES**



Inquire before you wire!

## WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.  
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. **DO NOT** use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** **DO NOT** send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do **NOT** reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

**Federal Bureau of Investigation:**  
<http://www.fbi.gov>

**Internet Crime Complaint Center:**  
<http://www.ic3.gov>

## **FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE**

Effective April 9, 2020

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

### **Collection of Personal Information**

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

### **Collection of Browsing Information**

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

### **Other Online Specifics**

**Cookies.** When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

### **Use of Personal Information**

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

### **When Information Is Disclosed**

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law. We may share your Personal Information with affiliates (other companies owned by FNF) to directly market to you. Please see "Choices with Your Information" to learn how to restrict that sharing.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

### **Security of Your Information**

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

### **Choices With Your Information**

If you do not want FNF to share your information among our affiliates to directly market to you, you may send an "opt out" request by email, phone, or physical mail as directed at the end of this Privacy Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you without your consent.

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (<https://fnf.com/pages/californiaprivacy.aspx>) or call (888) 413-1748.

For Nevada Residents: You may be placed on our internal Do Not Call List by calling (888) 934-3354 or by contacting us via the information set forth at the end of this Privacy Notice. Nevada law requires that we also provide you with the following contact information: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: BCPINFO@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

### **Information From Children**

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

### **International Users**

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

### **FNF Website Services for Mortgage Loans**

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

### **Your Consent To This Privacy Notice; Notice Changes; Use of Comments or Feedback**

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice. We may use comments or feedback that you submit to us in any manner without notice or compensation to you.

**Accessing and Correcting Information; Contact Us**

If you have questions, would like to correct your Personal Information, or want to opt-out of information sharing for affiliate marketing, send your requests to [privacy@fnf.com](mailto:privacy@fnf.com), by phone to (888) 934-3354, or by mail to:

Fidelity National Financial, Inc.  
601 Riverside Avenue,  
Jacksonville, Florida 32204  
Attn: Chief Privacy Officer

# ATTACHMENT ONE

## CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE POLICY - 1990

### EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.  
(b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
  - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
  - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
  - (c) resulting in no loss or damage to the insured claimant;
  - (d) attaching or created subsequent to Date of Policy; or
  - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

### EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.  
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.



**ATTACHMENT ONE  
(CONTINUED)**

**CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)  
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE**

**EXCLUSIONS**

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
  - a. building;
  - b. zoning;
  - c. land use;
  - d. improvements on the Land;
  - e. land division; and
  - f. environmental protection.This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
  - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
  - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
  - c. that result in no loss to You; or
  - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
  - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
  - b. in streets, alleys, or waterways that touch the Land.This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

**LIMITATIONS ON COVERED RISKS**

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 5,000.00

## **ATTACHMENT ONE (CONTINUED)**

### **2006 ALTA LOAN POLICY (06-17-06)**

#### **EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
  - (a) a fraudulent conveyance or fraudulent transfer, or
  - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

#### **EXCEPTIONS FROM COVERAGE**

[Except as provided in Schedule B - Part II, [t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

##### **[PART I**

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]

##### **PART II**

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

## **ATTACHMENT ONE (CONTINUED)**

### **2006 ALTA OWNER'S POLICY (06-17-06)**

#### **EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
  - (a) a fraudulent conveyance or fraudulent transfer; or
  - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

#### **EXCEPTIONS FROM COVERAGE**

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]
7. [Variable exceptions such as taxes, easements, CC&R's, etc., shown here.]

**ATTACHMENT ONE  
(CONTINUED)**

**ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY - ASSESSMENTS PRIORITY (04-02-15)**

**EXCLUSIONS FROM COVERAGE**

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
  - (i) the occupancy, use, or enjoyment of the Land;
  - (ii) the character, dimensions, or location of any improvement erected on the Land;
  - (iii) the subdivision of land; or
  - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
  - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
  - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
  - (c) resulting in no loss or damage to the Insured Claimant;
  - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
  - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
  - (a) a fraudulent conveyance or fraudulent transfer, or
  - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

## Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

### **FNF Underwritten Title Companies**

CTC - Chicago Title Company  
CLTC - Commonwealth Land Title Company  
FNTC - Fidelity National Title Company of California  
FNTCCA - Fidelity National Title Company of California  
TICOR - Ticor Title Company of California  
LTC - Lawyer's Title Company  
SLTC - ServiceLink Title Company

### **Underwritten by FNF Underwriters**

CTIC - Chicago Title Insurance Company  
CLTIC - Commonwealth Land Title Insurance Company  
FNTIC - Fidelity National Title Insurance Company  
FNTIC - Fidelity National Title Insurance Company  
CTIC - Chicago Title Insurance Company  
CLTIC - Commonwealth Land Title Insurance Company  
CTIC - Chicago Title Insurance Company

### **Available Discounts**

#### **DISASTER LOANS (CTIC, CLTIC, FNTIC)**

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

#### **CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)**

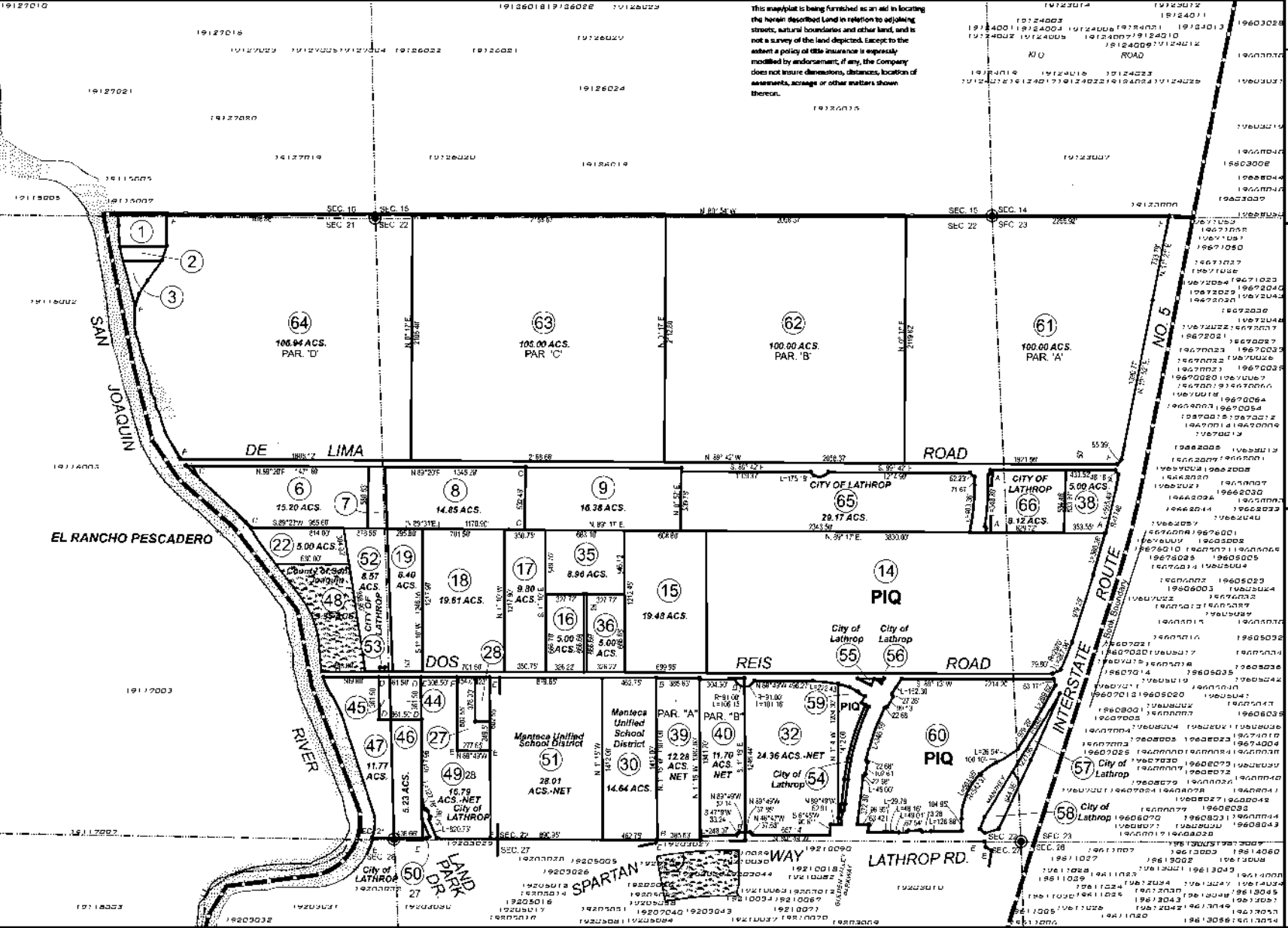
On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be forty percent (40%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

**DISCLAIMER**  
 The sole purpose of this document is for the assessment and collection of County property taxes. County makes no representation or warranty, express or implied, about the completeness, accuracy, reliability or authenticity of the information set forth in this document. Therefore, this document should not be relied upon to determine the legal ownership of any specific parcel(s), nor to facilitate any real property transaction(s) between private parties. County is not liable for any loss or damage whatsoever arising from or in connection with the use of or reliance upon this document(s).



**SEC. 22, & POR. OF SECS. 21 & 23, T.15. R.6E., M.D.B.&M  
 E - POR. LAND PARK AT LATHROP - PHASE 1**

This map/plot is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.



**192-02**

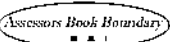
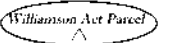
THIS MAP IS FOR ASSESSMENT PURPOSES ONLY AND IS NOT TO BE USED FOR ANY OTHER PURPOSE. COUNTY WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.



**MAPPING/GIS**  
 0 200 400 600 800  
 Feet

**LEGEND**

Example of a Standard Assessment/ Parcel Number  
**000-000-000-000**  
 Book Page Parcel Interval  
 or Number the  
 Book  
 R.M. - Recorded Subdivision  
 Map  
 P.M. - Recorded Parcel  
 Map  
 R.S. - Recorded Survey  
 Map



- A - R.S. BK. 26 PG. 165
- B - P.M. BK. 02 PG. 092
- C - R.S. BK. 28 PG. 195
- D - P.M. BK. 11 PG. 084
- E - R.M. BK. 40 PG. 100

SAN JOAQUIN COUNTY ASSESSMENT/ PARCEL NUMBER ISSUED PER ROLL YEAR			
ROLL YR.	ASMT#	ASMT#	ASMT#
20-21	20	20	20
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**BK. 192 PG. 02**  
 COUNTY OF  
 SAN JOAQUIN, CA  
 All Rights Reserved  
 COPYRIGHT COUNTY OF SAN JOAQUIN  
 APPROVED NOVEMBER 02 2019


# ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Please complete to the best of your knowledge. For those questions that are not applicable, please respond with an "N/A". For those questions that are unknown, please respond with "unknown".

## 1. PROPERTY INFORMATION:

Property Name: +/- 130 acres, Lathrop, CA		
Property Address: Dos Reis & Manthey Rds		
City Lathrop	State: California	Zip: 95330
Assessor's Parcel Number 191-220-14, 59, and 60		
Property Owner & Contact Information: Mike Robinson, need to get contact info		
Date Property Owner Purchased: Unknown		
Key Site Manager & Contact Information: Sean Asmus, 602-904-2756		

## 2. COMPLETED BY

Signature 	Date 2/22/2021
Printed Name Sean T. Asmus	Relation to Subject Property: Buyers Rep

## 3. PREVIOUS INVESTIGATIONS

Have any previous environmental investigations been performed at the property, including Phase I ESAs, Phase II Subsurface Investigations, Remediation, Asbestos or Lead-Based Paint surveys? \_\_\_\_\_ Unknown

## 4. PROPERTY DESCRIPTION

Property Size: +/- 130 ACRES Number of Building(s): 0

Size of Building(s): N/A

Date of Construction: N/A

Property Type: (please circle)

Multi-Family Hotel Mobile Home Park Retail/Commercial Industrial Office

Other: VACANT LAND

Please provide Rent Roll if Applicable.

Historical Use of Property: AGRICULTURAL

## 5. SURROUNDING PROPERTY USES

DIRECTION	USE
North	VACANT / AG
South	VACANT / AG
East	FREEWAY - RESIDENTIAL
West	LIGHT INDUSTRIAL

Are you aware of any potential environmental concerns associated with surrounding properties?

\_\_\_\_\_ YES  NO

If yes, please describe: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**6. UTILITIES & SERVICES**

Please provide the name of the utility or contractor providing the following:

- |                      |                            |
|----------------------|----------------------------|
| Electric _____       | Bio-hazardous Waste _____  |
| Gas _____            | Elevator Maintenance _____ |
| Potable Water _____  | Used Grease _____          |
| Sanitary Sewer _____ | Hazardous Waste _____      |

**7. ON SITE OPERATIONS**

Are you aware of any of the following conditions, either past or present, on the property?		
Condition	Response	If yes, please describe
1. Stored Chemicals	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. Underground Storage Tanks	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Aboveground Storage Tanks	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4. Spills or Releases	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Dump Areas/Landfills	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
6. Waste Treatment Systems	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Clarifiers/Separators	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
8. Vents/Odors	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
9. Floor Drains/Sumps	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
10. Stained Soil	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
11. Electrical Transformers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
12. Hydraulic Lifts/Elevators	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
13. Dry Cleaning Operations	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
14. Oil/Gas/Water/Monitoring Wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
15. Environmental Permits	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	





Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

March 8, 2021

### Wetlands

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## **APPENDIX C: REGULATORY DATABASE REPORT**

---

**APN 191-220-14, 191-220-59, and 191-220-60**

14101 S Manthey Rd

Lathrop, CA 95330

Inquiry Number: 6375198.2s

February 22, 2021

## The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary .....	ES1
Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	9
Orphan Summary .....	408
Government Records Searched/Data Currency Tracking .....	GR-1
 <b><u>GEOCHECK ADDENDUM</u></b>	
Physical Setting Source Addendum .....	A-1
Physical Setting Source Summary .....	A-2
Physical Setting SSURGO Soil Map .....	A-5
Physical Setting Source Map .....	A-10
Physical Setting Source Map Findings .....	A-12
Physical Setting Source Records Searched .....	PSGR-1

***Thank you for your business.***  
 Please contact EDR at 1-800-352-0050  
 with any questions or comments.

### Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

14101 S MANTHEY RD  
LATHROP, CA 95330

#### COORDINATES

Latitude (North): 37.8319220 - 37° 49' 54.91"  
Longitude (West): 121.2941870 - 121° 17' 39.07"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 650116.2  
UTM Y (Meters): 4188332.2  
Elevation: 12 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5640064 LATHROP, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140628  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
14101 S MANTHEY RD  
LATHROP, CA 95330

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	DOS RIES RANCH	14101 MANTHEY ROAD	NPDES		TP
<a href="#">Reg</a>	SHARPE GENERAL DEPOT		DOD	Same	5085, 0.963, East
<a href="#">Reg</a>	SHARPE ARMY DEPOT	700 EAST ROTH RD	NPL, SEMS, CORRACTS, RCRA-TSDF, US ENG CONTROLS,	Same	3906, 0.740, East
2	PENSKE	140 W LATHROP RD	RCRA NonGen / NLR	Higher	70, 0.013, SSE
<a href="#">A3</a>	JH MOTORSPORTS INC	14150 S HARLAN RD	CERS HAZ WASTE, HAZNET, CERS, HWTS	Higher	390, 0.074, East
<a href="#">A4</a>	JH MOTORSPORTS INC	14150 S HARLAN RD	RCRA NonGen / NLR	Higher	390, 0.074, East
5	LUIS BUCIO	14440 HARLAN RD	RCRA NonGen / NLR, FINDS, ECHO	Higher	441, 0.084, ESE
6	EAGLES NEST HARLEY-D	13900 S HARLAN RD	RCRA NonGen / NLR	Higher	518, 0.098, East
7	LATHROP SMOG	15151 S HARLAN RD	RCRA NonGen / NLR	Higher	926, 0.175, SSE
8	LATHROP HIGH SCHOOL	526 AND 600 W. DOS R	ENVIROSTOR, SCH, CERS	Higher	994, 0.188, WSW
<a href="#">B9</a>	TWO GUYS FOOD & FUEL	147 E LATHROP RD	CERS HAZ WASTE, SWEEPS UST, CERS TANKS, EMI, CERS	Higher	1108, 0.210, SE
<a href="#">B10</a>	CARDOZA ENTERPRISES	147 E LATHROP RD	RCRA NonGen / NLR	Higher	1108, 0.210, SE
<a href="#">B11</a>	LATHROP GAS & FOOD I	140 LATHROP RD	RCRA NonGen / NLR	Higher	1123, 0.213, SE
<a href="#">B12</a>	LATHROP CHEVRON	140 LATHROP RD	UST	Higher	1123, 0.213, SE
<a href="#">B13</a>	LATHROP GAS & FOOD I	140 E LATHROP RD	UST	Higher	1128, 0.214, SE
<a href="#">B14</a>	LATHROP GAS & FOOD I	140 E LATHROP RD	CERS HAZ WASTE, CERS TANKS, CERS	Higher	1128, 0.214, SE
<a href="#">B15</a>	TWO GUYS FOOD & FUEL	147 E LATHROP RD	UST	Higher	1133, 0.215, SE
16	NORTH COUNTRY SQUIRE	NORTH OF SQUIRES RD	ENVIROSTOR, DEED	Higher	1164, 0.220, SSE
<a href="#">C17</a>	WALGREENS #10631	14780 HARLAN RD	CERS HAZ WASTE, HAZNET, HWTS	Higher	1313, 0.249, SE
<a href="#">C18</a>	WALGREENS #10631	14780 S HARLAN RD	RCRA-VSQG	Higher	1313, 0.249, SE
<a href="#">D19</a>	O'REILLY AUTO PARTS	15079 S HARLAN RD	CERS HAZ WASTE, CERS	Higher	1318, 0.250, SE
<a href="#">D20</a>	OREILLY AUTO PARTS S	15079 S HARLAN RD	RCRA NonGen / NLR	Higher	1318, 0.250, SE
21	JOE'S TEXACO	15600 HARLAN RD S	LUST, Cortese, HIST CORTESE, CIWQS	Higher	2209, 0.418, South
22	CITY OF LATHROP	15688 HARLAN	LUST, Cortese, CERS	Higher	2583, 0.489, South
23	VERNER PARCELS C&D	HARLAN ROAD AND SQUI	ENVIROSTOR, DEED	Higher	2934, 0.556, NE
24	JOE WIDMER ELEMENTAR	STONEBRIDGE LANE/I-5	ENVIROSTOR, SCH	Higher	3511, 0.665, East
25	DEFENSE DISTRIBUTION	ROTH ROAD BLDG S-4	HAZNET, ICE, HWP, CERS, HWTS	Higher	4641, 0.879, East
26	4TH HIGH SCHOOL/WEST	FRENCH CAMP ROAD/WOL	ENVIROSTOR, SCH	Higher	4930, 0.934, NNE
27	LOUISE AVENUE COMMUN	245 LOUISE AVENUE	ENVIROSTOR, SCH	Higher	4953, 0.938, South
28	ARCO #6080 CASE #2	85 LOUISE AVE E	LUST, Cortese, Notify 65, CERS	Higher	5153, 0.976, South
29	LANGSTON'S	15615 7 TH STREET	Notify 65	Higher	5179, 0.981, SE

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
DOS RIES RANCH 14101 MANTHEY ROAD LATHROP, CA 95330	NPDES	N/A

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System

## EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROLS..... Institutional Controls Sites List

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land  
CPS-SLIC..... Statewide SLIC Cases

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
AST..... Aboveground Petroleum Storage Tank Facilities  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal voluntary cleanup sites***

VCP..... Voluntary Cleanup Program Properties  
INDIAN VCP..... Voluntary Cleanup Priority Listing

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT..... Waste Management Unit Database  
SWRCY..... Recycler Database  
HAULERS..... Registered Waste Tire Haulers Listing  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
ODI..... Open Dump Inventory  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
IHS OPEN DUMPS..... Open Dumps on Indian Land

#### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register



## EXECUTIVE SUMMARY

HIST Cal-Sites.....	Historical Calsites Database
CDL.....	Clandestine Drug Labs
Toxic Pits.....	Toxic Pits Cleanup Act Sites
US CDL.....	National Clandestine Laboratory Register
PFAS.....	PFAS Contamination Site Location Listing

### **Local Lists of Registered Storage Tanks**

HIST UST.....	Hazardous Substance Storage Container Database
CA FID UST.....	Facility Inventory Database

### **Local Land Records**

LIENS.....	Environmental Liens Listing
LIENS 2.....	CERCLA Lien Information

### **Records of Emergency Release Reports**

HMIRS.....	Hazardous Materials Information Reporting System
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
SPILLS 90.....	SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

FUDS.....	Formerly Used Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File

## EXECUTIVE SUMMARY

ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
HWTS.....	Hazardous Waste Tracking System
MINES MRDS.....	Mineral Resources Data System

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### *Exclusive Recovered Govt. Archives*

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

## EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### **STANDARD ENVIRONMENTAL RECORDS**

#### ***Federal NPL site list***

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 12/30/2020 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>SHARPE ARMY DEPOT</i></b> Cerclis ID:: 902792 EPA Id: CA8210020832	<b><i>700 EAST ROTH RD</i></b>	<b><i>E 1/2 - 1 (0.740 mi.)</i></b>	<b><i>0</i></b>	<b><i>10</i></b>

#### ***Federal RCRA CORRACTS facilities list***

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 12/14/2020 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>SHARPE ARMY DEPOT</i></b> EPA ID:: CA8210020832	<b><i>700 EAST ROTH RD</i></b>	<b><i>E 1/2 - 1 (0.740 mi.)</i></b>	<b><i>0</i></b>	<b><i>10</i></b>

#### ***Federal RCRA generators list***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 12/14/2020 has revealed that there is 1

## EXECUTIVE SUMMARY

RCRA-VSQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WALGREENS #10631 EPA ID:: CAL000327765	14780 S HARLAN RD	SE 1/8 - 1/4 (0.249 mi.)	C18	268

### **State- and tribal - equivalent CERCLIS**

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/26/2020 has revealed that there are 6 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>LATHROP HIGH SCHOOL</b> Facility Id: 70000047 Status: No Further Action	<b>526 AND 600 W. DOS R</b>	<b>WSW 1/8 - 1/4 (0.188 mi.)</b>	<b>8</b>	<b>155</b>
<b>NORTH COUNTRY SQUIRE</b> Facility Id: 39000001 Status: Haz Waste Disp Land Use (not BZP / HWP)	<b>NORTH OF SQUIRES RD</b>	<b>SSE 1/8 - 1/4 (0.220 mi.)</b>	<b>16</b>	<b>219</b>
<b>VERNER PARCELS C&amp;D</b> Facility Id: 39000002 Status: Haz Waste Disp Land Use (not BZP / HWP)	<b>HARLAN ROAD AND SQUI</b>	<b>NE 1/2 - 1 (0.556 mi.)</b>	<b>23</b>	<b>285</b>
<b>JOE WIDMER ELEMENTAR</b> Facility Id: 39010004 Status: No Further Action	<b>STONEBRIDGE LANE/I-5</b>	<b>E 1/2 - 1 (0.665 mi.)</b>	<b>24</b>	<b>286</b>
<b>4TH HIGH SCHOOL/WEST</b> Facility Id: 39010002 Status: No Further Action	<b>FRENCH CAMP ROAD/WOL</b>	<b>NNE 1/2 - 1 (0.934 mi.)</b>	<b>26</b>	<b>395</b>
<b>LOUISE AVENUE COMMUN</b> Facility Id: 39010011 Status: No Further Action	<b>245 LOUISE AVENUE</b>	<b>S 1/2 - 1 (0.938 mi.)</b>	<b>27</b>	<b>399</b>

### **State and tribal leaking storage tank lists**

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within

## EXECUTIVE SUMMARY

approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JOE'S TEXACO</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 12/04/2020 Status: Completed - Case Closed Status: Leak being confirmed Global Id: T0607700597	<b>15600 HARLAN RD S</b>	<b>S 1/4 - 1/2 (0.418 mi.)</b>	<b>21</b>	<b>277</b>
<b>CITY OF LATHROP</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 12/04/2020 Status: Completed - Case Closed Status: Leak being confirmed Global Id: T0607705881	<b>15688 HARLAN</b>	<b>S 1/4 - 1/2 (0.489 mi.)</b>	<b>22</b>	<b>281</b>

### ***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LATHROP CHEVRON Database: UST, Date of Government Version: 12/04/2020 Facility Id: FA0006943	140 LATHROP RD	SE 1/8 - 1/4 (0.213 mi.)	B12	192
LATHROP GAS & FOOD I Database: UST SAN JOAQUIN, Date of Government Version: 06/22/2018 Database: UST, Date of Government Version: 12/04/2020 Tank Status: 01 - Active, billable Facility Id: FA0006943	140 E LATHROP RD	SE 1/8 - 1/4 (0.214 mi.)	B13	192
TWO GUYS FOOD & FUEL Database: UST SAN JOAQUIN, Date of Government Version: 06/22/2018 Database: UST, Date of Government Version: 12/04/2020 Tank Status: 01 - Active, billable Facility Id: FA0003789 Facility Id: FA0003789	147 E LATHROP RD	SE 1/8 - 1/4 (0.215 mi.)	B15	217

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Lists of Hazardous waste / Contaminated Sites***

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 10/26/2020 has revealed that there is 1 SCH

## EXECUTIVE SUMMARY

site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>LATHROP HIGH SCHOOL</b> Facility Id: 70000047 Status: No Further Action	<b>526 AND 600 W. DOS R</b>	<b>WSW 1/8 - 1/4 (0.188 mi.)</b>	<b>8</b>	<b>155</b>

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/19/2020 has revealed that there are 5 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JH MOTORSPORTS INC</b>	<b>14150 S HARLAN RD</b>	<b>E 0 - 1/8 (0.074 mi.)</b>	<b>A3</b>	<b>139</b>
<b>TWO GUYS FOOD &amp; FUEL</b>	<b>147 E LATHROP RD</b>	<b>SE 1/8 - 1/4 (0.210 mi.)</b>	<b>B9</b>	<b>159</b>
<b>LATHROP GAS &amp; FOOD I</b>	<b>140 E LATHROP RD</b>	<b>SE 1/8 - 1/4 (0.214 mi.)</b>	<b>B14</b>	<b>194</b>
<b>WALGREENS #10631</b>	<b>14780 HARLAN RD</b>	<b>SE 1/8 - 1/4 (0.249 mi.)</b>	<b>C17</b>	<b>220</b>
<b>O'REILLY AUTO PARTS</b>	<b>15079 S HARLAN RD</b>	<b>SE 1/8 - 1/4 (0.250 mi.)</b>	<b>D19</b>	<b>272</b>

### **Local Lists of Registered Storage Tanks**

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TWO GUYS FOOD &amp; FUEL</b> Status: A Tank Status: A Comp Number: 2353	<b>147 E LATHROP RD</b>	<b>SE 1/8 - 1/4 (0.210 mi.)</b>	<b>B9</b>	<b>159</b>

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/19/2020 has revealed that there are 2 CERS TANKS sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TWO GUYS FOOD &amp; FUEL</b>	<b>147 E LATHROP RD</b>	<b>SE 1/8 - 1/4 (0.210 mi.)</b>	<b>B9</b>	<b>159</b>
<b>LATHROP GAS &amp; FOOD I</b>	<b>140 E LATHROP RD</b>	<b>SE 1/8 - 1/4 (0.214 mi.)</b>	<b>B14</b>	<b>194</b>

## EXECUTIVE SUMMARY

### **Local Land Records**

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 11/30/2020 has revealed that there is 1 DEED site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>NORTH COUNTRY SQUIRE</b> Status: HAZ WASTE DISP LAND USE (NOT BZP / HWP) Envirostor ID: 39000001	<b>NORTH OF SQUIRES RD</b>	<b>SSE 1/8 - 1/4 (0.220 mi.)</b>	<b>16</b>	<b>219</b>

### **Other Ascertainable Records**

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/14/2020 has revealed that there are 8 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PENSKE	140 W LATHROP RD	SSE 0 - 1/8 (0.013 mi.)	2	137
JH MOTORSPORTS INC EPA ID:: CAL000366059	14150 S HARLAN RD	E 0 - 1/8 (0.074 mi.)	A4	145
<b>LUIS BUCIO</b> EPA ID:: CAR000090969	<b>14440 HARLAN RD</b>	<b>ESE 0 - 1/8 (0.084 mi.)</b>	<b>5</b>	<b>148</b>
EAGLES NEST HARLEY-D EPA ID:: CAL000403447	13900 S HARLAN RD	E 0 - 1/8 (0.098 mi.)	6	150
LATHROP SMOG EPA ID:: CAL000433435	15151 S HARLAN RD	SSE 1/8 - 1/4 (0.175 mi.)	7	153
CARDOZA ENTERPRISES EPA ID:: CAL000172313	147 E LATHROP RD	SE 1/8 - 1/4 (0.210 mi.)	B10	187
LATHROP GAS & FOOD I EPA ID:: CAL000384242	140 LATHROP RD	SE 1/8 - 1/4 (0.213 mi.)	B11	189
OREILLY AUTO PARTS S EPA ID:: CAL000394668	15079 S HARLAN RD	SE 1/8 - 1/4 (0.250 mi.)	D20	274

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SHARPE GENERAL DEPOT		E 1/2 - 1 (0.963 mi.)	0	9

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 12/30/2020 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SHARPE ARMY DEPOT</b> EPA ID:: CA8210020832	<b>700 EAST ROTH RD</b>	<b>E 1/2 - 1 (0.740 mi.)</b>	<b>0</b>	<b>10</b>

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/22/2020 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JOE'S TEXACO</b> Cleanup Status: COMPLETED - CASE CLOSED	<b>15600 HARLAN RD S</b>	<b>S 1/4 - 1/2 (0.418 mi.)</b>	<b>21</b>	<b>277</b>
<b>CITY OF LATHROP</b> Cleanup Status: COMPLETED - CASE CLOSED	<b>15688 HARLAN</b>	<b>S 1/4 - 1/2 (0.489 mi.)</b>	<b>22</b>	<b>281</b>

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>JOE'S TEXACO</b> Reg Id: 390763	<b>15600 HARLAN RD S</b>	<b>S 1/4 - 1/2 (0.418 mi.)</b>	<b>21</b>	<b>277</b>

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 11/13/2020 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DEFENSE DISTRIBUTION</b> EPA Id: CA8210020832 Cleanup Status: UNDERGOING CLOSURE	<b>ROTH ROAD BLDG S-4</b>	<b>E 1/2 - 1 (0.879 mi.)</b>	<b>25</b>	<b>289</b>



## EXECUTIVE SUMMARY

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/07/2020 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

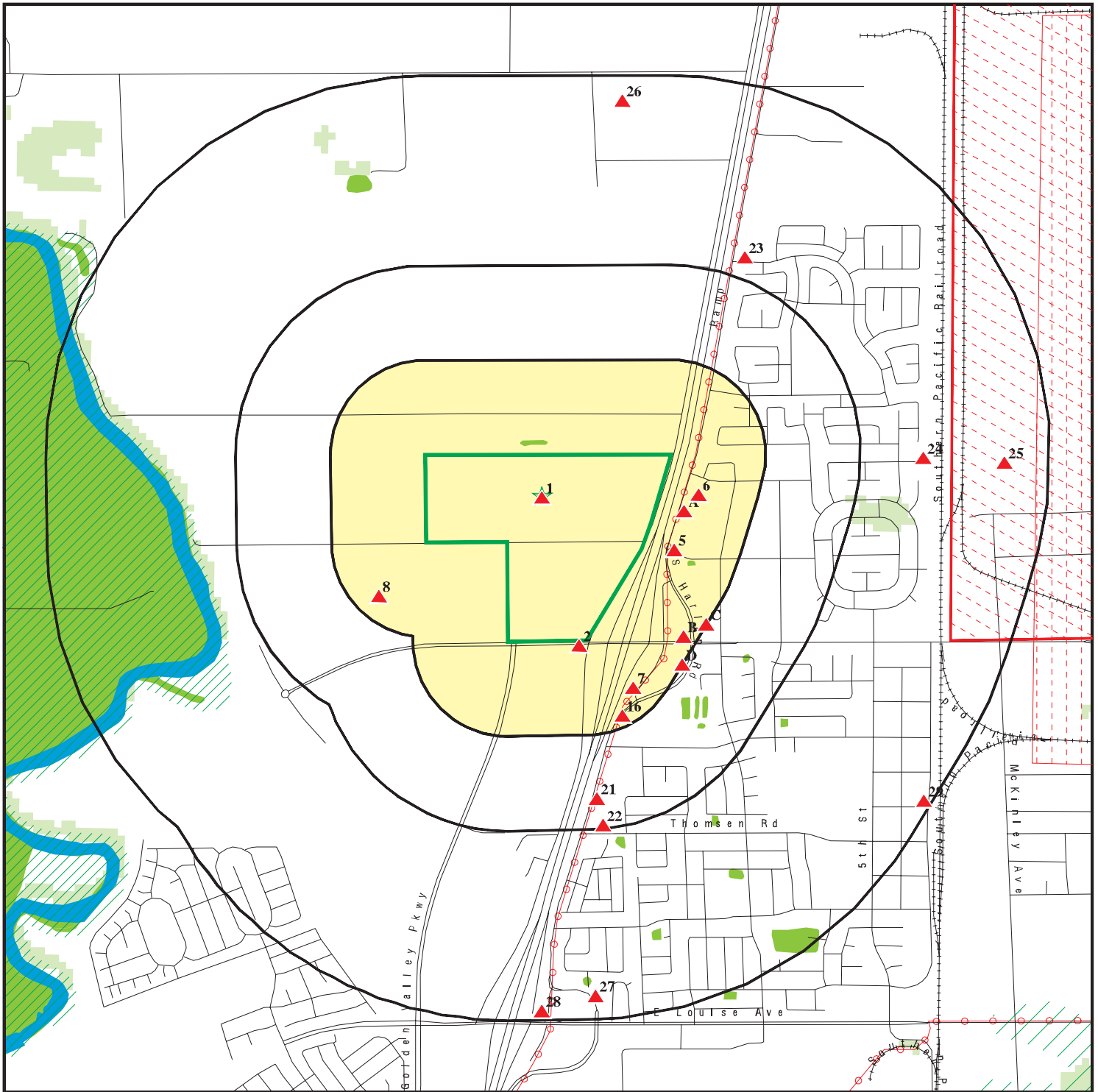
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>ARCO #6080 CASE #2</b> LANGSTON'S	<b>85 LOUISE AVE E</b> 15615 7 TH STREET	<b>S 1/2 - 1 (0.976 mi.)</b> SE 1/2 - 1 (0.981 mi.)	<b>28</b> 29	<b>402</b> 407

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

<u>Site Name</u>	<u>Database(s)</u>
TESLA INC	CERS HAZ WASTE
DEFENSE DISTRIBUTION REGION WEST	CDL
DOWNING AVE DUMP	SWF/LF
CHANNEL CONSTRUCTION ALONG SHULTE	SWF/LF
	CPS-SLIC

# OVERVIEW MAP - 6375198.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

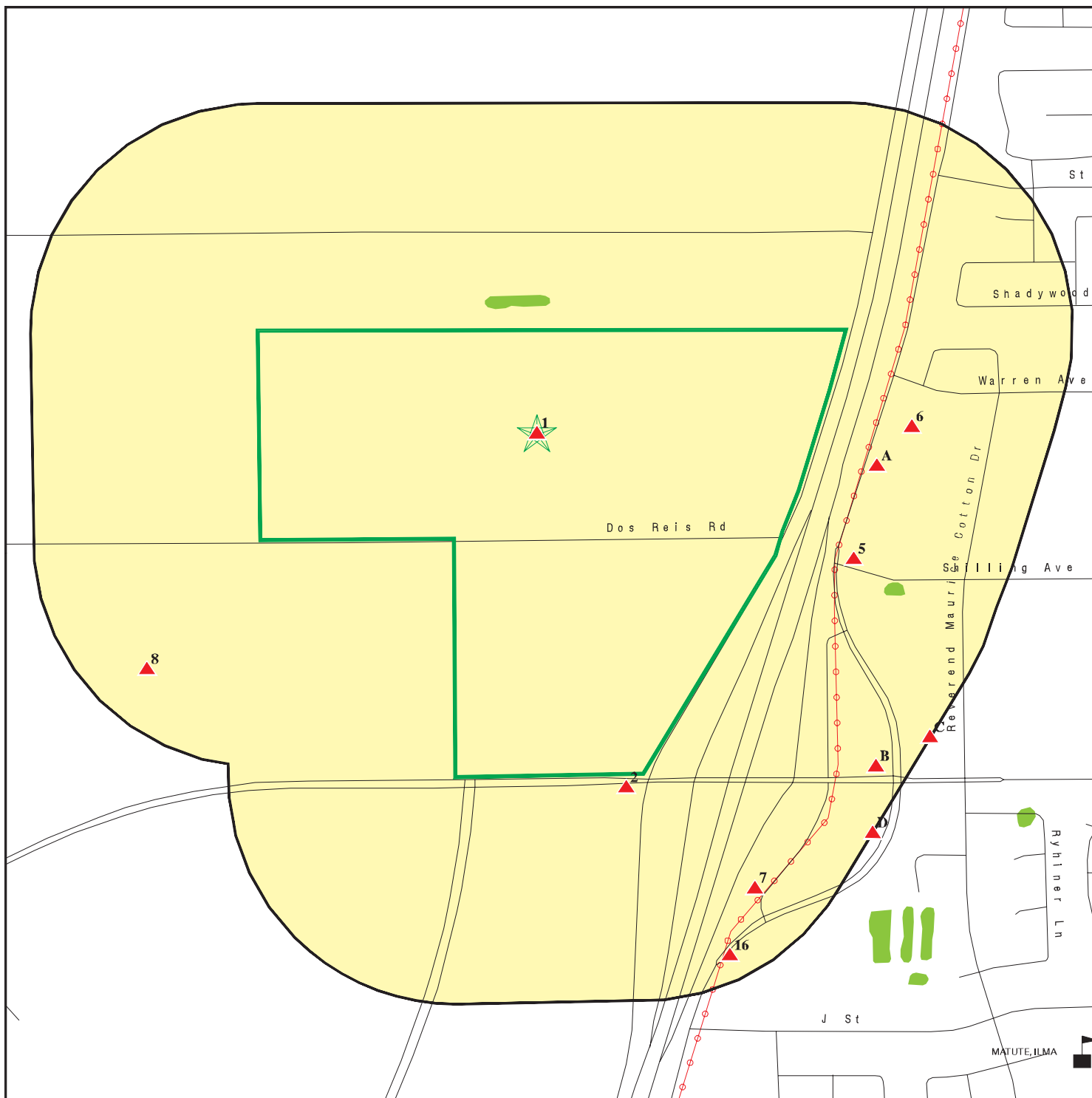








This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.








SITE NAME: APN 191-220-14, 191-220-59, and 191-220-60  
 ADDRESS: 14101 S Manthey Rd  
 Lathrop CA 95330  
 LAT/LONG: 37.831922 / 121.294187

CLIENT: Partner Engineering and Science, Inc.  
 CONTACT: Vanessa Pina  
 INQUIRY #: 6375198.2s  
 DATE: February 22, 2021 2:00 pm

# DETAIL MAP - 6375198.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: APN 191-220-14, 191-220-59, and 191-220-60  
 ADDRESS: 14101 S Manthey Rd  
 Lathrop CA 95330  
 LAT/LONG: 37.831922 / 121.294187

CLIENT: Partner Engineering and Science, Inc.  
 CONTACT: Vanessa Pina  
 INQUIRY #: 6375198.2s  
 DATE: February 22, 2021 2:03 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	1	NR	1
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL RESPONSE</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i></b>								
ENVIROSTOR	1.000		0	2	0	4	NR	6
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	0	2	NR	NR	2

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	3	NR	NR	NR	3
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	1	NR	NR	NR	1
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		1	4	NR	NR	NR	5
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
SWEEPS UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	2	NR	NR	NR	2
CA FID UST	0.250		0	0	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	1	0	NR	NR	1
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		4	4	NR	NR	NR	8
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	1	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	1	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	2	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	1	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP	1	NR	NR	NR	NR	NR	1
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

### EDR RECOVERED GOVERNMENT ARCHIVES

#### *Exclusive Recovered Govt. Archives*

RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0

- Totals --		1	5	19	5	11	0	41
-------------	--	---	---	----	---	----	---	----



## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
-----------------	--	----------------------------	-----------------	------------------	------------------	----------------	---------------	--------------------------

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**1**  
**Target**  
**Property**  
**DOS RIES RANCH**  
**14101 MANTHEY ROAD**  
**LATHROP, CA 95330**

**NPDES** **S122247320**  
**N/A**

**Actual:**  
**12 ft.**

NPDES:  
Name: DOS RIES RANCH  
Address: 14101 MANTHEY ROAD  
City,State,Zip: LATHROP, CA 95330  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S39W000577  
Regulatory Measure Type: Construction  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Expired  
Status Date: 12/30/2011  
Operator Name: Plowsheer LLC  
Operator Address: 139  
Operator City: Ripon  
Operator State: California  
Operator Zip: 95366

**DOD**  
**Region**  
**East**  
**1/2-1**  
**5085 ft.**  
**SHARPE GENERAL DEPOT (FIELD ANNEX)**  
**SHARPE GENERAL DEPOT (FIE (County), CA)**

**DOD** **CUSA136061**  
**N/A**

DOD:  
Feature 1: Army DOD  
Feature 2: Not reported  
Feature 3: Not reported  
URL: Not reported  
Name 1: Sharpe General Depot (Field Annex)  
Name 2: Not reported  
Name 3: Not reported  
State: CA  
DOD Site: Yes  
Tile name: CASAN\_JOAQUIN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NPL**  
**Region**  
**East**  
**1/2-1**  
**3906 ft.**

**SHARPE ARMY DEPOT**  
**700 EAST ROTH RD**  
**LATHROP, CA 95330**

**NPL** 1000368504  
**SEMS** CA8210020832  
**CORRACTS**  
**RCRA-TSDF**  
**US ENG CONTROLS**  
**US INST CONTROLS**  
**HIST UST**  
**RCRA NonGen / NLR**  
**ROD**

NPL:  
EPA Region: 9  
EPA ID: CA8210020832  
Site ID: 902792  
Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
City,State,Zip: LATHROP, CA 95330  
Federal: Y  
Final Date: 1987-07-22 00:00:00  
Latitude: 37.829169  
Longitude: -121.2672  
Site Score: 42.240000000000002

NPL:  
NPL Status: Currently on the Final NPL  
Substance ID: Not reported  
CAS Number: Not reported  
Substance: Not reported  
Pathway: Not reported  
Scoring: Not reported

NPL Status: Currently on the Final NPL  
Substance ID: U052  
CAS Number: 1319-77-3  
Substance: CRESOLS  
Pathway: GROUND WATER PATHWAY  
Scoring: 2

NPL Status: Currently on the Final NPL  
Substance ID: U079  
CAS Number: 156-60-5  
Substance: TRANS-DICHLOROETHYLENE, 1,2-  
Pathway: GROUND WATER PATHWAY  
Scoring: 2

NPL Status: Currently on the Final NPL  
Substance ID: U211  
CAS Number: 56-23-5  
Substance: CARBON TETRACHLORIDE  
Pathway: GROUND WATER PATHWAY  
Scoring: 4

NPL Status: Currently on the Final NPL  
Substance ID: U211  
CAS Number: 56-23-5  
Substance: CARBON TETRACHLORIDE  
Pathway: SURFACE WATER PATHWAY  
Scoring: 3

NPL Status: Currently on the Final NPL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Substance ID: U228  
CAS Number: 79-01-6  
Substance: TRICHLOROETHYLENE (TCE)  
Pathway: GROUND WATER PATHWAY  
Scoring: 2

Summary Details:

Conditions at proposal October 15, 1984): The Sharpe Army Depot covers 724 acres in a primarily rural area of San Joaquin County in north-central California, approximately 60 miles east of San Francisco, 2 miles east of the San Joaquin River, and 1.5 miles northeast of Lathrop. The site is a former U.S. Army maintenance facility. Wastes produced on-site were disposed of in multiple locations, including the South Balloon Area, the Burning Pits Area, and the North Balloon Area. These areas cover about 0.5 square mile. The wastes disposed of at the depot include sludge containing phenols and polychlorinated hydrocarbons trans-dichloroethylene, trichloroethylene, carbon tetrachloride), and used paints and solvents. The total amounts and types are unknown. The wastes have contaminated both soil and ground water, but not surface water to date. All maintenance activities have ceased, and the waste areas are no longer used. The site is located in the large plain on the valley floor, which carries several aquifers, at least one artesian. Most of the surrounding land is used for agriculture, primarily for raising row crops. The depot is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. The Army has completed Phase I records search) of the IRP. Status July 22, 1987): Sharpe Army Depot is sampling on-base and off-base ground water under IRP Phase II-Stage 2 confirmatory sampling). The Army has installed a facility for treating contaminated ground water in the South Balloon Area. Within the boundaries of this Federal facility, there are areas subject to the Subtitle C corrective action authorities of the Resource Conservation and Recovery Act (RCRA). However, no such areas were included in scoring this specific site. Therefore, this Federal facility site is being placed on the Federal section of the NPL under the NPL/RCRA policy announced on September 8, 1983 48 FR 40662).  
Not reported

NPL:

NPL Status: Currently on the Final NPL  
Category Description: Depth To Aquifer-> 50 And <= 100 Feet  
Category Value: 80

NPL Status: Currently on the Final NPL  
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile  
Category Value: 10

NPL:

NPL Name: SHARPE ARMY DEPOT

NPL:

EPA Region: 09  
Site ID: 0902792  
Site Status: F  
Federal Site: Y  
Date Deleted: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Date Finalized: 07/22/87  
Date Proposed: 10/15/84

NPL:  
Proposed Date: 10/15/1984  
Final Date: 07/22/1987  
Deleted Date: Not reported  
NPL Status: Final

SEMS:  
Site ID: 0902792  
EPA ID: CA8210020832  
Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
Cong District: 09,11  
FIPS Code: 06077  
Latitude: 37.829169  
Longitude: -121.267200  
FF: Y  
NPL: Currently on the Final NPL  
Non NPL Status: Not reported

SEMS Detail:  
Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: CM  
Action Name: PCOR  
SEQ: 2  
Start Date: 2003-06-27 04:00:00  
Finish Date: 6/27/2003 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: NF  
Action Name: NPL FINL  
SEQ: 1  
Start Date: 1987-07-22 04:00:00  
Finish Date: 7/22/1987 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 09

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: RV  
Action Name: RMVL  
SEQ: 1  
Start Date: 2014-09-30 05:00:00  
Finish Date: 9/30/2014 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: MA  
Action Name: ST COOP  
SEQ: 1  
Start Date: 1989-04-30 04:00:00  
Finish Date: 6/30/1994 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: NP  
Action Name: PROPOSED  
SEQ: 1  
Start Date: 1984-10-15 05:00:00  
Finish Date: 10/15/1984 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: HR  
Action Name: HAZRANK  
SEQ: 1  
Start Date: 1984-04-01 06:00:00  
Finish Date: 4/1/1984 6:00:00 AM  
Qual: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Current Action Lead: EPA Perf

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: AR  
Action Name: ADMIN REC  
SEQ: 1  
Start Date: 2000-10-24 04:00:00  
Finish Date: Not reported  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: PA  
Action Name: PA  
SEQ: 1  
Start Date: 1984-04-01 06:00:00  
Finish Date: 4/1/1984 6:00:00 AM  
Qual: L  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: LY  
Action Name: FF RA  
SEQ: 3  
Start Date: 1998-10-31 05:00:00  
Finish Date: 4/10/2001 4:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: LY  
Action Name: FF RA  
SEQ: 4

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Start Date: 1998-10-31 05:00:00  
Finish Date: 7/2/2002 4:00:00 AM  
Qual: FR  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: LV  
Action Name: FF RV  
SEQ: 1  
Start Date: 1994-12-08 05:00:00  
Finish Date: 6/13/1995 4:00:00 AM  
Qual: C  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 01  
Action Code: LX  
Action Name: FF RD  
SEQ: 1  
Start Date: 1993-01-25 05:00:00  
Finish Date: 10/27/1993 4:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 01  
Action Code: RO  
Action Name: ROD  
SEQ: 1  
Start Date: 1993-01-25 05:00:00  
Finish Date: 1/25/1993 5:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Action Code: LY  
Action Name: FF RA  
SEQ: 2  
Start Date: 1998-07-01 04:00:00  
Finish Date: 9/10/1999 4:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 01  
Action Code: LW  
Action Name: FF RI/FS  
SEQ: 1  
Start Date: 1989-03-16 05:00:00  
Finish Date: 1/25/1993 5:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: RO  
Action Name: ROD  
SEQ: 2  
Start Date: 1996-03-05 05:00:00  
Finish Date: 3/5/1996 5:00:00 AM  
Qual: R  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: EE  
Action Name: EE/CA  
SEQ: 1  
Start Date: 2014-09-22 05:00:00  
Finish Date: 9/30/2014 5:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

NPL: F  
FF: Y  
OU: 00  
Action Code: DS  
Action Name: DISCVRY  
SEQ: 1  
Start Date: 1980-11-01 05:00:00  
Finish Date: 11/1/1980 5:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 00  
Action Code: SI  
Action Name: SI  
SEQ: 1  
Start Date: 1984-04-01 06:00:00  
Finish Date: 4/1/1984 6:00:00 AM  
Qual: L  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: LW  
Action Name: FF RI/FS  
SEQ: 2  
Start Date: 1989-03-16 05:00:00  
Finish Date: 3/5/1996 5:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: LX  
Action Name: FF RD  
SEQ: 2  
Start Date: 1996-03-05 05:00:00  
Finish Date: 9/4/1998 4:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 01  
Action Code: LY  
Action Name: FF RA  
SEQ: 1  
Start Date: 1995-05-30 04:00:00  
Finish Date: 7/2/2001 4:00:00 AM  
Qual: Not reported  
Current Action Lead: Fed Fac

Region: 09  
Site ID: 0902792  
EPA ID: CA8210020832  
Site Name: SHARPE ARMY DEPOT  
NPL: F  
FF: Y  
OU: 02  
Action Code: LW  
Action Name: FF RI/FS  
SEQ: 3  
Start Date: 2018-07-20 05:00:00  
Finish Date: Not reported  
Qual: Not reported  
Current Action Lead: Fed Fac

**CORRACTS:**

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY  
Corrective Action: CA600SR  
Actual Date: 1989-02-17 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY  
Corrective Action: CA725IN  
Actual Date: 2000-08-11 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Corrective Action: CA725NO  
Actual Date: 1998-04-09 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY  
Corrective Action: CA725YE  
Actual Date: 2002-07-25 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY  
Corrective Action: CA750NO  
Actual Date: 2000-08-11 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY  
Corrective Action: CA750YE  
Actual Date: 2004-04-05 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Address: 700 E ROTH RD  
Address 2: Not reported  
Area Name: ENTIRE FACILITY  
Corrective Action: CA400  
Actual Date: 1996-02-01 00:00:00.0  
Air Release Indicator: Not reported  
Groundwater Release Indicator: Not reported  
Soil Release Indicator: Not reported  
Surface Water Release Indicator: Not reported

RCRA NonGen / NLR:  
Date Form Received by Agency: 2015-04-28 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Handler Address: 700 E ROTH RD  
Handler City,State,Zip: FRENCH CAMP, CA 95231  
EPA ID: CA8210020832

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Contact Name:	LAURIE TARKINGTON
Contact Address:	PO BOX 960001
Contact City,State,Zip:	STOCKTON, CA 95296
Contact Telephone:	209-839-4862
Contact Fax:	Not reported
Contact Email:	LAURIE.TARKINGTON@DLA.MIL
Contact Title:	ENV PROTECTION SPEC
EPA Region:	09
Land Type:	Federal
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Permitting Activities, Corrective Action Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 960001
Mailing City,State,Zip:	STOCKTON, CA 95296-0001
Owner Name:	UNITED STATES OF AMERICA
Owner Type:	Federal
Operator Name:	DEFENSE LOGISTIC AGENCY
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Storage, Treatment
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The land is federally-owned, The site is federally-owned, The site is federally-operated
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Storage, Treatment
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Storage, Treatment
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Storage, Treatment
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	Yes
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	Yes
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Storage, Treatment
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2015-05-18 18:55:07.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Biennial: List of Years

Year: 2013

[Click Here for Biennial Reporting System Data:](#)

Year: 2011

[Click Here for Biennial Reporting System Data:](#)

Year: 2009

[Click Here for Biennial Reporting System Data:](#)

Year: 2007

[Click Here for Biennial Reporting System Data:](#)

Year: 2005

[Click Here for Biennial Reporting System Data:](#)

Year: 2003

[Click Here for Biennial Reporting System Data:](#)

Year: 2001

[Click Here for Biennial Reporting System Data:](#)

Hazardous Waste Summary:

Waste Code: D001  
Waste Description: IGNITABLE WASTE

Waste Code: D002  
Waste Description: CORROSIVE WASTE

Waste Code: D003  
Waste Description: REACTIVE WASTE

Waste Code: D004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D018
Waste Description:	BENZENE
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	D039
Waste Description:	TETRACHLOROETHYLENE
Waste Code:	F002
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROETHANE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F003
Waste Description:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F005
Waste Description:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: U151  
Waste Description: MERCURY

Waste Code: U154  
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U159  
Waste Description: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

Waste Code: U210  
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Handler - Owner Operator:

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 1947-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: P.O. BOX 960001  
Owner/Operator City,State,Zip: STOCKTON, CA 95296-0710  
Owner/Operator Telephone: 209-839-4067  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 2002-05-31 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: UNITED STATES DEPT. OF DEFENSE  
Legal Status: Federal  
Date Became Current: 1942-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: P.O. BOX 960001, BLDG 100 RM 2  
Owner/Operator City,State,Zip: STOCKTON, CA 95296-0710  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 1942-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: UNITED STATES OF AMERICA  
Legal Status: Federal  
Date Became Current: 1947-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: PO BOX 960001  
Owner/Operator City,State,Zip: STOCKTON, CA 95296  
Owner/Operator Telephone: 209-839-4067  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: UNITED STATES ARMY  
Legal Status: Federal  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: ROTH ROAD  
Owner/Operator City,State,Zip: CITY NOT REPORTED, CA 95331  
Owner/Operator Telephone: 209-982-2097  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: UNITED STATES DEPT OF DEFENSE  
Legal Status: Federal  
Date Became Current: 2002-05-31 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 1947-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: 95286  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPT. OF DEFENSE
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPT. OF DEFENSE
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P. O. BOX 960001, BLDG 16 MEZZ
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	DEFENSE LOGISTIC AGENCY
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 960001
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	209-982-2099
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTIC AGENCY
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPT. OF DEFENSE
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPARTMENT OF
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P. O. BOX 960001, BLDG 16
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	209-839-4129
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES OF AMERICA
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 960001
Owner/Operator City,State,Zip:	STOCKTON, CA 95296
Owner/Operator Telephone:	209-839-4067
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTICS AGENCY
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTICS AGENCY
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTIC AGENCY
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTICS AGENCY
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES OF AMERICA
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P.O. BOX 960001
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	209-839-4067
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-02-25 00:00:00.0
Handler Name:	DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2012-08-22 00:00:00.0
Handler Name:	DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Electronic Manifest Broker: Not reported

Receive Date: 2014-03-01 00:00:00.0  
Handler Name: DISTRIBUTION DEPOT SAN JOAQUIN SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1996-09-01 00:00:00.0  
Handler Name: USARMY DEF DIST REGION W SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: CA  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2006-02-07 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Small Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1997-01-08 00:00:00.0  
Handler Name: USARMY DEF DIST REGION W SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: CA  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2015-04-28 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
Federal Waste Generator Description: Not a generator, verified

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1990-04-05 00:00:00.0  
Handler Name: SHARPE ARMY DEPOT\_ATTN: SDSSH-EM  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1992-02-26 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION REGION WEST, SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1994-04-13 00:00:00.0  
Handler Name: USARMY DEFENSE DIST REGION WEST SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1996-03-15 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION REGION WEST SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1999-03-04 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION SAN JOAQUIN SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2000-10-12 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION SAN JOAQUIN SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2002-03-13 00:00:00.0  
Handler Name: DEFENSE DIST DEPOT SAN JOAQUIN -SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2004-02-04 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Receive Date: 2006-02-07 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2008-02-07 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 49311  
NAICS Description: GENERAL WAREHOUSING AND STORAGE

NAICS Code: 49319  
NAICS Description: OTHER WAREHOUSING AND STORAGE

NAICS Code: 92119  
NAICS Description: OTHER GENERAL GOVERNMENT SUPPORT

NAICS Code: 92811  
NAICS Description: NATIONAL SECURITY

Facility Has Received Notices of Violation:

Found Violation: Yes  
Agency Which Determined Violation: EPA  
Violation Short Description: LDR - General  
Date Violation was Determined: 1987-03-31 00:00:00.0  
Actual Return to Compliance Date: 1988-04-27 00:00:00.0  
Return to Compliance Qualifier: Unverifiable  
Violation Responsible Agency: EPA  
Scheduled Compliance Date: Not reported  
Enforcement Identifier: Not reported  
Date of Enforcement Action: Not reported  
Enforcement Responsible Agency: Not reported  
Enforcement Docket Number: Not reported  
Enforcement Attorney: Not reported  
Corrective Action Component: Not reported  
Appeal Initiated Date: Not reported  
Appeal Resolution Date: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1987-03-31 00:00:00.0
Actual Return to Compliance Date:	1988-04-27 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	1988-02-29 00:00:00.0
Enforcement Identifier:	001
Date of Enforcement Action:	1987-10-27 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Permits - Application
Date Violation was Determined:	2003-02-04 00:00:00.0
Actual Return to Compliance Date:	2004-05-26 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2003-02-05 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-26 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-04-27 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2002-03-26 00:00:00.0
Actual Return to Compliance Date:	2002-07-17 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2002-03-26 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2002-03-26 00:00:00.0
Actual Return to Compliance Date:	2002-03-27 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2002-03-26 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2004-06-03 00:00:00.0
Actual Return to Compliance Date:	2004-06-24 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2004-06-03 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-26 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-09-22 00:00:00.0
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1992-10-19 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1992-09-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-09-22 00:00:00.0
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1992-09-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Container Use and Management
Date Violation was Determined:	2003-02-04 00:00:00.0
Actual Return to Compliance Date:	2003-02-11 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2003-02-05 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1990-04-16 00:00:00.0
Actual Return to Compliance Date:	1990-08-02 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1990-08-29 00:00:00.0
Enforcement Identifier:	001
Date of Enforcement Action:	1990-05-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-04-27 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1988-04-27 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-26 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-09-22 00:00:00.0
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1992-09-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1987-03-31 00:00:00.0
Actual Return to Compliance Date:	1988-04-27 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1991-09-25 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1991-11-06 00:00:00.0
Enforcement Identifier:	002
Date of Enforcement Action:	1991-08-01 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count: Not reported  
Final Amount: Not reported

Evaluation Action Summary:

Evaluation Date: 1987-03-31 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1988-04-27 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1994-02-15 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9STA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1995-04-19 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 2001-04-26 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: No  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: Not reported  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: Not reported  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1987-03-31 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1988-04-27 00:00:00.0  
Scheduled Compliance Date: 1988-02-29 00:00:00.0  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 2003-02-04 00:00:00.0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2004-05-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1995-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Actual Return to Compliance Date: Not reported  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1991-06-24 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1992-08-11 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1988-04-27 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 2002-03-26 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: Not reported  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 2002-07-17 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 2002-03-26 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: Not reported  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 2002-03-27 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2010-03-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1996-11-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2004-06-03 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2004-06-24 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1998-01-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2005-03-24 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-11-01 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-08-11 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Scheduled Compliance Date:	1992-10-19 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-08-11 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2003-02-04 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2003-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2000-03-29 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Date: 1990-04-16 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9STA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-08-02 00:00:00.0  
Scheduled Compliance Date: 1990-08-29 00:00:00.0  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1988-04-27 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1988-04-27 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1989-02-09 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: 1989-10-26 00:00:00.0  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1992-08-11 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9STA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-03-31 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-04-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-05-16 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-09-25 00:00:00.0
Scheduled Compliance Date:	1991-11-06 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2004-06-24 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Site:

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
Event Code: Not reported  
Action Taken Date: 09/30/2014  
EPA ID: CA8210020832  
Action Name: Explanation of Significant Differences  
Action ID: 1  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

Media:

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Explanation of Significant Differences  
Action Taken Date: 09/30/2014  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Explanation of Significant Differences  
Action Taken Date: 09/30/2014  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Explanation of Significant Differences  
Action Taken Date: 09/30/2014  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Explanation of Significant Differences  
Action Taken Date: 09/30/2014  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Explanation of Significant Differences  
Action Taken Date: 09/30/2014  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 1  
Operable Unit: 02  
Action Name: ROD Amendment  
Action Taken Date: 09/27/2011

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2011  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 1  
Operable Unit: 02  
Action Name: ROD Amendment  
Action Taken Date: 09/27/2011  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2011  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil Gas  
Action ID: 1  
Operable Unit: 02  
Action Name: ROD Amendment  
Action Taken Date: 09/27/2011  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2011  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil Gas  
Action ID: 1  
Operable Unit: 02  
Action Name: ROD Amendment  
Action Taken Date: 09/27/2011  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2011

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Record of Decision  
Action Taken Date: 01/25/1993  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1993  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Record of Decision  
Action Taken Date: 01/25/1993  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1993  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Record of Decision  
Action Taken Date: 01/25/1993  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1993  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Record of Decision  
Action Taken Date: 01/25/1993  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1993  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Record of Decision  
Action Taken Date: 01/25/1993  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1993  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Groundwater  
Action ID: 1  
Operable Unit: 01  
Action Name: Record of Decision  
Action Taken Date: 01/25/1993  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1993  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 2  
Operable Unit: 02  
Action Name: Record of Decision  
Action Taken Date: 03/05/1996  
Event Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 2  
Operable Unit: 02  
Action Name: Record of Decision  
Action Taken Date: 03/05/1996  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 2  
Operable Unit: 02  
Action Name: Record of Decision  
Action Taken Date: 03/05/1996  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 2  
Operable Unit: 02  
Action Name: Record of Decision  
Action Taken Date: 03/05/1996  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Other  
Action ID: 2  
Operable Unit: 02  
Action Name: Record of Decision  
Action Taken Date: 03/05/1996  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

EPA ID: CA8210020832  
Contaminated Media: Soil  
Action ID: 2  
Operable Unit: 02  
Action Name: Record of Decision  
Action Taken Date: 03/05/1996  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

**US INST CONTROLS:**

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
Action Name: Explanation of Significant Differences  
Action ID: 1  
Operable Unit: 01  
Actual Date: 09/30/2014  
Contaminated Media: Groundwater  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200  
  
Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
Action Name: Explanation of Significant Differences  
Action ID: 1  
Operable Unit: 01  
Actual Date: 09/30/2014  
Contaminated Media: Soil Gas  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2014  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
Action Name: ROD Amendment  
Action ID: 1  
Operable Unit: 02  
Actual Date: 09/27/2011  
Contaminated Media: Soil  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2011  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
Action Name: ROD Amendment  
Action ID: 1  
Operable Unit: 02  
Actual Date: 09/27/2011  
Contaminated Media: Soil Gas  
Event Code: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 2011  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
Action Name: Record of Decision  
Action ID: 2  
Operable Unit: 02  
Actual Date: 03/05/1996  
Contaminated Media: Other  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
Action Name: Record of Decision  
Action ID: 2  
Operable Unit: 02  
Actual Date: 03/05/1996  
Contaminated Media: Soil  
Event Code: Not reported  
Contact Name: Not reported  
Contact Telephone: Not reported  
Event: Not reported  
Federal Facility: Y  
Fiscal Year: 1996  
NPL Status: Currently on the Final NPL  
Superfund Alternative Agreement: N  
Latitude: 37.829169  
Longitude: -121.267200

HIST UST:  
Name: SHARPE ARMY DEPOT  
Address: ROTH ROAD  
City,State,Zip: LATHROP, CA 95331  
File Number: 0002B345

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B345.pdf>  
Region: STATE  
Facility ID: 00000037709  
Facility Type: Gas Station  
Other Type: Not reported  
Contact Name: Not reported  
Telephone: 2099822641  
Owner Name: SHARPE ARMY DEPOT  
Owner Address: ROTH ROAD  
Owner City,St,Zip: LATHROP, CA 95331  
Total Tanks: 0017

Tank Num: 001  
Container Num: CT-1  
Year Installed: 1969  
Tank Capacity: 00000550  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 657-2  
Year Installed: Not reported  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: 06  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 657-1  
Year Installed: Not reported  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: 06  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 004  
Container Num: 649-4  
Year Installed: 1953  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 005  
Container Num: 649-3  
Year Installed: 1953  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Tank Num: 006  
Container Num: 649-2  
Year Installed: 1953  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 007  
Container Num: 649-1  
Year Installed: 1953  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor

Tank Num: 008  
Container Num: 377  
Year Installed: 1969  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 009  
Container Num: 376  
Year Installed: 1969  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 010  
Container Num: 375  
Year Installed: 1969  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 011  
Container Num: 374  
Year Installed: 1969  
Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 012  
Container Num: 373  
Year Installed: 1969

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 013  
Container Num: 372  
Year Installed: 1969  
Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 014  
Container Num: 371  
Year Installed: 1969  
Tank Capacity: 00020000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 7/16  
Leak Detection: Stock Inventor

Tank Num: 015  
Container Num: 349  
Year Installed: 1950  
Tank Capacity: 00010000  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor, Pressure Test

Tank Num: 016  
Container Num: 348  
Year Installed: Not reported  
Tank Capacity: 00010000  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Stock Inventor, Pressure Test

Tank Num: 017  
Container Num: 199  
Year Installed: Not reported  
Tank Capacity: 00000500  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Container Construction Thickness: Not reported  
Leak Detection: Visual

[Click here for Geo Tracker PDF:](#)

RCRA NonGen / NLR:

Date Form Received by Agency:  
Handler Name:  
Handler Address:

2015-04-28 00:00:00.0  
DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE  
700 E ROTH RD

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Handler City,State,Zip:	FRENCH CAMP, CA 95231
EPA ID:	CA8210020832
Contact Name:	LAURIE TARKINGTON
Contact Address:	PO BOX 960001
Contact City,State,Zip:	STOCKTON, CA 95296
Contact Telephone:	209-839-4862
Contact Fax:	Not reported
Contact Email:	LAURIE.TARKINGTON@DLA.MIL
Contact Title:	ENV PROTECTION SPEC
EPA Region:	09
Land Type:	Federal
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Permitting Activities, Corrective Action Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 960001
Mailing City,State,Zip:	STOCKTON, CA 95296-0001
Owner Name:	UNITED STATES OF AMERICA
Owner Type:	Federal
Operator Name:	DEFENSE LOGISTIC AGENCY
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Storage, Treatment
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The land is federally-owned, The site is federally-owned, The site is federally-operated
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Storage, Treatment
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Storage, Treatment
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Storage, Treatment
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	Yes
Subject to Corrective Action Universe:	Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	Yes
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	Yes
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Storage, Treatment
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2015-05-18 18:55:07.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Biennial: List of Years

Year: 2013

[Click Here for Biennial Reporting System Data:](#)

Year: 2011

[Click Here for Biennial Reporting System Data:](#)

Year: 2009

[Click Here for Biennial Reporting System Data:](#)

Year: 2007

[Click Here for Biennial Reporting System Data:](#)

Year: 2005

[Click Here for Biennial Reporting System Data:](#)

Year: 2003

[Click Here for Biennial Reporting System Data:](#)

Year: 2001

[Click Here for Biennial Reporting System Data:](#)

Hazardous Waste Summary:

Waste Code: D001  
Waste Description: IGNITABLE WASTE

Waste Code: D002  
Waste Description: CORROSIVE WASTE

Waste Code: D003  
Waste Description: REACTIVE WASTE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D018
Waste Description:	BENZENE
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	D039
Waste Description:	TETRACHLOROETHYLENE
Waste Code:	F002
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F003
Waste Description:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F005

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: U151  
Waste Description: MERCURY

Waste Code: U154  
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U159  
Waste Description: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

Waste Code: U210  
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Handler - Owner Operator:

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 1947-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: P.O. BOX 960001  
Owner/Operator City,State,Zip: STOCKTON, CA 95296-0710  
Owner/Operator Telephone: 209-839-4067  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 2002-05-31 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: UNITED STATES DEPT. OF DEFENSE  
Legal Status: Federal  
Date Became Current: 1942-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: P.O. BOX 960001, BLDG 100 RM 2  
Owner/Operator City,State,Zip: STOCKTON, CA 95296-0710  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 1942-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: UNITED STATES OF AMERICA  
Legal Status: Federal  
Date Became Current: 1947-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: PO BOX 960001  
Owner/Operator City,State,Zip: STOCKTON, CA 95296  
Owner/Operator Telephone: 209-839-4067  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: UNITED STATES ARMY  
Legal Status: Federal  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: ROTH ROAD  
Owner/Operator City,State,Zip: CITY NOT REPORTED, CA 95331  
Owner/Operator Telephone: 209-982-2097  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: UNITED STATES DEPT OF DEFENSE  
Legal Status: Federal  
Date Became Current: 2002-05-31 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: DEFENSE LOGISTICS AGENCY  
Legal Status: Federal  
Date Became Current: 1947-10-01 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: 95286  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPT. OF DEFENSE
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPT. OF DEFENSE
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P. O. BOX 960001, BLDG 16 MEZZ
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	DEFENSE LOGISTIC AGENCY
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 960001
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	209-982-2099
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTIC AGENCY
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPT. OF DEFENSE
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES DEPARTMENT OF
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P. O. BOX 960001, BLDG 16
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	209-839-4129
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES OF AMERICA
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 960001
Owner/Operator City,State,Zip:	STOCKTON, CA 95296
Owner/Operator Telephone:	209-839-4067
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTICS AGENCY
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTICS AGENCY
Legal Status:	Federal
Date Became Current:	1942-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTIC AGENCY
Legal Status:	Federal

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DEFENSE LOGISTICS AGENCY
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES OF AMERICA
Legal Status:	Federal
Date Became Current:	1947-10-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P.O. BOX 960001
Owner/Operator City,State,Zip:	STOCKTON, CA 95296-0710
Owner/Operator Telephone:	209-839-4067
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-02-25 00:00:00.0
Handler Name:	DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2012-08-22 00:00:00.0
Handler Name:	DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported  
  
Receive Date: 2014-03-01 00:00:00.0  
Handler Name: DISTRIBUTION DEPOT SAN JOAQUIN SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1996-09-01 00:00:00.0  
Handler Name: USARMY DEF DIST REGION W SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: CA  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2006-02-07 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Small Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1997-01-08 00:00:00.0  
Handler Name: USARMY DEF DIST REGION W SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: CA  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2015-04-28 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN SHARPE SITE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Federal Waste Generator Description: Not a generator, verified  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1990-04-05 00:00:00.0  
Handler Name: SHARPE ARMY DEPOT\_ATTN: SDSSH-EM  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1992-02-26 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION REGION WEST, SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1994-04-13 00:00:00.0  
Handler Name: USARMY DEFENSE DIST REGION WEST SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1996-03-15 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION REGION WEST SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 1999-03-04 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION SAN JOAQUIN SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2000-10-12 00:00:00.0  
Handler Name: DEFENSE DISTRIBUTION SAN JOAQUIN SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2002-03-13 00:00:00.0  
Handler Name: DEFENSE DIST DEPOT SAN JOAQUIN -SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2004-02-04 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Receive Date: 2006-02-07 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2008-02-07 00:00:00.0  
Handler Name: DEFENSE DIST. DEPOT SAN JOAQUIN - SHARPE  
Federal Waste Generator Description: Large Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: Yes  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 49311  
NAICS Description: GENERAL WAREHOUSING AND STORAGE

NAICS Code: 49319  
NAICS Description: OTHER WAREHOUSING AND STORAGE

NAICS Code: 92119  
NAICS Description: OTHER GENERAL GOVERNMENT SUPPORT

NAICS Code: 92811  
NAICS Description: NATIONAL SECURITY

Facility Has Received Notices of Violation:

Found Violation: Yes  
Agency Which Determined Violation: EPA  
Violation Short Description: LDR - General  
Date Violation was Determined: 1987-03-31 00:00:00.0  
Actual Return to Compliance Date: 1988-04-27 00:00:00.0  
Return to Compliance Qualifier: Unverifiable  
Violation Responsible Agency: EPA  
Scheduled Compliance Date: Not reported  
Enforcement Identifier: Not reported  
Date of Enforcement Action: Not reported  
Enforcement Responsible Agency: Not reported  
Enforcement Docket Number: Not reported  
Enforcement Attorney: Not reported  
Corrective Action Component: Not reported  
Appeal Initiated Date: Not reported  
Appeal Resolution Date: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1987-03-31 00:00:00.0
Actual Return to Compliance Date:	1988-04-27 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	1988-02-29 00:00:00.0
Enforcement Identifier:	001
Date of Enforcement Action:	1987-10-27 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Permits - Application
Date Violation was Determined:	2003-02-04 00:00:00.0
Actual Return to Compliance Date:	2004-05-26 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2003-02-05 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-26 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-04-27 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2002-03-26 00:00:00.0
Actual Return to Compliance Date:	2002-07-17 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2002-03-26 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2002-03-26 00:00:00.0
Actual Return to Compliance Date:	2002-03-27 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2002-03-26 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2004-06-03 00:00:00.0
Actual Return to Compliance Date:	2004-06-24 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2004-06-03 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-26 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-09-22 00:00:00.0
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1992-10-19 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1992-09-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-09-22 00:00:00.0
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1992-09-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Container Use and Management
Date Violation was Determined:	2003-02-04 00:00:00.0
Actual Return to Compliance Date:	2003-02-11 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	200
Date of Enforcement Action:	2003-02-05 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1990-04-16 00:00:00.0
Actual Return to Compliance Date:	1990-08-02 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1990-08-29 00:00:00.0
Enforcement Identifier:	001
Date of Enforcement Action:	1990-05-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-04-27 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1988-04-27 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-26 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-09-22 00:00:00.0
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1992-09-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1987-03-31 00:00:00.0
Actual Return to Compliance Date:	1988-04-27 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-02-09 00:00:00.0
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1991-09-25 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1991-11-06 00:00:00.0
Enforcement Identifier:	002
Date of Enforcement Action:	1991-08-01 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1994-11-01 00:00:00.0
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	1994-12-13 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1991-06-24 00:00:00.0
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1994-03-31 00:00:00.0
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	004
Date of Enforcement Action:	1994-03-31 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Final Count: Not reported  
Final Amount: Not reported

Evaluation Action Summary:

Evaluation Date: 1987-03-31 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1988-04-27 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1994-02-15 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9STA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1995-04-19 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 2001-04-26 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: No  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: Not reported  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: Not reported  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1987-03-31 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1988-04-27 00:00:00.0  
Scheduled Compliance Date: 1988-02-29 00:00:00.0  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 2003-02-04 00:00:00.0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2004-05-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1995-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-04-27 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2002-03-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2002-07-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2002-03-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2002-03-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2010-03-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1996-11-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2004-06-03 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2004-06-24 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1998-01-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2005-03-24 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-11-01 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-08-11 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Scheduled Compliance Date:	1992-10-19 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-08-11 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2003-02-04 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2003-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2000-03-29 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Date: 1990-04-16 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9STA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-08-02 00:00:00.0  
Scheduled Compliance Date: 1990-08-29 00:00:00.0  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1988-04-27 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1988-04-27 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: Not reported  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1989-02-09 00:00:00.0  
Evaluation Responsible Agency: EPA  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9EPA  
Evaluation Responsible Sub-Organization: Not reported  
Actual Return to Compliance Date: 1990-01-08 00:00:00.0  
Scheduled Compliance Date: 1989-10-26 00:00:00.0  
Date of Request: Not reported  
Date Response Received: Not reported  
Request Agency: Not reported  
Former Citation: Not reported

Evaluation Date: 1992-08-11 00:00:00.0  
Evaluation Responsible Agency: State  
Found Violation: Yes  
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Evaluation Responsible Person Identifier: R9STA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-10-19 00:00:00.0
Scheduled Compliance Date:	1992-10-09 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-03-31 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-04-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-02-09 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-01-08 00:00:00.0
Scheduled Compliance Date:	1989-10-26 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-05-16 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-09-25 00:00:00.0
Scheduled Compliance Date:	1991-11-06 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2004-06-24 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1995-04-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-06-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-08-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-02-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-23 00:00:00.0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

ROD:

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
RG: 9  
Site ID: 902792  
Action: FF ESD  
Operable Unit Number: OVERALL SITE (OU-1)  
SEQ ID: 1  
Action Completion: 2014-09-30 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
RG: 9  
Site ID: 902792  
Action: FF ESD  
Operable Unit Number: SOIL (OU-2)  
SEQ ID: 2  
Action Completion: 2019-06-24 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
RG: 9  
Site ID: 902792  
Action: FF ROD (RCRA Statement of Basis/RTC)  
Operable Unit Number: OVERALL SITE (OU-1)  
SEQ ID: 1  
Action Completion: 1993-01-25 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832  
RG: 9  
Site ID: 902792  
Action: FF ROD (RCRA Statement of Basis/RTC)  
Operable Unit Number: SOIL (OU-2)  
SEQ ID: 2  
Action Completion: 1996-03-05 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

Name: SHARPE ARMY DEPOT  
Address: 700 EAST ROTH RD  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CA8210020832

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHARPE ARMY DEPOT (Continued)**

**1000368504**

RG: 9  
Site ID: 902792  
Action: FF ROD Amendment  
Operable Unit Number: SOIL (OU-2)  
SEQ ID: 1  
Action Completion: 2011-09-27 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

**2**  
**SSE**  
**< 1/8**  
**0.013 mi.**  
**70 ft.**

**PENSKE**  
**140 W LATHROP RD**  
**LATHROP, CA 95330**

**RCRA NonGen / NLR**

**1026476899**  
**CAC003082718**

**Relative:**  
**Higher**  
**Actual:**  
**13 ft.**

RCRA NonGen / NLR:  
Date Form Received by Agency: 2020-09-08 00:00:00.0  
Handler Name: PENSKE  
Handler Address: 140 W LATHROP RD  
Handler City,State,Zip: LATHROP, CA 95330  
EPA ID: CAC003082718  
Contact Name: NICK MONISE  
Contact Address: 140 W LATHROP RD  
Contact City,State,Zip: LATHROP, CA 95330  
Contact Telephone: 440-424-5504  
Contact Fax: Not reported  
Contact Email: NGENIMO@ERTSONLINE.COM  
Contact Title: Not reported  
EPA Region: 09  
Land Type: Not reported  
Federal Waste Generator Description: Not a generator, verified  
Non-Notifier: Not reported  
Biennial Report Cycle: Not reported  
Accessibility: Not reported  
Active Site Indicator: Not reported  
State District Owner: Not reported  
State District: Not reported  
Mailing Address: 2675 MORGANTOWN RD  
Mailing City,State,Zip: READING, PA 19607  
Owner Name: PENSKE MONISE  
Owner Type: Other  
Operator Name: NICK MONISE  
Operator Type: Other  
Short-Term Generator Activity: No  
Importer Activity: No  
Mixed Waste Generator: No  
Transporter Activity: No  
Transfer Facility Activity: No  
Recycler Activity with Storage: No  
Small Quantity On-Site Burner Exemption: No  
Smelting Melting and Refining Furnace Exemption: No  
Underground Injection Control: No  
Off-Site Waste Receipt: No  
Universal Waste Indicator: No  
Universal Waste Destination Facility: No  
Federal Universal Waste: No  
Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported  
Active Site Converter Treatment storage and Disposal Facility: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**PENSKE (Continued)**

**1026476899**

Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-09-20 14:39:25.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

**Handler - Owner Operator:**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PENSKE MONISE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2675 MORGANTOWN RD
Owner/Operator City,State,Zip:	READING, PA 19607
Owner/Operator Telephone:	916-347-8724
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	NICK MONISE

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**PENSKE (Continued)**

**1026476899**

Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	140 W LATHROP RD
Owner/Operator City,State,Zip:	LATHROP, CA 95330
Owner/Operator Telephone:	440-424-5504
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2020-09-08 00:00:00.0
Handler Name:	PENSKE
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found
-------------	---------------------

Evaluation Action Summary:

Evaluations:	No Evaluations Found
--------------	----------------------

**A3**  
**East**  
**< 1/8**  
**0.074 mi.**  
**390 ft.**

**JH MOTORSPORTS INC**  
**14150 S HARLAN RD**  
**LATHROP, CA 95330**

**CERS HAZ WASTE**  
**HAZNET**  
**CERS**  
**HWTS**

**S121768781**  
**N/A**

**Site 1 of 2 in cluster A**

**Relative:**  
**Higher**  
**Actual:**  
**16 ft.**

<b>CERS HAZ WASTE:</b>	
Name:	JH MOTORSPORTS INC
Address:	14150 S HARLAN RD
City,State,Zip:	LATHROP, CA 95330
Site ID:	370251
CERS ID:	10672240
CERS Description:	Hazardous Waste Generator

HAZNET:

Name:	JH MOTORSPORTS INC
Address:	14150 S HARLAN RD
Address 2:	Not reported
City,State,Zip:	LATHROP, CA 953309721
Contact:	JASON HARBINSON

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**S121768781**

Telephone: 2099680077  
Mailing Name: Not reported  
Mailing Address: 14150 S HARLAN ROAD

Year: 2019  
Gepaid: CAL000366059  
TSD EPA ID: AZR000515924  
CA Waste Code: 352 - Other organic solids  
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.15000

Year: 2019  
Gepaid: CAL000366059  
TSD EPA ID: CAT080013352  
CA Waste Code: 223 - Unspecified oil-containing waste  
Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect  
Tons: 0.10425

Year: 2018  
Gepaid: CAL000366059  
TSD EPA ID: CAD097030993  
CA Waste Code: 352 - Other organic solids  
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.06000

CERS:  
Name: JH MOTORSPORTS INC  
Address: 14150 S HARLAN RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 370251  
CERS ID: 10672240  
CERS Description: Chemical Storage Facilities

Violations:  
Site ID: 370251  
Site Name: JH Motorsports Inc  
Violation Date: 02-07-2019  
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)  
Violation Description: Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.  
Violation Notes: Returned to compliance on 02/25/2019. Copies of uniform manifests for the disposal of hazardous waste for February 2016 through February 2019 were not found on site. Hazardous waste generators shall retain copies of all manifests signed off by the disposal facility and all receipts used in a consolidated manifesting procedure on site for three years and have them readily available for review. Immediately locate a copy of all manifests and receipts for the last three years, maintain them on site, and submit copies to the EHD.  
Violation Division: San Joaquin County Environmental Health

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**S121768781**

Violation Program: HW  
Violation Source: CERS

Site ID: 370251  
Site Name: JH Motorsports Inc  
Violation Date: 02-07-2019  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2

Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.

Violation Notes: Returned to compliance on 03/04/2019. Copies of hazardous waste disposal records for February 2016 through February 2019 were not found on site. Hazardous waste generators shall retain copies of all manifests signed off by the disposal facility and all receipts used in a consolidated manifesting procedure on site for three years and have them readily available for review. Immediately locate a copy of all manifests and receipts for the last three years, maintain them on site, and submit copies to the EHD.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 370251  
Site Name: JH Motorsports Inc  
Violation Date: 02-07-2019  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 03/04/2019. One black metal 55 gallon drum of drained used oil filters was observed without an accumulation start date. No disposal records were available for metal filters during the inspection. Facilities that generate up to one ton of used oil filters per year may store the filters up to one year. Facilities that generate one ton or more of used oil filters may store the filters for up to 180 days. Immediately recycle these filters under a bill of lading and submit a copy of the bill of lading to the EHD. One black metal 55 gallon drum of drained used oil filters was observed without an accumulation start date. Used oil filters shall be drained of free-flowing oil, stored in a closed, rainproof container, labeled as G drained used oil filters, G and marked with an accumulation start date. Immediately mark the date and ensure that all used oil filters are managed in this way. Bills of lading for the recycling of used oil filters for the last three years were not found on site. A copy

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 370251  
Site Name: JH Motorsports Inc  
Violation Date: 02-07-2019  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste",

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**S121768781**

Violation Notes: name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
Returned to compliance on 02/25/2019. One black metal 55 gallon drum of used paper filters was observed without an accumulation start date. All hazardous waste containers shall be marked with the following information: - the words G Hazardous WasteG - name and address of generator - hazardous properties - physical state - composition (contents) - accumulation start date Immediately label these containers and ensure that all hazardous waste containers are marked with all the required information.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 370251  
Site Name: JH Motorsports Inc  
Violation Date: 02-07-2019  
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)

Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.

Violation Notes: Returned to compliance on 03/04/2019. One blue metal 55 gallon drum of used antifreeze was observed with an accumulation start date of 7/8/2018. One black metal 55 gallon drum of used paper filters was observed without an accumulation start date. No disposal records for antifreeze or paper filters were available during the inspection. Facilities who generate less than 1000 kg of hazardous waste per month and do not exceed 6000 kg of waste stored on site at any time may store waste on site up to 180 days. Immediately contact a licensed hazardous waste hauler to dispose of this waste under manifest and submit a copy of the manifest to the EHD.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-07-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by March 11, 2019. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420. Inspector Provided: Return to Compliance certification, modified contingency plan, flier for free CUPA classes, labeling guidance Waste Streams Observed: -Used Oil -Used Antifreeze -Drained Used Metal Filters -Used

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**S121768781**

Paper Filters -UW Aerosols  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-17-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations found at time of inspection. Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous material activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.

Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Coordinates:  
Site ID: 370251  
Facility Name: JH Motorsports Inc  
Env Int Type Code: HWG  
Program ID: 10672240  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 37.831300  
Longitude: -121.286920

Affiliation:  
Affiliation Type Desc: Identification Signer  
Entity Name: Dan Bertocchini  
Entity Title: General Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: San Joaquin Cnty Env Health  
Entity Title: Not reported  
Affiliation Address: 1868 East Hazelton Avenue  
Affiliation City: Stockton  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95205-6232  
Affiliation Phone: (209) 468-3420

Affiliation Type Desc: Document Preparer  
Entity Name: KPA, LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**S121768781**

Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Jason Harbinson  
Entity Title: Not reported  
Affiliation Address: 14150 S Harlan Rd  
Affiliation City: Lathrop  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95330  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 14150 S Harlan Rd  
Affiliation City: Lathrop  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95330  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: JH Motorsports Inc  
Entity Title: Not reported  
Affiliation Address: 14150 S Harlan Rd  
Affiliation City: Lathrop  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 968-0077

Affiliation Type Desc: Operator  
Entity Name: Jason Harbinson  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (209) 968-0077

Affiliation Type Desc: Parent Corporation  
Entity Name: JH Motorsports Inc  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

HWTS:

Name: JH MOTORSPORTS INC

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**S121768781**

Address: 14150 S HARLAN RD  
 Address 2: Not reported  
 City,State,Zip: LATHROP, CA 953309721  
 EPA ID: CAL000366059  
 Inactive Date: Not reported  
 Create Date: 07/26/2011  
 Last Act Date: 09/30/2020  
 Mailing Name: Not reported  
 Mailing Address: 14150 S HARLAN ROAD  
 Mailing Address 2: Not reported  
 Mailing City,State,Zip: LATHROP, CA 953309721  
 Owner Name: JH MOTORSPORTS INC  
 Owner Address: 14150 S HARLAN ROAD  
 Owner Address 2: Not reported  
 Owner City,State,Zip: LATHROP, CA 953309721  
 Contact Name: JASON HARBINSON  
 Contact Address: 14150 S HARLAN RD  
 Contact Address 2: Not reported  
 City,State,Zip: LATHROP, CA 95330

NAICS:  
 EPA ID: CAL000366059  
 Create Date: 2011-07-26 09:28:44.830  
 NAICS Code: 811111  
 NAICS Description: General Automotive Repair  
 Issued EPA ID Date: 2011-07-26 09:28:44.83000  
 Inactive Date: Not reported  
 Facility Name: JH MOTORSPORTS INC  
 Facility Address: 14150 S HARLAN RD  
 Facility Address 2: Not reported  
 Facility City: LATHROP  
 Facility County: Not reported  
 Facility State: CA  
 Facility Zip: 953309721

**A4**  
**East**  
**< 1/8**  
**0.074 mi.**  
**390 ft.**

**JH MOTORSPORTS INC**  
**14150 S HARLAN RD**  
**LATHROP, CA 95330**  
**Site 2 of 2 in cluster A**

**RCRA NonGen / NLR 1024830706**  
**CAL000366059**

**Relative:**  
**Higher**  
**Actual:**  
**16 ft.**

RCRA NonGen / NLR:  
 Date Form Received by Agency: 2011-07-26 00:00:00.0  
 Handler Name: JH MOTORSPORTS INC  
 Handler Address: 14150 S HARLAN RD  
 Handler City,State,Zip: LATHROP, CA 95330-9721  
 EPA ID: CAL000366059  
 Contact Name: JASON HARBINSON OWNER PRES  
 Contact Address: 14150 S HARLAN ROAD  
 Contact City,State,Zip: LATHROP, CA 95330  
 Contact Telephone: 209-968-0077  
 Contact Fax: 209-249-5255  
 Contact Email: SHERRY@JHMOTORSPORTS.COM  
 Contact Title: Not reported  
 EPA Region: 09  
 Land Type: Not reported  
 Federal Waste Generator Description: Not a generator, verified

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**1024830706**

Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	14150 S HARLAN ROAD
Mailing City,State,Zip:	LATHROP, CA 95330-9721
Owner Name:	JH MOTORSPORTS INC
Owner Type:	Other
Operator Name:	JASON HARBINSON OWNER PRES
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**1024830706**

Significant Non-Complier With a Compliance Schedule Universe: No  
Financial Assurance Required: Not reported  
Handler Date of Last Change: 2018-09-06 16:59:25.0  
Recognized Trader-Importer: No  
Recognized Trader-Exporter: No  
Importer of Spent Lead Acid Batteries: No  
Exporter of Spent Lead Acid Batteries: No  
Recycler Activity Without Storage: No  
Manifest Broker: No  
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Owner  
Owner/Operator Name: JH MOTORSPORTS INC  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: 14150 S HARLAN ROAD  
Owner/Operator City,State,Zip: LATHROP, CA 95330-9721  
Owner/Operator Telephone: 209-968-0077  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: JASON HARBINSON OWNER PRES  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: 14150 S HARLAN ROAD  
Owner/Operator City,State,Zip: LATHROP, CA 95330  
Owner/Operator Telephone: 209-968-0077  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 2011-07-26 00:00:00.0  
Handler Name: JH MOTORSPORTS INC  
Federal Waste Generator Description: Not a generator, verified  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 811111  
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**JH MOTORSPORTS INC (Continued)**

**1024830706**

Facility Has Received Notices of Violations:  
 Violations: No Violations Found

Evaluation Action Summary:  
 Evaluations: No Evaluations Found

**5**  
**ESE**  
**< 1/8**  
**0.084 mi.**  
**441 ft.**

**LUIS BUCIO**  
**14440 HARLAN RD**  
**LATHROP, CA 95330**

**RCRA NonGen / NLR**  
**FINDS**  
**ECHO**

**1004676905**  
**CAR000090969**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

RCRA NonGen / NLR:	
Date Form Received by Agency:	2001-01-30 00:00:00.0
Handler Name:	LUIS BUCIO
Handler Address:	14440 HARLAN RD
Handler City,State,Zip:	LATHROP, CA 95330
EPA ID:	CAR000090969
Contact Name:	LUIS BUCIO
Contact Address:	14440 HARLAN RD
Contact City,State,Zip:	LATHROP, CA 95330
Contact Telephone:	209-982-1642
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	14440 HARLAN RD
Mailing City,State,Zip:	LATHROP, CA 95330
Owner Name:	LUIS BUCIO
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	Yes
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**LUIS BUCIO (Continued)**

**1004676905**

Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:51:00.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

**Handler - Owner Operator:**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LUIS BUCIO
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	14440 HARLAN RD
Owner/Operator City,State,Zip:	LATHROP, CA 95330
Owner/Operator Telephone:	209-982-1642
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

**Historic Generators:**

Receive Date:	2001-01-30 00:00:00.0
---------------	-----------------------

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LUIS BUCIO (Continued)**

**1004676905**

Handler Name: LUIS BUCIO  
Federal Waste Generator Description: Not a generator, verified  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

FINDS:

Registry ID: 110012242830

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004676905  
Registry ID: 110012242830  
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110012242830>  
Name: LUIS BUCIO  
Address: 14440 HARLAN RD  
City,State,Zip: LATHROP, CA 95330

6  
East  
< 1/8  
0.098 mi.  
518 ft.

**EAGLES NEST HARLEY-DAVIDSON**  
**13900 S HARLAN RD**  
**LATHROP, CA 95330**

RCRA NonGen / NLR

**1024848101**  
**CAL000403447**

**Relative:**  
**Higher**  
**Actual:**  
**15 ft.**

RCRA NonGen / NLR:  
Date Form Received by Agency: 2015-01-06 00:00:00.0  
Handler Name: EAGLES NEST HARLEY-DAVIDSON  
Handler Address: 13900 S HARLAN RD  
Handler City,State,Zip: LATHROP, CA 95330-9722

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**EAGLES NEST HARLEY-DAVIDSON (Continued)**

**1024848101**

EPA ID:	CAL000403447
Contact Name:	JOHN LUND
Contact Address:	13900 S HARLAN RD
Contact City,State,Zip:	LATHROP, CA 95330
Contact Telephone:	209-941-0420
Contact Fax:	209-463-2100
Contact Email:	JOHN@HDSAC.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	13900 S HARLAN RD
Mailing City,State,Zip:	LATHROP, CA 95330-9722
Owner Name:	WESTBROOK LUND ENTERPRISES INC
Owner Type:	Other
Operator Name:	JOHN LUND
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EAGLES NEST HARLEY-DAVIDSON (Continued)**

**1024848101**

TSDFs Only Subject to CA under Discretionary Auth Universe: No  
Corrective Action Priority Ranking: No NCAPS ranking  
Environmental Control Indicator: No  
Institutional Control Indicator: No  
Human Exposure Controls Indicator: N/A  
Groundwater Controls Indicator: N/A  
Operating TSDF Universe: Not reported  
Full Enforcement Universe: Not reported  
Significant Non-Complier Universe: No  
Unaddressed Significant Non-Complier Universe: No  
Addressed Significant Non-Complier Universe: No  
Significant Non-Complier With a Compliance Schedule Universe: No  
Financial Assurance Required: Not reported  
Handler Date of Last Change: 2018-09-06 17:05:35.0  
Recognized Trader-Importer: No  
Recognized Trader-Exporter: No  
Importer of Spent Lead Acid Batteries: No  
Exporter of Spent Lead Acid Batteries: No  
Recycler Activity Without Storage: No  
Manifest Broker: No  
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Operator  
Owner/Operator Name: JOHN LUND  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: 13900 S HARLAN RD  
Owner/Operator City,State,Zip: LATHROP, CA 95330  
Owner/Operator Telephone: 209-941-0420  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: WESTBROOK LUND ENTERPRISES INC  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: 1000 ARDEN WAY  
Owner/Operator City,State,Zip: SACRAMENTO, CA 95815-0000  
Owner/Operator Telephone: 209-941-0420  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 2015-01-06 00:00:00.0  
Handler Name: EAGLES NEST HARLEY-DAVIDSON  
Federal Waste Generator Description: Not a generator, verified  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**EAGLES NEST HARLEY-DAVIDSON (Continued)**

**1024848101**

Spent Lead Acid Battery Importer: No  
 Spent Lead Acid Battery Exporter: No  
 Current Record: Yes  
 Non Storage Recycler Activity: Not reported  
 Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 92311  
 NAICS Description: ADMINISTRATION OF EDUCATION PROGRAMS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**7**  
**SSE**  
**1/8-1/4**  
**0.175 mi.**  
**926 ft.**

**LATHROP SMOG**  
**15151 S HARLAN RD**  
**LATHROP, CA 95330**

**RCRA NonGen / NLR**

**1024864869**  
**CAL000433435**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

RCRA NonGen / NLR:  
 Date Form Received by Agency: 2018-02-02 00:00:00.0  
 Handler Name: LATHROP SMOG  
 Handler Address: 15151 S HARLAN RD  
 Handler City,State,Zip: LATHROP, CA 95330  
 EPA ID: CAL000433435  
 Contact Name: NICHOLAS GIGGONS  
 Contact Address: 16201 JULIE LN  
 Contact City,State,Zip: LATHROP, CA 95330  
 Contact Telephone: 209-602-0985  
 Contact Fax: Not reported  
 Contact Email: LATHROPSMOG@GMAIL.COM  
 Contact Title: Not reported  
 EPA Region: 09  
 Land Type: Not reported  
 Federal Waste Generator Description: Not a generator, verified  
 Non-Notifier: Not reported  
 Biennial Report Cycle: Not reported  
 Accessibility: Not reported  
 Active Site Indicator: Handler Activities  
 State District Owner: Not reported  
 State District: Not reported  
 Mailing Address: 15151 S HARLAN RD  
 Mailing City,State,Zip: LATHROP, CA 95330  
 Owner Name: NICHOLAS GIGGONS  
 Owner Type: Other  
 Operator Name: NICHOLAS GIGGONS  
 Operator Type: Other  
 Short-Term Generator Activity: No  
 Importer Activity: No  
 Mixed Waste Generator: No  
 Transporter Activity: No  
 Transfer Facility Activity: No

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**LATHROP SMOG (Continued)**

**1024864869**

Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-07 19:37:23.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	NICHOLAS GIGGONS
Legal Status:	Other
Date Became Current:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**LATHROP SMOG (Continued)**

**1024864869**

Date Ended Current: Not reported  
 Owner/Operator Address: 16201 JULIE LN  
 Owner/Operator City,State,Zip: LATHROP, CA 95330  
 Owner/Operator Telephone: 209-602-0985  
 Owner/Operator Telephone Ext: Not reported  
 Owner/Operator Fax: Not reported  
 Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
 Owner/Operator Name: NICHOLAS GIGGONS  
 Legal Status: Other  
 Date Became Current: Not reported  
 Date Ended Current: Not reported  
 Owner/Operator Address: 16201 JULIE LN  
 Owner/Operator City,State,Zip: LATHROP, CA 95330  
 Owner/Operator Telephone: 209-602-0985  
 Owner/Operator Telephone Ext: Not reported  
 Owner/Operator Fax: Not reported  
 Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 2018-02-02 00:00:00.0  
 Handler Name: LATHROP SMOG  
 Federal Waste Generator Description: Not a generator, verified  
 State District Owner: Not reported  
 Large Quantity Handler of Universal Waste: No  
 Recognized Trader Importer: No  
 Recognized Trader Exporter: No  
 Spent Lead Acid Battery Importer: No  
 Spent Lead Acid Battery Exporter: No  
 Current Record: Yes  
 Non Storage Recycler Activity: Not reported  
 Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 811111  
 NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**8**  
**WSW**  
**1/8-1/4**  
**0.188 mi.**  
**994 ft.**

**LATHROP HIGH SCHOOL**  
**526 AND 600 W. DOS REIS ROAD AND 15225 MATHENY ROAD**  
**LATHROP, CA 95330**

**ENVIROSTOR** **S107736596**  
**SCH** **N/A**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**12 ft.**

ENVIROSTOR:  
 Name: LATHROP HIGH SCHOOL  
 Address: 526 AND 600 W. DOS REIS ROAD AND 15225 MATHENY ROAD  
 City,State,Zip: LATHROP, CA 95330  
 Facility ID: 70000047

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP HIGH SCHOOL (Continued)**

**S107736596**

Status: No Further Action  
Status Date: 01/30/2006  
Site Code: 104502  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 50  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Javier Hinojosa  
Division Branch: Northern California Schools & Santa Susana  
Assembly: 12  
Senate: 05  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 37.82815  
Longitude: -121.3020  
APN: 191-210-04, 191-220-29, 191-220-30  
Past Use: NONE  
Potential COC: NONE SPECIFIED No Contaminants found  
Confirmed COC: No Contaminants found  
Potential Description: NMA  
Alias Name: 191-210-04  
Alias Type: APN  
Alias Name: 191-220-29  
Alias Type: APN  
Alias Name: 191-220-30  
Alias Type: APN  
Alias Name: 104502  
Alias Type: Project Code (Site Code)  
Alias Name: 70000047  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 04/21/2006  
Comments: CRU Memo issued.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 09/12/2005  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Workplan  
Completed Date: 11/03/2005  
Comments: Verbal approval issued

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP HIGH SCHOOL (Continued)**

**S107736596**

Completed Date: 01/30/2006  
Comments: Received e-mail that MUSD completed public review.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 09/23/2005  
Comments: Geological & Environmental Hazards Assessment Report

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:

Name: LATHROP HIGH SCHOOL  
Address: 526 AND 600 W. DOS REIS ROAD AND 15225 MATHENY ROAD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: 70000047  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 50  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Javier Hinojosa  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104502  
Assembly: 12  
Senate: 05  
Special Program Status: Not reported  
Status: No Further Action  
Status Date: 01/30/2006  
Restricted Use: NO  
Funding: School District  
Latitude: 37.82815  
Longitude: -121.3020  
APN: 191-210-04, 191-220-29, 191-220-30  
Past Use: NONE  
Potential COC: NONE SPECIFIED, No Contaminants found  
Confirmed COC: No Contaminants found  
Potential Description: NMA  
Alias Name: 191-210-04  
Alias Type: APN  
Alias Name: 191-220-29  
Alias Type: APN  
Alias Name: 191-220-30  
Alias Type: APN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP HIGH SCHOOL (Continued)**

**S107736596**

Alias Name: 104502  
Alias Type: Project Code (Site Code)  
Alias Name: 70000047  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 04/21/2006  
Comments: CRU Memo issued.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 09/12/2005  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Workplan  
Completed Date: 11/03/2005  
Comments: Verbal approval issued

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 01/30/2006  
Comments: Received e-mail that MUSD completed public review.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 09/23/2005  
Comments: Geological & Environmental Hazards Assessment Report

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

CERS:

Name: LATHROP HIGH SCHOOL  
Address: 526 AND 600 W. DOS REIS ROAD AND 15225 MATHENY ROAD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 339231  
CERS ID: 70000047  
CERS Description: School Investigation

Affiliation:

Affiliation Type Desc: Supervisor  
Entity Name: JAVIER HINOJOSA  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP HIGH SCHOOL (Continued)**

**S107736596**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**B9  
SE  
1/8-1/4  
0.210 mi.  
1108 ft.**

**TWO GUYS FOOD & FUEL  
147 E LATHROP RD  
LATHROP, CA 95330  
Site 1 of 7 in cluster B**

**CERS HAZ WASTE  
SWEEPS UST  
CERS TANKS  
EMI  
CERS**

**S103954871  
N/A**

**Relative:  
Higher  
Actual:  
17 ft.**

**CERS HAZ WASTE:**  
Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 163962  
CERS ID: 10181421  
CERS Description: Hazardous Waste Generator

**SWEEPS UST:**

Name: TWO GUYS  
Address: 147 E LATHROP RD  
City: LATHROP  
Status: Active  
Comp Number: 2353  
Number: 2  
Board Of Equalization: 44-024690  
Referral Date: 11-09-92  
Action Date: 11-09-92  
Created Date: 12-06-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 39-000-002353-000001  
Tank Status: A  
Capacity: 10000  
Active Date: 10-12-89  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: 3

Name: TWO GUYS  
Address: 147 E LATHROP RD  
City: LATHROP  
Status: Active  
Comp Number: 2353  
Number: 2  
Board Of Equalization: 44-024690  
Referral Date: 11-09-92  
Action Date: 11-09-92  
Created Date: 12-06-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 39-000-002353-000002  
Tank Status: A  
Capacity: 10000



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Active Date: 10-12-89  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Name: TWO GUYS  
Address: 147 E LATHROP RD  
City: LATHROP  
Status: Active  
Comp Number: 2353  
Number: 2  
Board Of Equalization: 44-024690  
Referral Date: 11-09-92  
Action Date: 11-09-92  
Created Date: 12-06-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 39-000-002353-000003  
Tank Status: A  
Capacity: 10000  
Active Date: 10-12-89  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

**CERS TANKS:**

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 163962  
CERS ID: 10181421  
CERS Description: Underground Storage Tank

**EMI:**

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2002  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr: 0

Name: TWO GUYS FOOD & FUEL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2003  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2004  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1.32369066  
Reactive Organic Gases Tons/Yr: 1.317101228  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2005  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1.323690660146289760  
Reactive Organic Gases Tons/Yr: 1.3171012275  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2006  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1.085225151682749753  
Reactive Organic Gases Tons/Yr: 1.079485  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA  
Year: 2007  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .8307943744939711029  
Reactive Organic Gases Tons/Yr: .8264  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2008  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .6564440986610145906  
Reactive Organic Gases Tons/Yr: .6528797372436526  
Carbon Monoxide Emissions Tons/Yr: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2009  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.51129787299581198  
Reactive Organic Gases Tons/Yr: 0.50852162683105495  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2010  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.51129019776741003  
Reactive Organic Gases Tons/Yr: 0.50851398000000003  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2011  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Total Organic Hydrocarbon Gases Tons/Yr: 0.65157063544  
Reactive Organic Gases Tons/Yr: 0.64803273596  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2012  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.56098831691  
Reactive Organic Gases Tons/Yr: 0.55794226147  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: ED CARDOZA  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2013  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.58666576  
Reactive Organic Gases Tons/Yr: 0.58666576  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: ED CARDOZA  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2014  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Air District Name: SAN JOAQUIN VALLEY APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.57115470007  
Reactive Organic Gases Tons/Yr: 0.57115470007  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2015  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.554030646  
Reactive Organic Gases Tons/Yr: 0.554030646  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2016  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.541557762  
Reactive Organic Gases Tons/Yr: 0.541557762  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: Not reported  
Part. Matter 10 Micrometers and Smlr Tons/Yr:Not reported

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2017  
County Code: 39  
Air Basin: SJV

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.653126616  
Reactive Organic Gases Tons/Yr: 0.653126616  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: Not reported  
Part. Matter 10 Micrometers and Smlr Tons/Yr: Not reported

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Year: 2018  
County Code: 39  
Air Basin: SJV  
Facility ID: 889  
Air District Name: SJU  
SIC Code: 5541  
Air District Name: SAN JOAQUIN VALLEY APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.541089466  
Reactive Organic Gases Tons/Yr: 0.541089466  
Carbon Monoxide Emissions Tons/Yr: Not reported  
NOX - Oxides of Nitrogen Tons/Yr: Not reported  
SOX - Oxides of Sulphur Tons/Yr: Not reported  
Particulate Matter Tons/Yr: Not reported  
Part. Matter 10 Micrometers and Smlr Tons/Yr: Not reported

CERS:  
Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330-9718  
Site ID: 500722  
CERS ID: 110021364370  
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:  
Affiliation Type Desc: Environmental Contact  
Entity Name: jarnail kamboj  
Entity Title: Not reported  
Affiliation Address: 1017 MAIRGOLD LANE  
Affiliation City: MANTECA  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST PO Name  
Entity Name: CARDOZA ENTRPRS  
Entity Title: Not reported  
Affiliation Address: POBOX 1022

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Affiliation City: MANTECA  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Edward Cardoza  
Entity Title: Not reported  
Affiliation Address: POBOX 1022  
Affiliation City: MANTECA  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 163962  
CERS ID: 10181421  
CERS Description: Chemical Storage Facilities

Violations:  
Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-08-2015  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.  
Violation Notes: Returned to compliance on 07/22/2015. The business plan is incomplete because the site map needs more detail and the inventory is incorrect. The business plan information needs to be reviewed and resubmitted in the California Environmental Reporting System (CERS) annually. The hazardous materials inventory shall be submitted by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. Immediately log into the CERS at <http://cers.calepa.ca.gov/>, enter the correct or updated information, and submit to the EHD for approval.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS  
  
Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-07-2016  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34  
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.  
Violation Notes: Returned to compliance on 06/09/2016. Financial responsibility documents currently have indicated financial responsibility in the amount of 500,000 dollars per occurrence; this needs to be changed to one million dollars per occurrence. Current financial responsibility documents are required to be submitted annually. Immediately log into the California Environmental Reporting System (CERS) at



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

http://cers.calepa.ca.gov/, and upload the required documents.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-16-2013  
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections  
Violation Description: UST Program - Design/Construction - General  
Violation Notes: Returned to compliance on 07/23/2013.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-16-2014  
Citation: Un-Specified  
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.  
Violation Notes: Returned to compliance on 07/21/2014.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-08-2017  
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286  
Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.  
Violation Notes: Returned to compliance on 06/08/2017. UST Tank Information forms for the 87, 91, and diesel tanks are not current in CERS. Beneath "Tank Construction," change the "Primary Containment" from "Fiberglass" to "Steel" for all three tanks. Any change of information must be updated in CERS within 30 days of the changes. Immediately log into CERS, update the required information, and submit for review by the EHD. This was corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-16-2014  
Citation: Un-Specified  
Violation Description: UST Program - Administration/Documentation - For use of Local Ordinance only  
Violation Notes: Returned to compliance on 07/23/2014.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-11-2019  
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)  
Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.  
Violation Notes: Returned to compliance on 06/13/2019. On the 1/21/19 and 2/21/19 designated operator (DO) inspection report under - Section III The DO failed to add a description to all the components marked N/A or N from section VII through XI. Furthermore the DO did not conduct an inspection with 30 days of the previous inspection. The DO inspected the facility on 12/19/18 and on 1/21/18. The DO report was conducted 33 days after the 12/19/18 inspection. During the designated operator inspection, the designated operator shall review the alarm history for the previous month, check that each alarm was documented and responded to appropriately, and attach a copy of the alarm history with documentation taken in response to any alarms to the monthly report. Ensure that designated operators performing inspections at least once every 30 days at this facility and are including all of the required information on the reports.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS  
  
Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-16-2014  
Citation: Un-Specified  
Violation Description: UST Program - Administration/Documentation - For use of Local Ordinance only  
Violation Notes: Returned to compliance on 07/23/2014. HSC 25404(e)(4) CERS incomplete.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS  
  
Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-07-2016  
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)  
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been properly trained.

Violation Notes: Returned to compliance on 06/09/2016. The designated operator marked N/A (not applicable) for "Has each alarm for the previous month been responded to appropriately" on the January 22, 2016 designated operator monthly inspection report. This was not appropriate since there was a fuel alarm on January 17, 2016 for L1 at dispenser 1-2 that the designated operator did address in the January 22, 2016 and February 26, 2016 designated operator monthly inspection report. Also, the designated operator addressed the February 18, 2016 high product alarm for T1 (product 87) in the March 30, 2016 designated operator monthly report instead of the February 26, 2016 designated operator monthly report. During the monthly inspection, the designated operator shall check that all required testing and maintenance for the UST system have been completed and document the dates they were done. Ensure that designated operators performing monthly inspections at this facility are including all of the required information on the reports. [Truncated]

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-11-2019  
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: Returned to compliance on 06/11/2019. The 87 product line leak detector failed to detect a leak when tested. All line leak detectors shall be capable of detecting a 3-gallon per hour leak at 10 psi. The leak detector was replaced and retested during the inspection. A G UST Retrofit Verification with Inspector Already OnsiteG form has been completed and provided to the operator and contractor. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-08-2017  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)

Violation Description: Failure to have an approved UST Monitoring Plan.  
Violation Notes: Returned to compliance on 06/08/2017. The monitoring plan is not current and/or not approved by the EHD. In the "Monitoring Plan,"

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

beneath "Under Dispenser Containment (UDC) Monitoring), change "Leak Within Secondary Containment of UDC Causes Audible and Visual Alarms" from "Yes" to "No" for all three tanks. The monitoring plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, make the necessary changes, and submit for review by the EHD. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-08-2017  
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)

Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been properly trained.

Violation Notes: Returned to compliance on 06/15/2017. The designated operator failed to provide the alarm history for the L6 sensor in the 87-product submersible turbine pump sump during the July 22, 2016 designated operator monthly inspection report. During the monthly inspection, the designated operator shall review the alarm history for the previous month, check that each alarm was documented and responded to appropriately, and attach a copy of the alarm history with documentation taken in response to any alarms to the monthly report. Ensure that designated operators performing monthly inspections at this facility are including all of the required information on the reports.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-08-2017  
Citation: 23 CCR 16 2632(d)(1)(C), 2641(h), 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2632(d)(1)(C), 2641(h), 2711(a)(8)

Violation Description: Failure to submit or update a plot plan.  
Violation Notes: Returned to compliance on 06/08/2017. An accurate UST Monitoring Site Plan was not submitted. Add an "X" in each annular space to indicate the location of each annular sensor. Add an "L" in each submersible turbine pump sump to indicate the location of each line leak detector. On the Key, add "L=Line Leak Detector." A site plan must be submitted identifying the locations where monitoring will be performed. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/> and upload a copy of the UST Monitoring Site Plan. This was corrected on site.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-07-2016  
Citation: 23 CCR 16 2638(d) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2638(d)  
Violation Description: Failure to submit the Annual Monitoring System Certification Form to the CUPA within 30 days of completion of the test.  
Violation Notes: Returned to compliance on 06/09/2016. Annual monitoring system certification, leak detector testing, and spill container testing was performed on June 16, 2015 and a test report was submitted on August 12, 2015, approximately one month late. A copy of the test report must be submitted within 30 days of the tests. Take all necessary precautions to ensure testing and submittal of test reports are performed in a timely manner.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-11-2020  
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple  
Violation Description: UST Program -General - Must include violation description, proper statute and regulation citation in the "comment" section.  
Violation Notes: Returned to compliance on 06/11/2020. OBSERVATION: Liquid was observed in the UDC 5/6 SUMP. REGULATION GUIDANCE: If water could enter into the secondary containment by precipitation or infiltration, it must be removed and disposed of properly. CORRECTIVE ACTION: The service technician removed less than one quart of liquid from the UDC 5/6 sump. Ensure that all sumps and annular spaces are maintained free of liquid. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-14-2018  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)  
Violation Description: Failure to submit or maintain a current facility plot plan.  
Violation Notes: Returned to compliance on 06/18/2018. An accurate UST Monitoring Site Plan was not submitted. The site map is missing the pipe layout. A site plan must be submitted identifying the locations where monitoring will be performed. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/> and upload a copy of the UST Monitoring Site Plan.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-08-2015  
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)  
Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: Returned to compliance on 07/22/2015. The site map needs exit locations, hazardous material storage locations, and storm drain locations. A site map was not complete as part of the business plan. A site map shall contain a north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/>, upload the correct or updated information, and submit to the EHD for approval.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 11-06-2018  
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)  
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.  
Violation Notes: Returned to compliance on 11/15/2018. The emergency response procedures are not complete. Please fill out section C3, H1, and H2. On line C3 please put 209-468-3420 as the local Unified Program Agency (UPA) phone number. A business plan shall include the following emergency response procedures for a release or threatened release of hazardous materials, including, but not limited to, the following: - immediate notification of local emergency personnel and the Environmental Health Department (EHD) - procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment - evacuation plans and procedures, including immediate notice, for the site Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/>, upload the correct or updated information, and submit to the EHD for approval.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-07-2016  
Citation: 23 CCR 16 2632(d)(1)(C), 2641(h), 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2632(d)(1)(C), 2641(h), 2711(a)(8)  
Violation Description: Failure to submit or update a plot plan.  
Violation Notes: Returned to compliance on 06/08/2017. An accurate UST Monitoring Site Plan was not submitted. Add an "X" to the annular space to indicate that the space is monitored by a sensor. A site plan must be submitted identifying the locations where monitoring will be performed.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/> and upload a copy of the UST Monitoring Site Plan.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-16-2015  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)

Violation Description: Failure to maintain on site an approved monitoring plan.  
Violation Notes: Returned to compliance on 06/17/2015. The monitoring plans on site lists incorrect information for the diesel leak detector. An approved copy of these plans shall be accessible on site at all times. Immediately locate and retain a copy on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-07-2016  
Citation: 23 CCR 16 2637(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(e)

Violation Description: Failure to submit a copy of the secondary containment test results to the CUPA within 30 days after the test.  
Violation Notes: Returned to compliance on 06/09/2016. Secondary containment testing was performed on December 16, 2015 and a test report was submitted on January 26, 2016, approximately ten days late. A copy of the test report must be submitted within 30 days of the tests. Take all necessary precautions to ensure testing and submittal of test reports are performed in a timely manner.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-14-2018  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)

Violation Description: Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 06/14/2018. An approved copy of the monitoring plans were not available for inspection. Under Under Under Dispenser Containment (UDC) Monitoring, at UDC Monitoring Stops Flow of Product at Dispenser stated yes however 208 sensor were observed on the UDCs which do not stop the flow at the dispenser, the flow is stopped at the turbine. A copy of these plans shall be accessible on site at all times. The store manager, Greg Cattnach, was able to make the corrections while the inspector was on site. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-08-2015  
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: Returned to compliance on 07/22/2015. 21 bulk five gallon tanks of propane was found on site and has not been reported. Any material that meets or exceeds the reportable quantity shall be reported in the facility's business plan. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/>, add the materials to the hazardous material inventory, and submit to the EHD for approval.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-11-2019  
Citation: 23 CCR 16 2715(c)(4) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(4)  
Violation Description: Failure to maintain a list of employees trained by the designated operator on-site or off-site at a readily available location, if approved by the UPA. For training that occurs on or after October 1, 2018, failure to maintain a copy of the "Facility Employee Training Certificate" on-site or off-site at a readily available location, if approved by the UPA.  
Violation Notes: Returned to compliance on 06/11/2019. "Facility Employee Training Certificate" dated 10/18/19 was found on site was missing the zip code, it also stated that employee, Jaspall Kamboj, Paramjit Kamboj and Jarnail Kamboj were trained on 10/18/19 however the date of assuming responsibility was missing. All site employees must be trained prior to taking responsibility as a facility employee if after October 1, 2018, or within 30 days of hire if prior to October 1, 2018. The "Facility Employee Training Certificate" shall contain accurate information for all employees trained. The operator Jarnail Kamboj, was able to add the missing information while the inspector was on site to correct this violation. Ensure "Facility Employee Training Certificate" contains the accurate information. This was corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-07-2016  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have a UST Response Plan available on site.  
Violation Notes: Returned to compliance on 06/09/2016. The monitoring plan is not current and/or not approved by the EHD. The monitoring plan for all three tanks indicates "Yes" for Tank Integrity Testing Results. Change this to "No". The monitoring plan must be uploaded to the California



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Environmental Reporting System (CERS). Immediately log into CERS, make the necessary changes, and submit for review by the EHD.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-11-2020  
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)

Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violation Notes: Returned to compliance on 07/21/2020. OBSERVATION: The designated operator failed to check and note all required items on the visual inspection reports. The incorrect and missing information included the following from the inspection reports: - On the 7/17/2019 DO report, the designated operator failed to document all the alarms from the attached alarm history. The missing alarm includes: L 1 sensor out alarm disp 1-2, L2 sensor out alarm disp 3-4, L3 sensor out alarm disp 5-6, and L4 sensor out alarm disp 7-8, alarms occurred on June 11, 2019 REGULATION GUIDANCE: During the visual inspection, the designated operator shall check that all required testing and maintenance for the UST system have been completed and shall check all required items on the report. CORRECTIVE ACTION: Ensure that designated operators performing visual inspections at this facility are including all of the required information on the reports.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-16-2015  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)

Violation Description: Failure to submit a complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.

Violation Notes: Returned to compliance on 06/17/2015. UST Tank Information forms for the all 3 tanks are not current in CERS. The information submitted for vent and vapor recovery piping does not reflect what is onsite . Any change of information must be updated in CERS within 30 days of the changes. Immediately log into CERS, update the required information, and submit for review by the EHD.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 07-08-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violation Notes: Returned to compliance on 07/22/2015. Employee training records were unavailable for review at time of inspection. The business plan shall include provisions for ensuring that appropriate personnel receive initial and annual refresher training. This training shall be documented electronically or by hard copy and shall be made available for a minimum of three years. Immediately provide employee training for appropriate personnel and submit a copy of the training records to the EHD.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-16-2015  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34

Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Violation Notes: Returned to compliance on 06/17/2015. Financial responsibility documents have not been submitted to the EHD. Current financial responsibility documents are required to be submitted annually. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/>, and upload the required documents.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-11-2019  
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)

Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Violation Notes: none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, - 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October- 1,- 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months. Returned to compliance on 06/13/2019. Owners or operators of underground storage tanks that do not meet California Code of regulations, title 23 division 3, chapter 16 section 2635(c)(2) shall test overfill prevention equipment once by October 13th, 2018 and every 36 months thereafter; and within 30 days of the date of a repair. The site conducted the test on 2/22/19, over four months late. Ensure to conduct overfill prevention equipment inspection within the time frame provided by the regulation and submit test results within 30 days of performing the inspection. Overfill prevention equipment inspection is required once by October 13th, 2018 and every 36 months thereafter. Take all necessary precautions to ensure testing is performed in a timely manner. Ensure a 48 hour notification is provided to EHD prior to conducting the inspection. Test result for the testing performed must be submitted within 30 day of testing.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Violation Date: 06-14-2018  
Citation: 23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712

Violation Description: Failure to comply with any of the applicable requirements of the permit issued for the operation of the UST system.

Violation Notes: Returned to compliance on 06/14/2018. The 87 line leak detector was replaced by elite IV with a like for like replacement. The work order was found on site, the contractor notified the site within a timely manner however the site did not have the following documentation: a. Description of part(s) installed b. Name & UST ICC # of Service technician doing the work (manufacturer certification proof) c. Testing done to verify functionality of the repair This documentation is require be on site as stated by the Underground Storage Tank (UST) Repair Permit Guidance provided by San Joaquin County. The The store manager, Greg Cattnach, was able to get an email from elite IV with the documentation while the inspector was on site. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Violation Date: 06-16-2015  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate response plan.  
Violation Notes: Returned to compliance on 06/17/2015. -The response plan has not been uploaded to CERS. The response plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, upload the completed form, and submit for review by the EHD. Ensure a copy is available for inspection at any time. -The monitoring plan is not current and/or not approved by the EHD. The monitoring plan lists incorrect information for the Under Dispenser Monitoring (UDC) for all three tanks. The monitoring plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, make the necessary changes, and submit for review by the EHD.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-07-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by July 7, 2016. Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Letter from Chief Financial Officer (if applicable), and the Owner Statement of Designated Operator Compliance. The UST Owner/Operator: Written Agreement, if applicable, can be stored at the facility or uploaded into CERS.  
Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Annual monitoring system certification inspection. The violations included: - UST tank information not current [Corrected On Site (COS)] - Failed to have an approved UST monitoring plan (COS) - Site map failed to indicate sensors in the annular spaces and the line leak detectors for each tank (COS) - Designated operator (DO) did not provide an alarm history for the L6 sensor in the 87 tank stp sump during the 7/22/16 DO monthly inspection report. Emailed the inspection report to 'twoguysfoodfuel@gmail.com'  
Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2017

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations noted at the time of inspection. \*Note: Mr. Cattanash stated that all test waters and liquids are removed by the technicians during inspections and taken by them for reuse. All hazardous wastes are taken by the facility annually to the SJC Household Hazardous Waste Facility. The 2016 disposal record was for used fuel filters only. No hazardous waste was observed on site. Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous waste activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.

Eval Division: San Joaquin County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by July 8, 2017. Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Letter from Chief Financial Officer (if applicable), and the Owner Statement of Designated Operator Compliance. The UST Owner/Operator: Written Agreement, if applicable, can be stored at the facility or uploaded into CERS. Note: In CERS under "UST Certification of Financial Responsibility", the submittal needs to be removed and replaced with the Certification of Financial Responsibility found in "UST Letter from Chief Financial Officer." The latter contains the [Truncated]

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-11-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by July 11th, 2019. Document reviewed: Monitoring system certification test results from 2016, 2017, 2018 Secondary containment 2018, employee training, response plan, maintenance records, monitoring plan, financial responsibility documents and designated operator monthly inspection reports from June 2018- June 2019. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420.

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-11-2020  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: The monitoring system certification was conducted on 6/11/2020 and the paperwork inspection completed today (6/23/2020). An inspection checklist was provided to the facility operator on the day of inspection. The EHD has written the complete report which replaces the initial checklist. Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 07/23/2020. . To minimize person to person contact EHD is choosing to write the name of person receiving the report instead of having them sign. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420. Documents provided during inspection: Return to compliance certification form and corrective action form.

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-14-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by July 15th, 2018. Document reviewed: Monitoring system certification 2015, 2016, and 2017, secondary containment test results 2015, employee training, response plan, financial responsibility documents, monitoring plan and designated operator monthly inspection reports from June 2017- June 2018. Documents provided: Return to compliance certification. Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Letter from Chief Financial Officer (if applicable), and the Owner Statement of Designated Operator Compliance. The UST [Truncated]

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-16-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: On site for routine underground storage tank inspection and monitoring certification. Please note the inspection was conducted in June when previously it had been done in July. The next routine inspection and monitoring certification will be due June 2016. Secondary containment testing was last done in December 2012 and is due by December 2015. Greg has an appointment to upload CERS documents at the SJC EHD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

tomorrow June 17, 2015. Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by July 16, 2015 . Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Letter from Chief [Truncated]

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-08-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 8/7/2015 . Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous material activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.

Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-16-2013  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-16-2013  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-16-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: 203b, 306b, 999b  
Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-06-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 12/6/2018. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420.  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

**Enforcement Action:**

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 06-07-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 06-08-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 06-14-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 06-16-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 07-08-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 07-16-2013  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 163962  
Site Name: TWO GUYS FOOD & FUEL  
Site Address: 147 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 07-16-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Affiliation:  
Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 147 E LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Affiliation Zip: 95330  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Edward Cardoza  
Entity Title: Not reported  
Affiliation Address: P.O. BOX 1022  
Affiliation City: MANTECA  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95336  
Affiliation Phone: (209) 239-4141

Affiliation Type Desc: UST Tank Owner  
Entity Name: CARDOZA ENTERPRISES  
Entity Title: Not reported  
Affiliation Address: PO BOX 1022  
Affiliation City: MANTECA  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95336  
Affiliation Phone: (209) 239-4141

Affiliation Type Desc: Environmental Contact  
Entity Name: JARNAIL KAMBOJ  
Entity Title: Not reported  
Affiliation Address: 1017 MAIRGOLD LANE  
Affiliation City: MANTECA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95336  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: GREG CATTANACH  
Entity Title: MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: CARDOZA, ED & DOLORES  
Entity Title: Not reported  
Affiliation Address: 147 E LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 239-4141

Affiliation Type Desc: UST Tank Operator  
Entity Name: JARNAIL KAMBOJ  
Entity Title: Not reported  
Affiliation Address: 147 E LATHROP RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 612-6396

Affiliation Type Desc: Document Preparer  
Entity Name: GREG CATTANACH  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Property Owner Name  
Entity Name: CARDOZA ENTERPRISES  
Entity Title: Not reported  
Affiliation Address: PO BOX 1022  
Affiliation City: MANTECA  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95336  
Affiliation Phone: (209) 239-4141

Affiliation Type Desc: CUPA District  
Entity Name: San Joaquin Cnty Env Health  
Entity Title: Not reported  
Affiliation Address: 1868 East Hazelton Avenue  
Affiliation City: Stockton  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95205-6232  
Affiliation Phone: (209) 468-3420

Affiliation Type Desc: Operator  
Entity Name: JARNAIL KAMBOJ  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (209) 612-6396

Affiliation Type Desc: Parent Corporation  
Entity Name: TWO GUYS FOOD & FUEL  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Permit Applicant

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**S103954871**

Entity Name: JARNAIL KAMBOJ  
Entity Title: OWNER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (209) 858-2666

**B10**  
**SE**  
**1/8-1/4**  
**0.210 mi.**  
**1108 ft.**

**CARDOZA ENTERPRISES**  
**147 E LATHROP RD**  
**LATHROP, CA 95330**  
**Site 2 of 7 in cluster B**

**RCRA NonGen / NLR** **1024796046**  
**CAL000172313**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

RCRA NonGen / NLR:  
Date Form Received by Agency: 1998-08-19 00:00:00.0  
Handler Name: CARDOZA ENTERPRISES  
Handler Address: 147 E LATHROP RD  
Handler City,State,Zip: LATHROP, CA 95330-0000  
EPA ID: CAL000172313  
Contact Name: ED CARDOZA JR  
Contact Address: PO BOX 1022  
Contact City,State,Zip: MANTECA, CA 95336  
Contact Telephone: 209-239-4141  
Contact Fax: 209-823-3414  
Contact Email: CARDOZENT@AOL.COM  
Contact Title: Not reported  
EPA Region: 09  
Land Type: Not reported  
Federal Waste Generator Description: Not a generator, verified  
Non-Notifier: Not reported  
Biennial Report Cycle: Not reported  
Accessibility: Not reported  
Active Site Indicator: Handler Activities  
State District Owner: Not reported  
State District: Not reported  
Mailing Address: PO BOX 1022  
Mailing City,State,Zip: MANTECA, CA 95336-0000  
Owner Name: SUPER STOP MARKET  
Owner Type: Other  
Operator Name: ED CARDOZA JR  
Operator Type: Other  
Short-Term Generator Activity: No  
Importer Activity: No  
Mixed Waste Generator: No  
Transporter Activity: No  
Transfer Facility Activity: No  
Recycler Activity with Storage: No  
Small Quantity On-Site Burner Exemption: No  
Smelting Melting and Refining Furnace Exemption: No  
Underground Injection Control: No  
Off-Site Waste Receipt: No  
Universal Waste Indicator: Yes  
Universal Waste Destination Facility: Yes  
Federal Universal Waste: No  
Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CARDOZA ENTERPRISES (Continued)**

**1024796046**

Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:43:49.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SUPER STOP MARKET
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	290 N MAIN ST STE C
Owner/Operator City,State,Zip:	MANTECA, CA 95336-0000
Owner/Operator Telephone:	209-239-4475
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator: Operator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARDOZA ENTERPRISES (Continued)**

**1024796046**

Owner/Operator Name: ED CARDOZA JR  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: PO BOX 1022  
Owner/Operator City,State,Zip: MANTECA, CA 95336  
Owner/Operator Telephone: 209-239-4141  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Historic Generators:  
Receive Date: 1998-08-19 00:00:00.0  
Handler Name: CARDOZA ENTERPRISES  
Federal Waste Generator Description: Not a generator, verified  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:  
NAICS Code: 23332  
NAICS Description: COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION

Facility Has Received Notices of Violations:  
Violations: No Violations Found

Evaluation Action Summary:  
Evaluations: No Evaluations Found

**B11**  
**SE**  
**1/8-1/4**  
**0.213 mi.**  
**1123 ft.**

**LATHROP GAS & FOOD INC**  
**140 LATHROP RD**  
**LATHROP, CA 95330**

**RCRA NonGen / NLR** **1024838014**  
**CAL000384242**

**Site 3 of 7 in cluster B**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

RCRA NonGen / NLR:  
Date Form Received by Agency: 2013-04-08 00:00:00.0  
Handler Name: LATHROP GAS & FOOD INC  
Handler Address: 140 LATHROP RD  
Handler City,State,Zip: LATHROP, CA 95330  
EPA ID: CAL000384242  
Contact Name: JARNAIL KAMBOJ  
Contact Address: 140 LATHROP RD  
Contact City,State,Zip: LATHROP, CA 95330  
Contact Telephone: 209-982-0052  
Contact Fax: 209-982-5679  
Contact Email: JSINGH2001@GMAIL.COM  
Contact Title: Not reported  
EPA Region: 09

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**1024838014**

Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	140 LATHROP RD
Mailing City, State, Zip:	LATHROP, CA 95330-0000
Owner Name:	LATHROP GAS & FOOD INC
Owner Type:	Other
Operator Name:	JARNAIL KAMBOJ
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSD Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**1024838014**

Unaddressed Significant Non-Complier Universe: No  
Addressed Significant Non-Complier Universe: No  
Significant Non-Complier With a Compliance Schedule Universe: No  
Financial Assurance Required: Not reported  
Handler Date of Last Change: 2018-09-06 17:02:13.0  
Recognized Trader-Importer: No  
Recognized Trader-Exporter: No  
Importer of Spent Lead Acid Batteries: No  
Exporter of Spent Lead Acid Batteries: No  
Recycler Activity Without Storage: No  
Manifest Broker: No  
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Operator  
Owner/Operator Name: JARNAIL KAMBOJ  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: 140 LATHROP RD  
Owner/Operator City,State,Zip: LATHROP, CA 95330  
Owner/Operator Telephone: 209-982-0052  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: LATHROP GAS & FOOD INC  
Legal Status: Other  
Date Became Current: Not reported  
Date Ended Current: Not reported  
Owner/Operator Address: 140 LATHROP RD  
Owner/Operator City,State,Zip: LATHROP, CA 95330-0000  
Owner/Operator Telephone: 209-982-5005  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 2013-04-08 00:00:00.0  
Handler Name: LATHROP GAS & FOOD INC  
Federal Waste Generator Description: Not a generator, verified  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 44719  
NAICS Description: OTHER GASOLINE STATIONS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**1024838014**

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**B12**  
**SE**  
**1/8-1/4**  
**0.213 mi.**  
**1123 ft.**

**LATHROP CHEVRON**  
**140 LATHROP RD**  
**LATHROP, CA 95330**  
**Site 4 of 7 in cluster B**

**UST U003786670**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

UST:  
Name: LATHROP CHEVRON  
Address: 140 LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: FA0006943  
Permitting Agency: Not reported  
Latitude: 37.8272035  
Longitude: -121.2861441

**B13**  
**SE**  
**1/8-1/4**  
**0.214 mi.**  
**1128 ft.**

**LATHROP GAS & FOOD INC**  
**140 E LATHROP RD**  
**LATHROP, CA 95330**  
**Site 5 of 7 in cluster B**

**UST U004024176**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

UST SAN JOAQUIN:  
Name: LATHROP GAS & FOOD INC  
Address: 140 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Region: SJ  
Facility Id: FA0006943  
Mail Address: 140 E LATHROP RD  
Mail Address 2: Not reported  
Mail Care of: JARNAIL KAMBOJ  
Mail City,St,Zip: LATHROP, CA 95330  
  
Tank Rec ID: TA0505688  
Tank Number: 1  
Tank Status: 01 - Active, billable  
Tank Capacity: 12000  
Product Type Desc: 1a - REGULAR UNLEADED  
Program Element: 2361  
Decode for Program Element: 2361 - UST FACILITY  
Chemical Form: (none)  
CAS#: Not reported  
CERS ID: 10182153  
Cross Ref Tank ID: Not reported  
LEA ID: 1  
Common Name: UNLEADED GASOLINE  
Date Installed: 7/1/1995  
Date of Closure: Not reported  
Latitude: 37.8263305029

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**U004024176**

Longitude: -121.2877537230

Tank Rec ID: TA0505689  
Tank Number: 2  
Tank Status: 01 - Active, billable  
Tank Capacity: 10000  
Product Type Desc: 03 - DIESEL  
Program Element: 2361  
Decode for Program Element: 2361 - UST FACILITY  
Chemical Form: (none)  
CAS#: Not reported  
CERS ID: 10182153  
Cross Ref Tank ID: Not reported  
LEA ID: 1  
Common Name: DIESEL #2  
Date Installed: 7/1/1995  
Date of Closure: Not reported  
Latitude: 37.8263305029  
Longitude: -121.2877537230

Tank Rec ID: TA0505690  
Tank Number: 3  
Tank Status: 01 - Active, billable  
Tank Capacity: 12000  
Product Type Desc: 1b - PREMIUM UNLEADED  
Program Element: 2361  
Decode for Program Element: 2361 - UST FACILITY  
Chemical Form: (none)  
CAS#: Not reported  
CERS ID: 10182153  
Cross Ref Tank ID: Not reported  
LEA ID: 1  
Common Name: UNLEADED GASOLINE  
Date Installed: 7/1/1995  
Date of Closure: Not reported  
Latitude: 37.8263305029  
Longitude: -121.2877537230

**UST:**

Name: LATHROP GAS & FOOD INC  
Address: 140 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: Not reported  
Permitting Agency: San Joaquin County Environmental Health  
Latitude: 37.8258  
Longitude: -121.288

Name: LATHROP GAS & FOOD INC  
Address: 140 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: Not reported  
Permitting Agency: San Joaquin County Environmental Health  
Latitude: 37.8258  
Longitude: -121.288

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**B14**  
**SE**  
**1/8-1/4**  
**0.214 mi.**  
**1128 ft.**

**LATHROP GAS & FOOD INC**  
**140 E LATHROP RD**  
**LATHROP, CA 95330**

**CERS HAZ WASTE**  
**CERS TANKS**  
**CERS**

**S121774068**  
**N/A**

**Site 6 of 7 in cluster B**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

**CERS HAZ WASTE:**  
Name: LATHROP GAS & FOOD INC  
Address: 140 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 396320  
CERS ID: 10182153  
CERS Description: Hazardous Waste Generator

**CERS TANKS:**  
Name: LATHROP GAS & FOOD INC  
Address: 140 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 396320  
CERS ID: 10182153  
CERS Description: Underground Storage Tank

**CERS:**  
Name: LATHROP GAS & FOOD INC  
Address: 140 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Site ID: 396320  
CERS ID: 10182153  
CERS Description: Chemical Storage Facilities

**Violations:**  
Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2019  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 12/09/2019. OBSERVATION: An approved copy of the monitoring plans were not available for inspection. REGULATION GUIDANCE: A copy of these plans shall be accessible on site at all times. CORRECTIVE ACTION: Immediately locate and retain a copy on site. This was corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 11-06-2018  
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: Returned to compliance on 11/06/2018. The Hazardous Materials Inventory forms for all chemicals were not complete. Please add the new federal hazard category to each chemical on inventory. This information must be current and submitted as part of the business plan. This violation has been corrected on site.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: 23 CCR 16 2636(f)(1) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(1)  
Violation Description: Failure of the leak detection equipment to have an audible and visual alarm as required.  
Violation Notes: Returned to compliance on 12/12/2016. The 87-product 208 sensor in the submersible turbine pump sump had a broken wire and could not be tested to ensure continuous monitoring of the tank system. All monitoring equipment shall be maintained to activate an audible and visual alarm or stop the flow of product at the dispenser when it detects a leak. The sensor was replaced and retested during the inspection. A G UST Retrofit Verification with Inspector Already OnsiteG form has been completed and provided to the operator and contractor. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 12/14/2017. An approved copy of the monitoring plans were not available for inspection. A copy of these plans shall be accessible on site at all times. Immediately locate and retain a copy on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-16-2013  
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections  
Violation Description: UST Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 01/06/2014.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2637(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(e)  
Violation Description: Failure to submit a copy of the secondary containment test results to the UPA within 30 days after the test.  
Violation Notes: Returned to compliance on 12/14/2017. Secondary containment testing

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

was performed on 1/29/2015 and a test report was submitted past 30 days. A copy of the test report must be submitted within 30 days of the tests. Take all necessary precautions to ensure testing and submittal of test reports are performed in a timely manner.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: 23 CCR 16 2636(f)(5) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(5)

Violation Description: "Failure to meet one or more of the following monitoring requirements in lieu of the requirement to be tightness tested annually: The monitoring system maintains all product piping outside the dispenser to be fail-safe and shut down the pump when a leak is detected. The monitoring system shuts down the pump or stops flow when a leak is detected in the under dispenser containment (UDC)."

Violation Notes: Returned to compliance on 12/12/2016. The Bravo box floats and chains in the under dispenser containment (UDC) 5/6 (91-product) and 11/12 (87-, 91-, and diesel-product) failed to stop the flow of product at the dispenser when tested. All monitoring equipment shall be maintained to activate an audible and visual alarm or stop the flow of product at the dispenser when it detects a leak. The service technician adjusted the floats and chains and verified functionality. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple

Violation Description: UST Program -General - Must include violation description, proper statute and regulation citation in the "comment" section.

Violation Notes: Returned to compliance on 12/11/2017. Liquid was observed in the dispenser 11/12 and 9/10 under dispenser containment sump. If water could enter into the secondary containment by precipitation or infiltration, it must be removed and disposed of properly. Immediately remove this liquid, make a hazardous waste determination per Title 22 hazardous waste regulations, and manage it accordingly. Ensure that the under dispenser containment in dispenser 11/12 and 9/10 is maintained free of liquid. Technician removed liquid from the under dispenser containment from dispenser 9/10 and 11/12 after he tested the floats and chains. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Violation Description: Failure to have an approved UST Monitoring Plan.  
Violation Notes: Returned to compliance on 12/14/2017. The monitoring plan is not current and/or not approved by the EHD. In the UST tank information for tank ID TA0505689, in the section labeled Vent, Vapor Recovery(VR) and Riser/Fill Pipe Piping Construction under vapor recovery primary containment is marked fiberglass, this should be marked none. All the monitoring plans for the tanks under Monitor Panel Model is labeled TSL-350, but the monitoring panel is EMC. The monitoring plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, make the necessary changes, and submit for review by the EHD.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2019  
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)  
Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.  
Violation Notes: Returned to compliance on 12/11/2020. OBSERVATION: The designated operator failed to check and note all required items on the visual inspection reports: - The G NAG in sections VII through XI were not fully explained on the inspection reports. -Tank and line tightness test information was left blank. REGULATION GUIDANCE: During the visual inspection, the designated operator shall check that all required testing and maintenance for the UST system have been completed and shall check all required items on the report. CORRECTIVE ACTION: Ensure that designated operators performing visual inspections at this facility are including all of the required information on the reports.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 11-06-2018  
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)  
Violation Description: Failure to complete and electronically submit a site map with all required content.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Violation Notes: Returned to compliance on 11/06/2018. A site map was not complete as part of the business plan. The site map is missing an evacuation staging area, fuel fill port, storm drain locations, emergency shut offs, utilities shut offs, chemical loading and unloading area. Please add the missing elements to the site map. A site map shall contain a north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. If a site map element is not applicable for your facility then list it on the map and label as G NA". This violation has been corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate plot plan.

Violation Notes: Returned to compliance on 12/10/2016. An accurate UST Monitoring Site Plan was not submitted. The site map submitted does not indicate the locations of the sensors. A site plan must be submitted identifying the locations where monitoring will be performed. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/> and upload a copy of the UST Monitoring Site Plan.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2019  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)  
Violation Description: Failure to have an approved UST Monitoring Plan.

Violation Notes: Returned to compliance on 12/09/2019. OBSERVATION: The monitoring plan is not current and/or not approved by the EHD. UDC leak sensor manufacturer and model information was left blank on the monitoring plans for all tanks. The question regarding G UDC Leak Alarm Triggering Automatic Pump ShutdownG was incorrectly selected yes on the monitoring plans for all tanks. REGULATION GUIDANCE: The monitoring plan must be uploaded to the California Environmental Reporting System (CERS). CORRECTIVE ACTION: Immediately log into CERS, make the necessary changes, and submit for review by the EHD. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2018  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Violation Description: 16, Section(s) 2712(i)  
Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 12/11/2018. An approved copy of the monitoring plans were not available for inspection. A copy of these plans shall be accessible on site at all times. The owner, made the changes to the monitoring system certification that was on site to correct this while inspector was on site. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 06-08-2017  
Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(ii)

Violation Description: Failure to post the following information next to the telephone: (A) The name and telephone number of the emergency coordinator; (B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and (C) The telephone number of the fire department, unless the facility has a direct alarm.

Violation Notes: Returned to compliance on 06/08/2017. An emergency coordinator and modified contingency plan information is lacking. There must be at least one emergency coordinator on site or on call to coordinate emergency response measures, and the following information must be posted by a phone: the name and phone number of the emergency coordinator; location of fire extinguishers, spill control equipment, and if present, fire alarm; and the phone number of the fire department, unless the facility has a direct alarm. Immediately appoint an emergency coordinator and post the required information by a phone. A form is provided that can be used for this purpose.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-16-2014  
Citation: 23 CCR 16 2636(f)(1) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(1)

Violation Description: Failure of the double wall pressurized piping in the under dispenser containment to be continuously monitored by a method that either shuts down the flow of product to the dispenser or activates an audible/visual alarm when a leak is detected.

Violation Notes: Returned to compliance on 12/16/2014. The Bravo box float and chain for the 87 and 91 products in the 11/12 UDC sump failed to stop the flow of product at the dispenser when tested. All monitoring equipment shall be maintained to activate an audible and visual alarm or stop the flow of product at the dispenser when it detects a leak. The service technician cleaned the float mechanism. The float appears to be rubbing on around the edges on rough/bubbling paint. Notified Jessie of concerns from technician for future failures. Corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286  
Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.  
Violation Notes: Returned to compliance on 12/12/2016. UST Facility Operating Permit Application and UST Tank Information for TA0505688, TA0505689, and TA0505690 are not current in California Environmental Reporting System (CERS). The Board of Equalization number, 44048818, is closed and not valid. The UST Tank Information for all three tanks needs the following revisions: beneath Vent, Vapor Recovery (VR) and Riser/Fill Pipe Piping Construction, enter the Vent Primary Containment; beneath Under Dispenser Containment (UDC) change "double-walled" to "single-walled"; and beneath Corrosion Protection, change "No" to "Yes" for Isolation. Any change of information must be updated in CERS within 30 days of the changes. Immediately log into CERS, update the required information, and submit for review by the Environmental Health Department (EHD).  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: Un-Specified  
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.  
Violation Notes: Returned to compliance on 12/14/2015. A monitoring system certification, leak detector testing, and spill container testing were performed on December 16, 2015 and a test report has not been submitted to the California Environmental Reporting System (CERS). A copy of the test results were not also not found on site. A copy of the test report must be submitted within 30 days of the test. Immediately provide this report to the EHD.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)  
Violation Description: Failure to submit a complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.  
Violation Notes: Returned to compliance on 12/14/2015. UST Tank Information forms for all three tanks are not current in CERS. They do not list any corrosion protection. The diesel tank form incorrectly indicates that there is single-walled vapor recovery piping at the site. Any change of information must be updated in CERS within 30 days of the changes. Immediately log into CERS, update the required information, and submit for review by the EHD.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2018  
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)

Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violation Notes: Returned to compliance on 08/22/2019. The designated operator failed to document the following: On the 10/19/18 Designated operator (DO) inspection report - Section III The DO failed to add a description to all the components marked N/A in section VII through XI. -Section VI The owner or operator failed to add a name, a signature and a date within 48 hours of receiving and reviewing the DO report. -Section IX The DO failed to mark Yes or No to the question "Are all sensors in under-dispenser containment located to detect a leak at the earliest opportunity?" - Section X The DO failed to mark N/A instead of No under the question "Has the overfill prevention equipment inspection been completed within the past 36 months?" On the 11/19/18 designated operator inspection report; - Section III The DO failed to add a description to all the components marked N/A in section VII through XI. -Section VI The owner or operator failed to add a name, a signature and a date within 48 hours of receiving and reviewing the San Joaquin County Environmental Health

Violation Division: UST  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)

Violation Description: Failure to have an approved UST Response Plan.

Violation Notes: Returned to compliance on 12/14/2017. The response plan is not current and/or not approved by the EHD. The response plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, upload the completed form, and submit for review by the EHD. Ensure a copy is available for inspection at any time.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)  
Violation Description: Failure to have an approved UST Response Plan.  
Violation Notes: Returned to compliance on 12/12/2016. The Response Plan is not current and/or approved by the Environmental Health Department (EHD). Section V of the Response Plan has not been completed. The Response Plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, upload the completed form, and submit for review by the EHD. Ensure that a copy is available for inspection at any time.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: 23 CCR 16 2636(f)(1) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(1)  
Violation Description: Failure of the double wall pressurized piping in the turbine sump to be continuously monitored with a system that activates an audible and visual alarm or restricts or stops flow at dispenser when a leak is detected.  
Violation Notes: Returned to compliance on 12/09/2015. The Bravo box floats and chains in the UDC sumps 1/2 (center), 3/4 (south), 7/8 (south), 9/10 (center), and 11/12 (center) failed to stop the flow of product at the dispenser when tested. All monitoring equipment shall be maintained to activate an audible and visual alarm or stop the flow of product at the dispenser when it detects a leak. The service technician adjusted the floats and chains and verified functionality. According to Nick with Affordatest, a two-inch socket was laying in the UDC 1/2 over the float, which was preventing it from rising. The socket was removed at the time of inspection.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-16-2013  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 12/30/2013.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to maintain on site an approved monitoring plan.  
Violation Notes: Returned to compliance on 12/14/2015. An approved copy of the

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

monitoring plans were not available for inspection. A copy of these plans shall be accessible on site at all times. Immediately locate and retain a copy on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 06-08-2017  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 06/08/2017. A metal can of hazardous waste solids was observed in the storage room with no hazardous property or physical state. All hazardous waste containers shall be marked with the following information: - the words G Hazardous WasteG - name and address of generator - hazardous properties (ignitable, corrosive, reactive, toxic) - physical state (liquid, solid) - composition (contents) - accumulation start date Immediately label this container and ensure that all hazardous waste containers are marked with all the required information.

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 06-08-2017  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2

Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures.

Violation Notes: Returned to compliance on 06/08/2017. 30 gallons of fuel contaminate water was disposed of as "oily water" using a consolidated manifesting procedure on 11/30/15. Disposal using a consolidated manifesting procedure is not eligible for this waste. The consolidated manifesting procedure may be used if the generator does not generate more than 1000 kilograms per month of hazardous waste (excluding used oil and oil/water separator waste) and only for the following waste streams: - used oil - contents of an oil/water separator - solids contaminated with used oil - brake fluid - antifreeze - antifreeze sludge - parts cleaning solvents, including aqueous cleaning solvents - hydroxide sludge contaminated solely with metals from a wastewater treatment process - "paint-related" wastes, including paints, thinners, filters, and sludges - spent photographic solutions - dry cleaning solvents (including perchloroethylene, naphtha, and silicone based solvents) - filters, lint, [Truncated]

Violation Division: San Joaquin County Environmental Health  
Violation Program: HW  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)  
Violation Description: Failure to submit or maintain a current facility plot plan.  
Violation Notes: Returned to compliance on 12/19/2017. An accurate UST Monitoring Site Plan was not submitted. Site plan is lacking general piping layout and sensors monitoring in the under dispenser containment. A site plan must be submitted identifying the locations where monitoring will be performed. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/> and upload a copy of the UST Monitoring Site Plan.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2019  
Citation: 23 CCR 16 2665(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665(b)  
Violation Description: "Failure to submit a copy of the overfill prevention equipment inspection results on the G Overfill Prevention Equipment Inspection Report FormG to the UPA within 30 days after the inspection. "  
Violation Notes: Returned to compliance on 12/11/2020. OBSERVATION: Overfill Prevention Equipment testing was performed on 12/11/2019 and a test report was submitted on 1/18/2019, 38 days later. REGULATION GUIDANCE: A copy of the test report must be submitted within 30 days of the tests. CORRECTIVE ACTION: Take all necessary precautions to ensure testing and submittal of test reports are performed in a timely manner.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2636(f)(1) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(1)  
Violation Description: Failure of the double-walled pressurized piping to be continuously monitored with a system that activates an audible and visual alarm or stops flow at the dispenser when a leak is detected.  
Violation Notes: Returned to compliance on 12/11/2017. The floats and chains in dispensers 11/12, 5/6, 7/8, and 3/4 for the 87 product line failed to activate an audible and visual alarm when tested to ensure continuous monitoring of the tank system. All monitoring equipment shall be maintained to activate an audible and visual alarm or stop the flow of product at the dispenser when it detects a leak. The technician adjusted and cleaned the floats and chains in the above dispensers. He retested the floats and chain and verified functionality. This was corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34  
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.  
Violation Notes: Returned to compliance on 12/12/2016. Financial responsibility documents have not been submitted to the EHD. Current financial responsibility documents are required to be submitted annually. Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/>, and upload the required documents.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 11-06-2018  
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)  
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.  
Violation Notes: Returned to compliance on 11/06/2018. The emergency response procedures were not complete. Section A2, G,H1, H2, H10, and J were not filled out. Please complete the consolidated emergency response and contingency plan. A business plan shall include the following emergency response procedures for a release or threatened release of hazardous materials, including, but not limited to, the following: - immediate notification of local emergency personnel and the Environmental Health Department (EHD) - procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment - evacuation plans and procedures, including immediate notice, for the site This information has been corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2018  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)  
Violation Description: Failure to have an approved UST Monitoring Plan.  
Violation Notes: Returned to compliance on 12/11/2018. The monitoring plan is not current and/or not approved by the EHD. ELD testing was listed under the 87 product tank to have ELD test reports, however the site owner stated that the site did not conduct ELD testing. The monitoring plan must be uploaded to the California Environmental Reporting System (CERS). The site owner made the corrections to the monitoring plan into CERS, while the inspector was on site, and submit for review by the EHD. This was corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: 23 CCR 16 2715 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715  
Violation Description: Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented.  
Violation Notes: Returned to compliance on 12/14/2015. The designated operator failed to check and note the correct test dates for the secondary containment tests on the designated operator monthly inspection reports starting in February 2015. The triennial secondary containment testing was conducted on January 29, 2015. The test date marked is January 6, 2014, which was for testing of the 91 piping and UDC 11/12 only. During the monthly inspection, the designated operator shall check that all required testing and maintenance for the UST system have been completed and document the dates they were done. Ensure that designated operators performing monthly inspections at this facility are including all of the required information on the reports.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: HSC 6.7 25291(a)(1) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(1)  
Violation Description: Failure to construct, operate, and maintain primary containment as product-tight.  
Violation Notes: Returned to compliance on 12/12/2016. Leaking was noted below the shear valves in under dispenser containment (UDC) 1/2, 5/6, 9/10, and 11/12 and filters appeared to be leaking in UDC 9/10 and 11/12 allowing for oily debris to accumulate in the UDCs and indicating a leak in the primary piping. All primary containment for the UST system must be tight. The service technician removed the leaking product and tightened the filters. If the seepage reappears, immediately have a properly licensed, trained, and certified contractor repair or replace the failed component. This was corrected on site.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2019  
Citation: 23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)  
Violation Description: Failure to have at least one facility employee present during operating hours that has been trained in the proper operation and

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

LATHROP GAS & FOOD INC (Continued)

S121774068

Violation Notes: maintenance of the UST system by a designated operator (DO). Returned to compliance on 12/11/2020. OBSERVATION: The designated operator employee training for Sukhdev Singh was not performed. REGULATIONS: The designated operator shall train facility employees in the proper operation and maintenance of the UST system at least once every 12 months. The training shall be conducted before the individual performs the duties of a facility employees. The training shall include, but is not limited to: 1. Operation of the UST system in a manner consistent with the facility's best management practices 2. Employee's role with regard to monitoring equipment as specified in the facility's monitoring plan 3. Employee's role with regard to spills and overfills as specified in the facility's response plan 4. Name of the contact person(s) for emergencies and monitoring equipment alarms Initial training shall also include a site-specific practical demonstration that provides both sharing information and evaluating knowledge for responding to emergencies, leak de

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-12-2016  
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)

Violation Description: Failure to have an approved UST Monitoring Plan.  
Violation Notes: Returned to compliance on 12/12/2016. The monitoring plan is not current and/or not approved by the Environmental Health Department (EHD). The monitoring plan for all three tanks have the following issues: - Beneath Tank Monitoring is Performed Using the Following Method(s) enter "Dry" for Secondary Containment System. - Beneath Pipe Monitoring is Performed Using the Following Method(s), enter "Dry" for Piping Secondary Containment. - Beneath Under Dispenser Containment (UDC) Monitoring remove "Veeder Root" from UDC Panel Manufacturer; remove "TSL-350 from UDC Panel Model #; removed "Bravo" from UDC Leak Sensor Manufacturer; remove "FLOAT & CHAIN" from UDC Leak Sensor Model; and change "Yes" to "No" for Failure/Disconnection of UDC Monitoring System Triggers Automatic Pump Shutdown; and - Beneath Record Keeping, change "No" to "Yes" for Equipment Maintenance and Calibration Records. The monitoring plan must be uploaded to California Environmental Reporting System (CERS). Immediately log into CERS, make [Truncated]

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2018  
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)

Violation Description: Failure to comply with one or more of the following overflow prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, - 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October- 1, - 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.

Violation Notes: Returned to compliance on 12/11/2018. Owners or operators of underground storage tanks that do not meet California Code of regulations, title 23 division 3, chapter 16 section 2635(c)(2) shall test overfill prevention equipment once by October 13th, 2018 and every 36 months thereafter; and within 30 days of the date of a repair. The site did not performed the testing by October 13th, 2018. The service technicians on site performed the inspection today (12/11/18) with passing results to correct this on site. Ensure to conduct overfill prevention equipment inspection within the time frame provided by the regulation and submit test results within 30 days of performing the inspection. Ensure a 48 hour notification is provided to EHD prior to conducting the inspection. This was corrected on site.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-11-2017  
Citation: 23 CCR 16 2638(d) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2638(d)

Violation Description: Failure to submit the Annual Monitoring System Certification Form to the UPA within 30 days of completion of the test.

Violation Notes: Returned to compliance on 12/20/2017. A monitoring system certification, leak detector testing, and spill container testing were performed on 12/12/2016. A test report has not been submitted to the EHD or the California Environmental Reporting System (CERS). A copy of the test report must be submitted within 30 days of the test. Immediately provide this report to the EHD.

Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-16-2013  
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections

Violation Description: UST Program - Operations/Maintenance - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Violation Notes: Returned to compliance on 01/06/2014.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 12-09-2015  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate response plan.  
Violation Notes: Returned to compliance on 12/14/2015. The monitoring plan is not current and/or not approved by the EHD. The monitoring plans for all three tanks have the following issues: - No tank secondary type is listed - The piping secondary is incorrectly listed as 'pressurized' - The UDC monitoring incorrectly indicates the floats and chains are connected to the monitoring panel - The UDC monitoring incorrectly states disconnection of the floats and chains will lead to shutdown The monitoring plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, make the necessary changes, and submit for review by the EHD. The response plan is not current and/or not approved by the EHD. Section V of the response plan submitted was not filled in. The response plan must be uploaded to the California Environmental Reporting System (CERS). Immediately log into CERS, upload the completed form, and submit for review by the EHD. Ensure a copy is available for inspection at any [Truncated]  
Violation Division: San Joaquin County Environmental Health  
Violation Program: UST  
Violation Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Violation Date: 07-08-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: Returned to compliance on 07/20/2015. Employee training records were unavailable for review at time of inspection . The business plan shall include provisions for ensuring that appropriate personnel receive initial and annual refresher training. This training shall be documented electronically or by hard copy and shall be made available for a minimum of three years. Immediately provide employee training for appropriate personnel and submit a copy of the training records to the EHD.  
Violation Division: San Joaquin County Environmental Health  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-16-2013  
Violations Found: Yes  
Eval Type: Routine done by local agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Eval Notes: Not reported  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-16-2013  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-16-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by January 16, 2015. Note violation was corrected on site. Consent to perform the inspection, take photos and collect samples was given by Jessie Singh, owner. This facility's designated operator is Alex Jabbari, ICC expiration date: October 3, 2016 . The service technician was Jeff Conger (ICC expiration date: 2/15), who had the following manufacturer's certifications: Veeder-Root exp 1/2015, VMI Tester exp 9/2016 . Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Owner/Operator: Written Agreement (if applicable), UST Letter [Truncated]  
Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-08-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by July 8, 2017. Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous waste activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields. Documents reviewed: Disposal records Documents provided: Return to Compliance Certification form, Schedule of free CUPA classes, Sample hazardous waste label, Hazardous waste labels, modified contingency plan template  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HW  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-08-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 8/7/2015. Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous material activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.

Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-06-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: All violations were corrected on site. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420.

Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-09-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by January 8, 2016. Note: When liquid (from the containers of windshield cleaner attached to the dispensers) was poured into UDC 11/12 during testing of the floats and chains, a creamy yellow color rose up through the liquid from around the floats. Evidence of repairs and additional sealant added around the piping at the base of the UDC was observed under dispenser 11/12. No maintenance records were found on site for repairs to the piping or the UDC under dispenser 11/12. Owners and operators must use an approved UST system made of or lined with materials that are compatible with the substance stored in the UST system. Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the [Truncated]

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-09-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

that have been or will be taken for each violation, and any supporting paperwork, by 1/8/2019. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420. Documents provided during inspection: -Return to compliance certification -Corrective Action Statement -EHD class schedule

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 12-11-2017

Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 1/10/2018. Documents reviewed: Monitoring system certification report, Secondary containment testing report, Employee training log, Designated operator monthly reports, alarm history and set up, monitoring plans, response plan, and financial responsibility, letter from chief financial officer, current permit on site. Documents received: Return to compliance certification. Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Letter from Chief Financial Officer (if applicable), and the Owner Statement of Designated Operator [Truncated]

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 12-11-2018

Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by January 10th, 2018. Document reviewed: Monitoring system certification test results from 2016, 2017, Secondary containment 2018, employee training, response plan, maintenance records, monitoring plan, financial responsibility documents and designated operator monthly inspection reports from December 2018- November 2018. Documents provided: Return to compliance certification. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420.

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 12-12-2016

Violations Found: Yes

Eval Type: Routine done by local agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the Environmental Health Department (EHD) with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by January 11, 2017. Please be aware that as of January 1, 2014, facility operators are required to upload the following UST program documents into the California Environmental Reporting System (CERS): UST Monitoring Site Plan, UST Certification of Financial Responsibility, UST Response Plan, UST Letter from Chief Financial Officer (if applicable), and the Owner Statement of Designated Operator Compliance. The UST Owner/Operator: Written Agreement, if applicable, can be stored at the facility or uploaded into CERS.

Eval Division: San Joaquin County Environmental Health  
Eval Program: UST  
Eval Source: CERS

Enforcement Action:  
Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 06-08-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 07-08-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 12-09-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 396320

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 12-11-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 12-12-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 12-16-2013  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 12-16-2013  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 396320  
Site Name: LATHROP GAS & FOOD INC  
Site Address: 140 E LATHROP RD  
Site City: LATHROP  
Site Zip: 95330  
Enf Action Date: 12-16-2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: San Joaquin County Environmental Health  
Enf Action Program: UST  
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Document Preparer  
Entity Name: Jasbir Singh  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 140 E LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95330  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: LATHROP GAS & FOOD INC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: jarnail kamboj  
Entity Title: Not reported  
Affiliation Address: 140 LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 612-6396

Affiliation Type Desc: UST Tank Owner  
Entity Name: LATHROP GAS &FOOD  
Entity Title: Not reported  
Affiliation Address: 140 LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 982-0052



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Affiliation Type Desc: CUPA District  
Entity Name: San Joaquin Cnty Env Health  
Entity Title: Not reported  
Affiliation Address: 1868 East Hazelton Avenue  
Affiliation City: Stockton  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95205-6232  
Affiliation Phone: (209) 468-3420

Affiliation Type Desc: Environmental Contact  
Entity Name: JARNAIL KAMBOJ  
Entity Title: Not reported  
Affiliation Address: 140 E LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95330  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: JARNAIL KAMBOJ  
Entity Title: President  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: JARNAIL KAMBOJ  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (209) 612-6396

Affiliation Type Desc: UST Permit Applicant  
Entity Name: Jasbir Singh  
Entity Title: Secretary  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (209) 814-3730

Affiliation Type Desc: UST Property Owner Name  
Entity Name: JARNAIL KAMBOJ & JASBIR SINGH  
Entity Title: Not reported  
Affiliation Address: 140 LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LATHROP GAS & FOOD INC (Continued)**

**S121774068**

Affiliation Zip: 95330  
Affiliation Phone: (209) 982-0052

Affiliation Type Desc: UST Tank Operator  
Entity Name: LATHROP GAS & FOOD,INC  
Entity Title: Not reported  
Affiliation Address: 140 LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 982-0005

Affiliation Type Desc: Legal Owner  
Entity Name: JARNAIL KAMBOJ  
Entity Title: Not reported  
Affiliation Address: 140 E LATHROP RD  
Affiliation City: LATHROP  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95330  
Affiliation Phone: (209) 612-6396

**B15  
SE  
1/8-1/4  
0.215 mi.  
1133 ft.**

**TWO GUYS FOOD & FUEL  
147 E LATHROP RD  
LATHROP, CA 95330  
Site 7 of 7 in cluster B**

**UST U003942529  
N/A**

**Relative:  
Higher  
Actual:  
17 ft.**

UST SAN JOAQUIN:  
Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Region: SJ  
Facility Id: FA0003789  
Mail Address: 147 E LATHROP RD  
Mail Address 2: Not reported  
Mail Care of: JARNAIL KAMBOJ  
Mail City,St,Zip: LATHROP, CA 95330

Tank Rec ID: TA0235301  
Tank Number: 1  
Tank Status: 01 - Active, billable  
Tank Capacity: 10000  
Product Type Desc: 1a - REGULAR UNLEADED  
Program Element: 2360  
Decode for Program Element: 2360 - UST - PER TANK FEE  
Chemical Form: (none)  
CAS#: Not reported  
CERS ID: 10181421  
Cross Ref Tank ID: Not reported  
LEA ID: 1  
Common Name: Not reported  
Date Installed: 3/30/1989  
Date of Closure: Not reported  
Latitude: 37.8263905010  
Longitude: -121.2873841676

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**U003942529**

Tank Rec ID: TA0235302  
Tank Number: 2  
Tank Status: 01 - Active, billable  
Tank Capacity: 10000  
Product Type Desc: 1b - PREMIUM UNLEADED  
Program Element: 2360  
Decode for Program Element: 2360 - UST - PER TANK FEE  
Chemical Form: (none)  
CAS#: Not reported  
CERS ID: 10181421  
Cross Ref Tank ID: Not reported  
LEA ID: 1  
Common Name: Not reported  
Date Installed: 3/30/1989  
Date of Closure: Not reported  
Latitude: 37.8263905010  
Longitude: -121.2873841676

Tank Rec ID: TA0235303  
Tank Number: 3  
Tank Status: 01 - Active, billable  
Tank Capacity: 10000  
Product Type Desc: 03 - DIESEL  
Program Element: 2360  
Decode for Program Element: 2360 - UST - PER TANK FEE  
Chemical Form: (none)  
CAS#: Not reported  
CERS ID: 10181421  
Cross Ref Tank ID: Not reported  
LEA ID: 1  
Common Name: Not reported  
Date Installed: 3/30/1989  
Date of Closure: Not reported  
Latitude: 37.8263905010  
Longitude: -121.2873841676

**UST:**

Name: TWO GUYS FOOD & FUEL\*\*  
Address: 147 LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: FA0003789  
Permitting Agency: Not reported  
Latitude: 37.828143  
Longitude: -121.286007

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: Not reported  
Permitting Agency: San Joaquin County Environmental Health  
Latitude: 37.8268  
Longitude: -121.2875

Name: TWO GUYS FOOD & FUEL  
Address: 147 E LATHROP RD  
City,State,Zip: LATHROP, CA 95330

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TWO GUYS FOOD & FUEL (Continued)**

**U003942529**

Facility ID: Not reported  
Permitting Agency: San Joaquin County Environmental Health  
Latitude: 37.8268  
Longitude: -121.2875

**16**  
**SSE**  
**1/8-1/4**  
**0.220 mi.**  
**1164 ft.**

**NORTH COUNTRY SQUIRES**  
**NORTH OF SQUIRES RD / EAST OF HARLAN RD**  
**LATHROP, CA 95330**

**ENVIROSTOR** **S104549144**  
**DEED** **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

ENVIROSTOR:  
Name: NORTH COUNTRY SQUIRES  
Address: NORTH OF SQUIRES RD / EAST OF HARLAN RD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: 39000001  
Status: Haz Waste Disp Land Use (not BZP / HWP)  
Status Date: 04/24/2000  
Site Code: Not reported  
Site Type: Border Zone / Haz Waste Evaluation  
Site Type Detailed: Border Zone / Haz Waste Evaluation  
Acres: 1  
NPL: NO  
Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Michael Darrett  
Supervisor: Sam V. Martinez  
Division Branch: Cleanup Legacy Landfills  
Assembly: 17  
Senate: Not reported  
Special Program: Not reported  
Restricted Use: YES  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not reported  
Latitude: 37.82358  
Longitude: -121.2903  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: Arsenic  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: NORTH COUNTRY SQUIRES  
Alias Type: Alternate Name  
Alias Name: 39000001  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction  
Completed Date: 01/08/1992  
Comments: DEED RESTRICTION: A voluntary deed restriction is in place. This property went through the Hazardous Waster/Border Zone Property process, but was not formally designated as either a hazardous waste property or border zone property.

Future Area Name: Not reported  
Future Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NORTH COUNTRY SQUIRES (Continued)**

**S104549144**

Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**DEED:**

Name: NORTH COUNTRY SQUIRES  
Address: NORTH OF SQUIRES RD / EAST OF HARLAN RD  
City,State,Zip: LATHROP, CA 95330  
Envirostor ID: 39000001  
Area: PROJECT WIDE  
Sub Area: Not reported  
Site Type: BORDER ZONE / HAZ WASTE EVALUATION  
Status: HAZ WASTE DISP LAND USE (NOT BZP / HWP)  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): Not reported  
File Name: Envirostor Land Use Restrictions

**C17  
SE  
1/8-1/4  
0.249 mi.  
1313 ft.**

**WALGREENS #10631  
14780 HARLAN RD  
LATHROP, CA 95330**

**CERS HAZ WASTE  
HAZNET  
HWTS**

**S113150917  
N/A**

**Site 1 of 2 in cluster C**

**Relative:  
Higher  
Actual:  
17 ft.**

**CERS HAZ WASTE:**  
Name: WALGREENS #10631  
Address: 14780 HARLAN RD  
City,State,Zip: LATHROP, CA 95330-9719  
Site ID: 169820  
CERS ID: 10186943  
CERS Description: Hazardous Waste Generator

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 01-07-2016  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations found at time of inspection. The business is under reportable quantity and will be inactivated from the hazardous material business plan program. Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous material activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

**Affiliation:**

Affiliation Type Desc: Operator  
Entity Name: Walgreen Co.  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (847) 914-2264

Affiliation Type Desc: Legal Owner  
Entity Name: Walgreen Co.  
Entity Title: Not reported  
Affiliation Address: 200 Wilmot Road  
Affiliation City: Deerfield  
Affiliation State: IL  
Affiliation Country: United States  
Affiliation Zip: 60015  
Affiliation Phone: (847) 914-2264

Affiliation Type Desc: Document Preparer  
Entity Name: Crystalyn Dogui-is, On behalf of Walgreen Co.  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: Verisk 3E, Regulatory Dept/Walgreen Co., 3207 Grey Hawk Court, Ste 200  
Affiliation City: Carlsbad  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 92010  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Crystalyn Dogui-is, on behalf of Walgreen Co.  
Entity Title: Regulatory Compliance Coordinator II, Verisk 3E  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: San Joaquin Cnty Env Health  
Entity Title: Not reported  
Affiliation Address: 1868 East Hazelton Avenue  
Affiliation City: Stockton  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95205-6232  
Affiliation Phone: (209) 468-3420

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Affiliation Type Desc: Environmental Contact  
Entity Name: Crystalyn Dogui-is, Verisk 3E, Regulatory Department/Walgreen Co.  
Entity Title: Not reported  
Affiliation Address: 3207 Grey Hawk Court, Suite 200  
Affiliation City: Carlsbad  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 92010  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Walgreens  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**HAZNET:**

Name: WALGREENS #10631  
Address: 14780 HARLAN RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 920100000  
Contact: KARINA ROMERO  
Telephone: 7606028700  
Mailing Name: Not reported  
Mailing Address: 3207 GREY HAWK CT. SUITE 200

Year: 2019  
Gepaid: CAL000327765  
TSD EPA ID: INR000110197  
CA Waste Code: 311 - Pharmaceutical waste  
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.00050

Year: 2019  
Gepaid: CAL000327765  
TSD EPA ID: AZR000515924  
CA Waste Code: 331 - Off-specification, aged or surplus organics  
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.12500

Year: 2019  
Gepaid: CAL000327765  
TSD EPA ID: CAD008364432  
CA Waste Code: 311 - Pharmaceutical waste  
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.06950

Year: 2019  
Gepaid: CAL000327765

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSD EPA ID:	AZR000515924
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.40200
Year:	2019
Gepaid:	CAL000327765
TSD EPA ID:	NVD980895338
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.02900
Year:	2018
Gepaid:	CAL000327765
TSD EPA ID:	AZR000515924
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.22000
Year:	2018
Gepaid:	CAL000327765
TSD EPA ID:	NVD980895338
CA Waste Code:	122 - Alkaline solution without metals pH >= 12.5
Disposal Method:	H121 - Neutralization Only
Tons:	0.01200
Year:	2018
Gepaid:	CAL000327765
TSD EPA ID:	NVD980895338
CA Waste Code:	311 - Pharmaceutical waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.03300
Year:	2018
Gepaid:	CAL000327765
TSD EPA ID:	NVD980895338
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.02350
Year:	2018
Gepaid:	CAL000327765
TSD EPA ID:	INR000110197
CA Waste Code:	311 - Pharmaceutical waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00100

[Click this hyperlink](#) while viewing on your computer to access 72 additional CA HAZNET: record(s) in the EDR Site Report.



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Info:

Year:	2016
Gen EPA ID:	CAL000327765
Shipment Date:	20151021
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007425683FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151021
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007425683FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.027
Waste Quantity:	54
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151021
Creation Date:	Not reported
Receipt Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.05  
Waste Quantity: 100  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.003  
Waste Quantity: 6  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0185  
Waste Quantity: 37  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 5/12/2016 9:59:57  
Receipt Date: 20151116  
Manifest ID: 007425682FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAR000210617  
Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA  
TSDF EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0245  
Waste Quantity: 49  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.036

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Waste Quantity: 72  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0055  
Waste Quantity: 11  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: P001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Shipment Date: 20151021  
Creation Date: 5/4/2016 22:16:02  
Receipt Date: 20151030  
Manifest ID: 007425684FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAR000210617  
Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA  
TSDf EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0015  
Waste Quantity: 3  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2015  
Gen EPA ID: CAL000327765

Shipment Date: 20151021  
Creation Date: 5/12/2016 9:59:57  
Receipt Date: 20151116  
Manifest ID: 007425682FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAR000210617  
Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0245  
Waste Quantity: 49  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.036  
Waste Quantity: 72  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0055  
Waste Quantity: 11  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	P001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151021
Creation Date:	5/4/2016 22:16:02
Receipt Date:	20151030
Manifest ID:	007425684FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMN LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151021
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007425683FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151021
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007425683FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151021
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007425683FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.027
Waste Quantity:	54
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Shipment Date: 20151021  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0045  
Waste Quantity: 9  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20151021  
Creation Date: 12/16/2015 22:15:07  
Receipt Date: 20151023  
Manifest ID: 007425683FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0185  
Waste Quantity: 37  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 2012  
Gen EPA ID: CAL000327765

Shipment Date: 20121119  
Creation Date: Not reported  
Receipt Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Manifest ID: 005512598FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.012  
Waste Quantity: 24  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121119  
Creation Date: 4/9/2013 22:15:07  
Receipt Date: 20121206  
Manifest ID: 005512598FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5  
RCRA Code: D002  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No  
Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0115  
Waste Quantity: 23  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121119  
Creation Date: 4/9/2013 22:15:07  
Receipt Date: 20121206  
Manifest ID: 005512598FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	P001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121119
Creation Date:	4/9/2013 22:15:07
Receipt Date:	20121206
Manifest ID:	005512598FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	D010
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121119
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005512598FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0195
Waste Quantity:	39
Quantity Unit:	P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121119
Creation Date:	4/9/2013 22:15:07
Receipt Date:	20121206
Manifest ID:	005512598FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0145
Waste Quantity:	29
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121119
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005512598FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121119
Creation Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Receipt Date: Not reported  
Manifest ID: 005512598FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0015  
Waste Quantity: 3  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121119  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 005512598FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0125  
Waste Quantity: 25  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20120828  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 005412170FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5)  
RCRA Code: D002  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2009  
Gen EPA ID: CAL000327765

Shipment Date: 20091218  
Creation Date: 7/19/2010 18:30:23  
Receipt Date: 20100108  
Manifest ID: 006508159JJK  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDF EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site  
Quantity Tons: 0.008  
Waste Quantity: 16  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20091218  
Creation Date: 7/19/2010 18:30:23  
Receipt Date: 20091230  
Manifest ID: 006508158JJK  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDF EPA ID: SCR000770073  
Trans Name: KILN DIRECT  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Meth Code: - Not reported  
Quantity Tons: 0.013  
Waste Quantity: 26  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20091218  
Creation Date: 7/19/2010 18:30:23  
Receipt Date: 20091230  
Manifest ID: 006508158JJK  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: SCR000770073  
Trans Name: KILN DIRECT  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0085  
Waste Quantity: 17  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20091218  
Creation Date: 7/19/2010 18:30:23  
Receipt Date: 20100108  
Manifest ID: 006508159JJK  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5)  
RCRA Code: D002  
Meth Code: H121 - Neutralization Only  
Quantity Tons: 0.0085  
Waste Quantity: 17  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Shipment Date:	20091218
Creation Date:	7/19/2010 18:30:23
Receipt Date:	20100108
Manifest ID:	006508159JJK
Trans EPA ID:	MNS000100924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.007
Waste Quantity:	14
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091218
Creation Date:	7/19/2010 18:30:23
Receipt Date:	20100108
Manifest ID:	006508159JJK
Trans EPA ID:	MNS000100924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091217
Creation Date:	7/19/2010 18:30:23
Receipt Date:	20100108
Manifest ID:	006508148JJK
Trans EPA ID:	MNS000100924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site  
Quantity Tons: 0.012  
Waste Quantity: 24  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20091217  
Creation Date: 7/19/2010 18:30:23  
Receipt Date: 20100108  
Manifest ID: 006508148JJK  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site  
Quantity Tons: 0.0105  
Waste Quantity: 21  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20091217  
Creation Date: 7/19/2010 18:30:23  
Receipt Date: 20091230  
Manifest ID: 006508147JJK  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: SCR000770073  
Trans Name: KILN DIRECT  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0085  
Waste Quantity: 17  
Quantity Unit: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20090903  
Creation Date: 3/5/2010 18:31:00  
Receipt Date: 20090922  
Manifest ID: 002554779FLE  
Trans EPA ID: MNS000100924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site  
Quantity Tons: 0.008  
Waste Quantity: 16  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

**Additional Info:**

Year: 2013  
Gen EPA ID: CAL000327765

Shipment Date: 20131111  
Creation Date: 3/31/2014 22:15:09  
Receipt Date: 20131202  
Manifest ID: 005801986FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: D010  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: D007  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	3/31/2014 22:15:09
Receipt Date:	20131202
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	P001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	3/31/2014 22:15:09
Receipt Date:	20131202
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5)
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.009
Waste Quantity:	18
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	3/31/2014 22:15:09
Receipt Date:	20131202
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0185
Waste Quantity:	37
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0405
Waste Quantity:	81
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0195
Waste Quantity:	39
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131111
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005801986FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 5: Not reported

Shipment Date: 20130808  
Creation Date: 2/12/2014 22:15:06  
Receipt Date: 20130826  
Manifest ID: 005499150FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: D010  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: D007  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20130808  
Creation Date: 2/12/2014 22:15:06  
Receipt Date: 20130826  
Manifest ID: 005499150FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.2005  
Waste Quantity: 401  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 2008  
Gen EPA ID: CAL000327765

Shipment Date: 20081126  
Creation Date: 4/16/2009 18:30:10

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Receipt Date: 20081216  
Manifest ID: 001107993FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 135 - Unspecified aqueous solution  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.021  
Waste Quantity: 42  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20081126  
Creation Date: 4/16/2009 18:30:10  
Receipt Date: 20081216  
Manifest ID: 001107993FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.007  
Waste Quantity: 14  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20081126  
Creation Date: 4/16/2009 18:30:10  
Receipt Date: 20081216  
Manifest ID: 001107993FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0295
Waste Quantity:	59
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080828
Creation Date:	1/28/2009 18:30:18
Receipt Date:	20080911
Manifest ID:	001107749FLE
Trans EPA ID:	SCD987584778
Trans Name:	SUMTER TRANSPORT COMPANY
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080828
Creation Date:	1/28/2009 18:30:18
Receipt Date:	20080911
Manifest ID:	001107749FLE
Trans EPA ID:	SCD987584778
Trans Name:	SUMTER TRANSPORT COMPANY
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.023
Waste Quantity:	46
Quantity Unit:	P



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20080522  
Creation Date: 12/8/2008 18:30:18  
Receipt Date: 20080617  
Manifest ID: 001107520FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.007  
Waste Quantity: 14  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20080522  
Creation Date: 12/8/2008 18:30:18  
Receipt Date: 20080617  
Manifest ID: 001107520FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.008  
Waste Quantity: 16  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20080522  
Creation Date: 12/8/2008 18:30:18

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Receipt Date: 20080617  
Manifest ID: 001107520FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 135 - Unspecified aqueous solution  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.006  
Waste Quantity: 12  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20080522  
Creation Date: 12/8/2008 18:30:18  
Receipt Date: 20080617  
Manifest ID: 001107520FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 135 - Unspecified aqueous solution  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.013  
Waste Quantity: 26  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20080225  
Creation Date: 8/20/2008 18:30:17  
Receipt Date: 20080312  
Manifest ID: 001100278FLE  
Trans EPA ID: SCD987584778  
Trans Name: SUMTER TRANSPORT COMPANY  
Trans 2 EPA ID: OKD981588791  
Trans 2 Name: TRIAD TRANSPORT INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDF Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.002  
Waste Quantity: 4  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2014  
Gen EPA ID: CAL000327765

Shipment Date: 20141029  
Creation Date: 1/14/2015 22:14:51  
Receipt Date: 20141031  
Manifest ID: 007228020FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0425  
Waste Quantity: 85  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20141029  
Creation Date: 1/14/2015 22:14:51  
Receipt Date: 20141031  
Manifest ID: 007228020FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: P001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20141029  
Creation Date: 1/14/2015 22:14:51  
Receipt Date: 20141031  
Manifest ID: 007228020FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0095  
Waste Quantity: 19  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20141029  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 007228020FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0665  
Waste Quantity: 133  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141029
Creation Date:	1/14/2015 22:14:51
Receipt Date:	20141031
Manifest ID:	007228020FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0095
Waste Quantity:	19
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141029
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007228020FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	D010
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141029
Creation Date:	Not reported
Receipt Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Manifest ID: 007228020FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0035  
Waste Quantity: 7  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20141029  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 007228020FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.047  
Waste Quantity: 94  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20140801  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 007226702FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDf EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0045  
Waste Quantity: 9  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20140801  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 007226702FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC  
TSDF EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0405  
Waste Quantity: 81  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

**Additional Info:**

Year: 2011  
Gen EPA ID: CAL000327765

Shipment Date: 20111128  
Creation Date: 12/3/2012 22:15:48  
Receipt Date: 20111219  
Manifest ID: 004970665FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDF EPA ID: INR000110197  
Trans Name: STERICYCLE INC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

RCRA Code:	P075
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	P001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111128
Creation Date:	12/3/2012 22:15:48
Receipt Date:	20111219
Manifest ID:	004970665FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111128
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004970665FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.016
Waste Quantity:	32
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111128
Creation Date:	12/3/2012 22:15:48
Receipt Date:	20111219
Manifest ID:	004970665FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111128
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004970665FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111128
Creation Date:	12/3/2012 22:15:48
Receipt Date:	20111219
Manifest ID:	004970665FLE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110906
Creation Date:	11/22/2012 22:15:09
Receipt Date:	20110930
Manifest ID:	004970458FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110906
Creation Date:	11/22/2012 22:15:09
Receipt Date:	20110930
Manifest ID:	004970458FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110906
Creation Date:	11/22/2012 22:15:09
Receipt Date:	20110930
Manifest ID:	004970458FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	P075
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	P001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110906
Creation Date:	11/22/2012 22:15:09
Receipt Date:	20110919
Manifest ID:	004970457FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	INR000110197
Trans Name:	STERICYCLE INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2010  
Gen EPA ID: CAL000327765

Shipment Date: 20101203  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 004505607FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.001  
Waste Quantity: 2  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20101203  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 004505607FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 135 - Unspecified aqueous solution  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.003  
Waste Quantity: 6  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20101203

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 004505607FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0065  
Waste Quantity: 13  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20101203  
Creation Date: 5/24/2011 18:30:12  
Receipt Date: 20101217  
Manifest ID: 004505607FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0135  
Waste Quantity: 27  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20101203  
Creation Date: 5/24/2011 18:30:12  
Receipt Date: 20101217  
Manifest ID: 004505607FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H050 - Energy Recovery At This Site--Use As Fuel(Includes On-Site Fuel Blending)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20101203
Creation Date:	5/24/2011 18:30:12
Receipt Date:	20101217
Manifest ID:	004505607FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20101203
Creation Date:	5/24/2011 18:30:12
Receipt Date:	20101217
Manifest ID:	004505607FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5)
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100908
Creation Date:	3/3/2011 18:30:18
Receipt Date:	20100930
Manifest ID:	007485956JJK
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100908
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007485956JJK
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982492399
Trans 2 Name:	ALL CHEMICAL DISPOSAL INC
TSDf EPA ID:	OHD083377010
Trans Name:	ENVIRONMENTAL ENTERPRISES INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100908
Creation Date:	Not reported
Receipt Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Manifest ID: 007485956JJK  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: CAD982492399  
Trans 2 Name: ALL CHEMICAL DISPOSAL INC  
TSDf EPA ID: OHD083377010  
Trans Name: ENVIRONMENTAL ENTERPRISES INC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: - Not reported  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: Not reported  
Waste Quantity: Not reported  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

**Additional Info:**

Year: 2017  
Gen EPA ID: CAL000327765

Shipment Date: 20171006  
Creation Date: 9/29/2018 18:30:10  
Receipt Date: 20171102  
Manifest ID: 010177130FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION  
TSDf EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: D010  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: D007  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20171006  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 010177130FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Trans 2 Name: SMITH SYSTEMS TRANSPORTATION  
TSDf EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 311 - Pharmaceutical waste  
RCRA Code: P001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20171006  
Creation Date: 9/29/2018 18:30:10  
Receipt Date: 20171102  
Manifest ID: 010177130FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION  
TSDf EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5)  
RCRA Code: D002  
Meth Code: H121 - Neutralization Only  
Quantity Tons: 0.0025  
Waste Quantity: 5  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20171006  
Creation Date: 9/29/2018 18:30:10  
Receipt Date: 20171102  
Manifest ID: 010177130FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: NED986382133  
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION  
TSDf EPA ID: NVD980895338  
Trans Name: 21ST CENTURY EMN LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Quantity Tons:	Treatment/Reovery (H010-H129) Or (H131-H135) 0.0105
Waste Quantity:	21
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171006
Creation Date:	9/29/2018 18:30:10
Receipt Date:	20171102
Manifest ID:	010177130FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMN LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171006
Creation Date:	5/30/2018 18:33:51
Receipt Date:	20171017
Manifest ID:	010177129FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.066
Waste Quantity:	132
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171006
Creation Date:	5/30/2018 18:33:51
Receipt Date:	20171017
Manifest ID:	010177129FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0515
Waste Quantity:	103
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171006
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	010177130FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMN LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	P075
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170705
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	008553762FLE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.1375  
Waste Quantity: 275  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20170705  
Creation Date: 7/5/2018 18:31:14  
Receipt Date: 20170713  
Manifest ID: 008553762FLE  
Trans EPA ID: MNS000110924  
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: GENERAL ENVIRONMENTAL MGT LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: D009  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.002  
Waste Quantity: 4  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

**HWTS:**

Name: WALGREENS #10631  
Address: 14780 HARLAN RD  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 95330  
EPA ID: CAL000327765  
Inactive Date: Not reported  
Create Date: 12/12/2007  
Last Act Date: 08/03/2020  
Mailing Name: Not reported  
Mailing Address: 104 WILMOT RD 5TH FLR MS 1450

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**WALGREENS #10631 (Continued)**

**S113150917**

Mailing Address 2: Not reported  
 Mailing City,State,Zip: DEERFIELD, IL 60015  
 Owner Name: WALGREEN CO.  
 Owner Address: 200 WILMOT RD MS 2273  
 Owner Address 2: Not reported  
 Owner City,State,Zip: DEERFIELD, IL 600150000  
 Contact Name: KARINA ROMERO  
 Contact Address: 3207 GREY HAWK CT., SUITE 200  
 Contact Address 2: Not reported  
 City,State,Zip: CARLSBAD, CA 92010

NAICS:  
 EPA ID: CAL000327765  
 Create Date: 2007-12-12 08:23:19.810  
 NAICS Code: 44611  
 NAICS Description: Pharmacies and Drug Stores  
 Issued EPA ID Date: 2007-12-12 08:23:19.81000  
 Inactive Date: Not reported  
 Facility Name: WALGREENS #10631  
 Facility Address: 14780 HARLAN RD  
 Facility Address 2: Not reported  
 Facility City: LATHROP  
 Facility County: Not reported  
 Facility State: CA  
 Facility Zip: 95330

**C18**  
**SE**  
**1/8-1/4**  
**0.249 mi.**  
**1313 ft.**

**WALGREENS #10631**  
**14780 S HARLAN RD**  
**LATHROP, CA 95330**  
**Site 2 of 2 in cluster C**

**RCRA-VSQG 1016954465**  
**CAL000327765**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

RCRA-VSQG:  
 Date Form Received by Agency: 2016-09-23 00:00:00.0  
 Handler Name: WALGREENS #10631  
 Handler Address: 14780 S HARLAN RD  
 Handler City,State,Zip: LATHROP, CA 95330  
 EPA ID: CAL000327765  
 Contact Name: KARINA ROMERO  
 Contact Address: GREYHAWK CT SUITE 200  
 Contact City,State,Zip: CARLSBAD, CA 92010  
 Contact Telephone: 760-602-8700  
 Contact Fax: 760-918-4025  
 Contact Email: REGULATORY@3ECOMPANY.COM  
 Contact Title: BUSINESS SOLUTIONS SPECIALIST  
 EPA Region: 09  
 Land Type: Private  
 Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator  
 Non-Notifier: Not reported  
 Biennial Report Cycle: 2015  
 Accessibility: Not reported  
 Active Site Indicator: Handler Activities  
 State District Owner: Not reported  
 State District: Not reported  
 Mailing Address: GREYHAWK CT STE 200  
 Mailing City,State,Zip: CARLSBAD, CA 92010  
 Owner Name: HAMPSON LUM & EVANGELINE LUM REV TRUST

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**WALGREENS #10631 (Continued)**

**1016954465**

Owner Type:	Private
Operator Name:	WALGREEN CO
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSD Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2016-11-04 19:42:33.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**1016954465**

Sub-Part P Indicator: Not reported

Biennial: List of Years

Year: 2015

[Click Here for Biennial Reporting System Data:](#)

Year: 2013

[Click Here for Biennial Reporting System Data:](#)

Hazardous Waste Summary:

Waste Code: D001  
Waste Description: IGNITABLE WASTE

Waste Code: D002  
Waste Description: CORROSIVE WASTE

Waste Code: D007  
Waste Description: CHROMIUM

Waste Code: D009  
Waste Description: MERCURY

Waste Code: D010  
Waste Description: SELENIUM

Waste Code: D024  
Waste Description: M-CRESOL

Waste Code: P001  
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P075  
Waste Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Waste Code: U034  
Waste Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Waste Code: U165  
Waste Description: NAPHTHALENE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	HAMPSON LUM TRUST
Legal Status:	Private
Date Became Current:	2008-02-14 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1701 VALLEJO ST #500
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94123
Owner/Operator Telephone:	847-914-2264
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WALGREENS #10631 (Continued)**

**1016954465**

Owner/Operator Indicator: Operator  
Owner/Operator Name: WALGREEN CO  
Legal Status: Private  
Date Became Current: 2008-02-14 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator  
Owner/Operator Name: WALGREEN CO  
Legal Status: Private  
Date Became Current: 2007-11-16 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: Not reported  
Owner/Operator City,State,Zip: Not reported  
Owner/Operator Telephone: Not reported  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner  
Owner/Operator Name: HAMPSON LUM & EVANGELINE LUM REV TRUST  
Legal Status: Private  
Date Became Current: 2007-10-30 00:00:00.  
Date Ended Current: Not reported  
Owner/Operator Address: 1701 VALLEJO ST #500  
Owner/Operator City,State,Zip: SAN FRANCISCO, CA 94123  
Owner/Operator Telephone: 415-929-1336  
Owner/Operator Telephone Ext: Not reported  
Owner/Operator Fax: Not reported  
Owner/Operator Email: Not reported

**Historic Generators:**

Receive Date: 2014-06-09 00:00:00.0  
Handler Name: WALGREENS #10631  
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No  
Spent Lead Acid Battery Importer: No  
Spent Lead Acid Battery Exporter: No  
Current Record: No  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

Receive Date: 2016-09-23 00:00:00.0  
Handler Name: WALGREENS #10631  
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator  
State District Owner: Not reported  
Large Quantity Handler of Universal Waste: No  
Recognized Trader Importer: No  
Recognized Trader Exporter: No



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**WALGREENS #10631 (Continued)**

**1016954465**

Spent Lead Acid Battery Importer: No  
 Spent Lead Acid Battery Exporter: No  
 Current Record: Yes  
 Non Storage Recycler Activity: Not reported  
 Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 44611  
 NAICS Description: PHARMACIES AND DRUG STORES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**D19**  
**SE**  
**1/8-1/4**  
**0.250 mi.**  
**1318 ft.**

**O'REILLY AUTO PARTS #4719**  
**15079 S HARLAN RD**  
**LATHROP, CA 95330**  
**Site 1 of 2 in cluster D**

**CERS HAZ WASTE** **S121744273**  
**CERS** **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

CERS HAZ WASTE:  
 Name: O'REILLY AUTO PARTS #4719  
 Address: 15079 S HARLAN RD  
 City,State,Zip: LATHROP, CA 95330  
 Site ID: 139395  
 CERS ID: 10586497  
 CERS Description: Hazardous Waste Generator

CERS:  
 Name: O'REILLY AUTO PARTS #4719  
 Address: 15079 S HARLAN RD  
 City,State,Zip: LATHROP, CA 95330  
 Site ID: 139395  
 CERS ID: 10586497  
 CERS Description: Chemical Storage Facilities

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
 Eval Date: 09-17-2015  
 Violations Found: No  
 Eval Type: Routine done by local agency  
 Eval Notes: No Hazardous Materials Business Plan violations noted at the time of inspection. Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous material activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.  
 Eval Division: San Joaquin County Environmental Health  
 Eval Program: HMRRP  
 Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**O'REILLY AUTO PARTS #4719 (Continued)**

**S121744273**

Eval Date: 09-28-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations found at time of inspection. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420.  
Eval Division: San Joaquin County Environmental Health  
Eval Program: HMRRP  
Eval Source: CERS

Coordinates:  
Site ID: 139395  
Facility Name: O'Reilly Auto Parts #4719  
Env Int Type Code: HWG  
Program ID: 10586497  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 37.825530  
Longitude: -121.287710

Affiliation:  
Affiliation Type Desc: CUPA District  
Entity Name: San Joaquin Cnty Env Health  
Entity Title: Not reported  
Affiliation Address: 1868 East Hazelton Avenue  
Affiliation City: Stockton  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95205-6232  
Affiliation Phone: (209) 468-3420

Affiliation Type Desc: Document Preparer  
Entity Name: Tristan Guison, Agent for OG Reilly Auto Enterprises, L.L.C.  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Tristan Guison, Agent for OG Reilly Auto Enterprises, L.L.C.  
Entity Title: Regulatory Compliance Specialist II, Verisk 3E  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: O'Reilly Auto Parts  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**O'REILLY AUTO PARTS #4719 (Continued)**

**S121744273**

Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Rebecca Lee, Verisk 3E, Regulatory Department/O'Reilly Auto Parts  
Entity Title: Not reported  
Affiliation Address: 3207 Grey Hawk Court, Suite 200  
Affiliation City: Carlsbad  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 92010  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: O'Reilly Auto Enterprises, L.L.C.  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (417) 862-3333

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: Verisk 3E, Reg. Dept/O'Reilly Auto Parts, 3207 Grey Hawk Ct, Ste 200  
Affiliation City: Carlsbad  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 92010  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: O'Reilly Auto Enterprises, L.L.C.  
Entity Title: Not reported  
Affiliation Address: 702 E. Bethany Home Road  
Affiliation City: Phoenix  
Affiliation State: AZ  
Affiliation Country: United States  
Affiliation Zip: 85014  
Affiliation Phone: (417) 862-3333

**D20**  
**SE**  
**1/8-1/4**  
**0.250 mi.**  
**1318 ft.**

**OREILLY AUTO PARTS STORE 4719**  
**15079 S HARLAN RD**  
**LATHROP, CA 95330**  
**Site 2 of 2 in cluster D**

**RCRA NonGen / NLR** **1024843355**  
**CAL000394668**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

RCRA NonGen / NLR:  
Date Form Received by Agency: 2014-03-04 00:00:00.0  
Handler Name: OREILLY AUTO PARTS STORE 4719  
Handler Address: 15079 S HARLAN RD  
Handler City,State,Zip: LATHROP, CA 95330  
EPA ID: CAL000394668

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OREILLY AUTO PARTS STORE 4719 (Continued)**

**1024843355**

Contact Name:	JOHN BOUNDS
Contact Address:	233 S. PATTERSON AVE.
Contact City,State,Zip:	SPRINGFIELD, MO 65802
Contact Telephone:	417-520-4589
Contact Fax:	417-874-7102
Contact Email:	JBOUNDS2@OREILLYAUTO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	233 S PATTERSON
Mailing City,State,Zip:	SPRINGFIELD, MO 65802-0000
Owner Name:	O'REILLY AUTO PARTS
Owner Type:	Other
Operator Name:	JOHN BOUNDS
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OREILLY AUTO PARTS STORE 4719 (Continued)**

**1024843355**

Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:04:01.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

**Handler - Owner Operator:**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	O'REILLY AUTO PARTS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	233 S PATTERSON
Owner/Operator City,State,Zip:	SPRINGFIELD, MO 65802-0000
Owner/Operator Telephone:	417-862-3333
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JOHN BOUNDS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	233 S. PATTERSON AVE.
Owner/Operator City,State,Zip:	SPRINGFIELD, MO 65802
Owner/Operator Telephone:	417-520-4589
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

**Historic Generators:**

Receive Date:	2014-03-04 00:00:00.0
Handler Name:	OREILLY AUTO PARTS STORE 4719
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OREILLY AUTO PARTS STORE 4719 (Continued)**

**1024843355**

Spent Lead Acid Battery Exporter: No  
Current Record: Yes  
Non Storage Recycler Activity: Not reported  
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 44131  
NAICS Description: AUTOMOTIVE PARTS AND ACCESSORIES STORES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

21  
South  
1/4-1/2  
0.418 mi.  
2209 ft.

**JOE'S TEXACO**  
**15600 HARLAN RD S**  
**LATHROP, CA 95330**

**LUST** **S103633133**  
**Cortese** **N/A**  
**HIST CORTESE**  
**CIWQS**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

LUST REG 5:  
Name: JOE'S TEXACO  
Address: 15600 HARLAN RD S  
City: LATHROP  
Region: 5  
Status: Leak being confirmed  
Case Number: 390763  
Case Type: Drinking Water Aquifer affected  
Substance: GASOLINE  
Staff Initials: JLB  
Lead Agency: Local  
Program: LUST  
MTBE Code: 5

LUST:

Name: JOE'S TEXACO  
Address: 15600 HARLAN RD S  
City,State,Zip: LATHROP, CA 95330  
Lead Agency: SAN JOAQUIN COUNTY  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0607700597](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607700597)  
Global Id: T0607700597  
Latitude: 37.8204919  
Longitude: -121.2917117  
Status: Completed - Case Closed  
Status Date: 04/23/2010  
Case Worker: Not reported  
RB Case Number: 390763  
Local Agency: Not reported  
File Location: Local Agency  
Local Case Number: 231585  
Potential Media Affect: Aquifer used for drinking water supply  
Potential Contaminants of Concern: Gasoline  
Site History: USTs were removed in February 1998 and contamination was found. Site

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOE'S TEXACO (Continued)**

**S103633133**

investigation began in November 1998. Many phases of work have been performed and the MTBE plume has spread over most of the 3.77 acre site north of this site. The groundwater flow was to the northeast and now is to the northwest so the MTBE plume may extend beneath I-5. Remediation has not shown to be cost effective over the years. Concentrations of MTBE continue to decline through natural attenuation. Concurrence on a determination of no further action required was received from the RWQCB on 12/17/09; NFA issued 4/23/10.

LUST:

Global Id: T0607700597  
Contact Type: Regional Board Caseworker  
Contact Name: Alan Buehler  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: alan.buehler@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 11/16/2009  
Action: LOP Case Closure Summary to RB - #11/16/2009

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 02/05/2010  
Action: File review

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 04/23/2010  
Action: Closure/No Further Action Letter

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 12/19/1996  
Action: Notice of Reimbursement

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 04/25/2008  
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 01/27/2011  
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 01/27/2011  
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607700597  
Action Type: ENFORCEMENT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOE'S TEXACO (Continued)**

**S103633133**

Date: 03/22/2010  
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 08/19/2008  
Action: Technical Correspondence / Assistance / Other - #8/19/08

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 12/04/2008  
Action: Technical Correspondence / Assistance / Other - #12/4/2008

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 12/19/2008  
Action: Technical Correspondence / Assistance / Other - #12/19/2008

Global Id: T0607700597  
Action Type: Other  
Date: 09/30/1994  
Action: Leak Discovery

Global Id: T0607700597  
Action Type: Other  
Date: 09/30/1994  
Action: Leak Reported

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 03/20/2009  
Action: Staff Letter - #3/20/2009

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 06/29/2009  
Action: Technical Correspondence / Assistance / Other - #06/29/2009

Global Id: T0607700597  
Action Type: ENFORCEMENT  
Date: 11/18/2009  
Action: Technical Correspondence / Assistance / Other - #11/18/2009

**LUST:**

Global Id: T0607700597  
Status: Open - Case Begin Date  
Status Date: 09/30/1994

Global Id: T0607700597  
Status: Open - Site Assessment  
Status Date: 12/19/1996

Global Id: T0607700597  
Status: Open - Site Assessment  
Status Date: 01/14/1997

Global Id: T0607700597



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOE'S TEXACO (Continued)**

**S103633133**

Status: Completed - Case Closed  
Status Date: 04/23/2010

**CORTESE:**

Name: JOE'S TEXACO  
Address: 15600 HARLAN RD S  
City,State,Zip: LATHROP, CA 95330  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0607700597  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: COMPLETED - CASE CLOSED  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**HIST CORTESE:**

edr\_fname: JOE'S TEXACO  
edr\_fadd1: 15600 HARLAN  
City,State,Zip: LATHROP, CA 95330  
Region: CORTESE  
Facility County Code: 39  
Reg By: LTNKA  
Reg Id: 390763

**CIWQS:**

Name: JOES TRAVEL PLAZA  
Address: 15600 HARLAN PLAZA  
City,State,Zip: LATHROP, CA 95330  
Agency: Joes Travel Plaza  
Agency Address: 15600 S Harlan Rd, Lathrop , CA 95330  
Place/Project Type: Construction - Commercial  
SIC/NAICS: Not reported  
Region: 5S  
Program: CONSTW  
Regulatory Measure Status: Terminated  
Regulatory Measure Type: Storm water construction  
Order Number: 2009-0009-DWQ  
WDID: 5S39C344682  
NPDES Number: CAS000002  
Adoption Date: 01/01/1900  
Effective Date: 11/29/2006

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOE'S TEXACO (Continued)**

**S103633133**

Termination Date: 07/03/2013  
Expiration/Review Date: 01/01/1900  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: Not reported  
Longitude: Not reported

**22**  
**South**  
**1/4-1/2**  
**0.489 mi.**  
**2583 ft.**

**CITY OF LATHROP**  
**15688 HARLAN**  
**LATHROP, CA 95330**

**LUST** **S108723440**  
**Cortese** **N/A**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

LUST REG 5:  
Name: CITY OF LATHROP  
Address: 15688 HARLAN  
City: LATHROP  
Region: 5  
Status: Leak being confirmed  
Case Number: 391176  
Case Type: Drinking Water Aquifer affected  
Substance: MISC MVF  
Staff Initials: JLB  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

LUST:  
Name: CITY OF LATHROP  
Address: 15688 HARLAN  
City,State,Zip: LATHROP, CA 95330  
Lead Agency: SAN JOAQUIN COUNTY  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0607705881](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607705881)  
Global Id: T0607705881  
Latitude: 37.820005  
Longitude: -121.292022  
Status: Completed - Case Closed  
Status Date: 07/24/2009  
Case Worker: Not reported  
RB Case Number: 391176  
Local Agency: Not reported  
File Location: Not reported  
Local Case Number: 0001865  
Potential Media Affect: Aquifer used for drinking water supply  
Potential Contaminants of Concern: Gasoline  
Site History: Two underground storage tanks were found in a sidewalk and planter area during development of the property in April 2007. Preliminary soil and groundwater data indicated groundwater may be contaminated. Three monitoring wells were installed. Low levels of TPH have been found and it has been determined that the case can be closed. Destruction of the monitoring wells is pending.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CITY OF LATHROP (Continued)

S108723440

LUST:

Global Id: T0607705881  
Contact Type: Regional Board Caseworker  
Contact Name: Alan Buehler  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: alan.buehler@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 09/13/2007  
Action: Unauthorized Release Form - #9/13/2007

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 09/25/2008  
Action: Other Report - #10-27-2008

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 08/13/2008  
Action: Other Report - #8/13/2008

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 08/02/2007  
Action: Other Report - #8/2/2007

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 08/02/2007  
Action: Other Report - #8/2/2007

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 01/29/2009  
Action: Other Report - #1/29/2009

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 12/29/2008  
Action: Other Report - #1/8/2009

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 10/28/2008  
Action: Other Report - #10/28/2008

Global Id: T0607705881  
Action Type: ENFORCEMENT  
Date: 03/27/2009  
Action: Closure/No Further Action Letter - #3/27/2009

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CITY OF LATHROP (Continued)**

**S108723440**

Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	04/28/2009
Action:	Staff Letter - #9/24/2008
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	11/30/2007
Action:	Other Report - #11/30/2007
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	04/28/2009
Action:	Other Report - #4/28/2009
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	08/19/2009
Action:	Other Report - #8/19/2009
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	09/24/2008
Action:	Staff Letter - #9/24/2008
Global Id:	T0607705881
Action Type:	Other
Date:	09/13/2007
Action:	Leak Discovery
Global Id:	T0607705881
Action Type:	Other
Date:	09/13/2007
Action:	Leak Reported
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	02/25/2009
Action:	File review
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	04/28/2009
Action:	Staff Letter - #4/28/2009
Global Id:	T0607705881
Action Type:	ENFORCEMENT
Date:	07/24/2009
Action:	Closure/No Further Action Letter
LUST:	
Global Id:	T0607705881
Status:	Open - Case Begin Date
Status Date:	09/13/2007
Global Id:	T0607705881
Status:	Open - Site Assessment

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CITY OF LATHROP (Continued)**

**S108723440**

Status Date: 09/14/2007  
Global Id: T0607705881  
Status: Completed - Case Closed  
Status Date: 07/24/2009

**CORTESE:**

Name: CITY OF LATHROP  
Address: 15688 HARLAN  
City,State,Zip: LATHROP, CA 95330  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0607705881  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: COMPLETED - CASE CLOSED  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**CERS:**

Name: CITY OF LATHROP  
Address: 15688 HARLAN  
City,State,Zip: LATHROP, CA 95330  
Site ID: 239675  
CERS ID: T0607705881  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: Alan Buehler - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

23  
NE  
1/2-1  
0.556 mi.  
2934 ft.

**VERNER PARCELS C&D  
HARLAN ROAD AND SQUIRES ROAD  
LATHROP, CA 95330**

**ENVIROSTOR S117038651  
DEED N/A**

**Relative:  
Higher  
Actual:  
17 ft.**

ENVIROSTOR:  
Name: VERNER PARCELS C&D  
Address: HARLAN ROAD AND SQUIRES ROAD  
City,State,Zip: LATHROP, CA 95330  
Facility ID: 39000002  
Status: Haz Waste Disp Land Use (not BZP / HWP)  
Status Date: 04/24/2000  
Site Code: Not reported  
Site Type: Border Zone / Haz Waste Evaluation  
Site Type Detailed: Border Zone / Haz Waste Evaluation  
Acres: 1  
NPL: NO  
Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Michael Darrett  
Supervisor: Sam V. Martinez  
Division Branch: Cleanup Legacy Landfills  
Assembly: 12  
Senate: 05  
Special Program: Not reported  
Restricted Use: YES  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not reported  
Latitude: 37.84111  
Longitude: -121.2844  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: Arsenic  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: COUNTRY SQUIRES  
Alias Type: Alternate Name  
Alias Name: SOUTHERN PACIFIC C&D  
Alias Type: Alternate Name  
Alias Name: VERNER PARCELS C AND D  
Alias Type: Alternate Name  
Alias Name: Not reported  
Alias Type: Project Code (Site Code)  
Alias Name: 39000002  
Alias Type: Envirostor ID Number

Completed Info:  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction  
Completed Date: 02/15/1990  
Comments: DEED RESTRICTION: A voluntary deed restriction is in place. This property went through the Hazardous Waste/Border Zone Property process, but was not formally designated as either a hazardous waste property or border zone property.  
  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VERNER PARCELS C&D (Continued)**

**S117038651**

Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**DEED:**

Name: VERNER PARCELS C&D  
Address: HARLAN ROAD AND SQUIRES ROAD  
City,State,Zip: LATHROP, CA 95330  
Envirostor ID: 39000002  
Area: PROJECT WIDE  
Sub Area: Not reported  
Site Type: BORDER ZONE / HAZ WASTE EVALUATION  
Status: HAZ WASTE DISP LAND USE (NOT BZP / HWP)  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): Not reported  
File Name: Envirostor Land Use Restrictions

**24**  
**East**  
**1/2-1**  
**0.665 mi.**  
**3511 ft.**

**JOE WIDMER ELEMENTARY SCHOOL**  
**STONEBRIDGE LANE/I-5**  
**LATHROP, CA 95330**

**ENVIROSTOR S109548233**  
**SCH N/A**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

**ENVIROSTOR:**  
Name: JOE WIDMER ELEMENTARY SCHOOL  
Address: STONEBRIDGE LANE/I-5  
City,State,Zip: LATHROP, CA 95330  
Facility ID: 39010004  
Status: No Further Action  
Status Date: 06/23/2000  
Site Code: 104013  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 20  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Assembly: 12  
Senate: 05  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 37.83344  
Longitude: -121.2758  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: Endosulfan DDT Lead DDD Dieldrin Arsenic DDE Endrin  
Confirmed COC: NONE SPECIFIED  
Potential Description: SOIL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOE WIDMER ELEMENTARY SCHOOL (Continued)**

**S109548233**

Alias Name: JOE WIDMER ELEMENTARY SCHOOL  
Alias Type: Alternate Name  
Alias Name: MANTECA USD  
Alias Type: Alternate Name  
Alias Name: MANTECA USD-JOE WIDMER ELEM. SCH.  
Alias Type: Alternate Name  
Alias Name: MANTECA USD-WIDMER ELEM/VCA  
Alias Type: Alternate Name  
Alias Name: 101230  
Alias Type: Project Code (Site Code)  
Alias Name: 104013  
Alias Type: Project Code (Site Code)  
Alias Name: 39010004  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/23/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 11/22/1999  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 03/15/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 04/05/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Standard Voluntary Agreement  
Completed Date: 12/22/1999  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**JOE WIDMER ELEMENTARY SCHOOL (Continued)**

**S109548233**

Name: JOE WIDMER ELEMENTARY SCHOOL  
Address: STONEBRIDGE LANE/I-5  
City,State,Zip: LATHROP, CA 95330  
Facility ID: 39010004  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 20  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104013  
Assembly: 12  
Senate: 05  
Special Program Status: Not reported  
Status: No Further Action  
Status Date: 06/23/2000  
Restricted Use: NO  
Funding: School District  
Latitude: 37.83344  
Longitude: -121.2758  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: Endosulfan, Endosulfan, DDT, Lead, DDD, Dieldrin, Arsenic, DDE, Endrin  
Confirmed COC: NONE SPECIFIED  
Potential Description: SOIL  
Alias Name: JOE WIDMER ELEMENTARY SCHOOL  
Alias Type: Alternate Name  
Alias Name: MANTECA USD  
Alias Type: Alternate Name  
Alias Name: MANTECA USD-JOE WIDMER ELEM. SCH.  
Alias Type: Alternate Name  
Alias Name: MANTECA USD-WIDMER ELEM/VCA  
Alias Type: Alternate Name  
Alias Name: 101230  
Alias Type: Project Code (Site Code)  
Alias Name: 104013  
Alias Type: Project Code (Site Code)  
Alias Name: 39010004  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/23/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 11/22/1999  
Comments: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**JOE WIDMER ELEMENTARY SCHOOL (Continued)**

**S109548233**

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Cost Recovery Closeout Memo  
 Completed Date: 03/15/2001  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Site Inspections/Visit (Non LUR)  
 Completed Date: 04/05/2000  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Standard Voluntary Agreement  
 Completed Date: 12/22/1999  
 Comments: Not reported

Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported

**25**  
**East**  
**1/2-1**  
**0.879 mi.**  
**4641 ft.**

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SI**  
**ROTH ROAD BLDG S-4**  
**LATHROP, CA 95331**

**HAZNET** **S112836628**  
**ICE** **N/A**  
**HWP**  
**CERS**  
**HWTS**

**Relative:**  
**Higher**  
**Actual:**  
**22 ft.**

HAZNET:  
 Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE  
 Address: ROTH ROAD BLDG S-4  
 Address 2: Not reported  
 City,State,Zip: LATHROP, CA 952960710  
 Contact: EDWARD MCNAIR  
 Telephone: 2098395539  
 Mailing Name: Not reported  
 Mailing Address: PO BOX 960001

Year: 2018  
 Gepaid: CA8210020832  
 TSD EPA ID: AZD081705402  
 CA Waste Code: 352 - Other organic solids  
 Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.03000

Year: 2018  
 Gepaid: CA8210020832  
 TSD EPA ID: AZD081705402  
 CA Waste Code: 223 - Unspecified oil-containing waste  
 Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Tons:	0.03000
Year:	2017
Gepaid:	CA8210020832
TSD EPA ID:	CAT080013352
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.209
Year:	2017
Gepaid:	CA8210020832
TSD EPA ID:	AZD081705402
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.075
Year:	2017
Gepaid:	CA8210020832
TSD EPA ID:	AZD081705402
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.034
Year:	2017
Gepaid:	CA8210020832
TSD EPA ID:	AZD081705402
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1
Year:	2016
Gepaid:	CA8210020832
TSD EPA ID:	CAT080013352
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.95
Year:	2016
Gepaid:	CA8210020832
TSD EPA ID:	AZD081705402
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.075
Year:	2016
Gepaid:	CA8210020832
TSD EPA ID:	AZD081705402
CA Waste Code:	-
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.08

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Year: 2016  
Gepaid: CA8210020832  
TSD EPA ID: AZD081705402  
CA Waste Code: 352 - Other organic solids  
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.075

[Click this hyperlink](#) while viewing on your computer to access 1231 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

Year: 1993  
Gen EPA ID: CA8210020832

Shipment Date: 19931229  
Creation Date: 9/14/1995 0:00:00  
Receipt Date: 19931229  
Manifest ID: 93021898  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT000613968  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT000613968  
TSDF Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0375  
Waste Quantity: 9  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19931229  
Creation Date: 9/14/1995 0:00:00  
Receipt Date: 19931229  
Manifest ID: 93021897  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT000613968  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT000613968  
TSDF Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0333  
Waste Quantity: 8

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931229
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931229
Manifest ID:	93021894
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000613968
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0417
Waste Quantity:	10
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931229
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931229
Manifest ID:	93021899
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000613968
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0333
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931228
Creation Date:	9/14/1995 0:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Receipt Date: 19931228  
Manifest ID: 93021896  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000613968  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000613968  
TSDf Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0375  
Waste Quantity: 9  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19931228  
Creation Date: 9/14/1995 0:00:00  
Receipt Date: 19931228  
Manifest ID: 93021893  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000613968  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000613968  
TSDf Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0208  
Waste Quantity: 5  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19931228  
Creation Date: 9/14/1995 0:00:00  
Receipt Date: 19931228  
Manifest ID: 93021893  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000613968  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000613968

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

TSDF Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.4962  
Waste Quantity: 119  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19931228  
Creation Date: 9/14/1995 0:00:00  
Receipt Date: 19931228  
Manifest ID: 93021895  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT000613968  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT000613968  
TSDF Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0375  
Waste Quantity: 9  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19931210  
Creation Date: 9/14/1995 0:00:00  
Receipt Date: 19931213  
Manifest ID: 93160463  
Trans EPA ID: CAD004778742  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD050806850  
Trans Name: Not reported  
TSDF Alt EPA ID: CAD050806850  
TSDF Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: D001  
Meth Code: T01 - Treatment, Tank  
Quantity Tons: 0.001  
Waste Quantity: 2  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931210
Creation Date:	9/14/1995 0:00:00
Receipt Date:	19931213
Manifest ID:	93160464
Trans EPA ID:	CAD004778742
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD088504881
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD088504881
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D002
Meth Code:	R01 - Recycler
Quantity Tons:	0.098
Waste Quantity:	196
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2012
Gen EPA ID:	CA8210020832
Shipment Date:	20121205
Creation Date:	5/3/2013 22:15:23
Receipt Date:	20121221
Manifest ID:	005622335FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.028
Waste Quantity:	56
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121205



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Creation Date: 5/3/2013 22:15:23  
Receipt Date: 20121221  
Manifest ID: 005622335FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: Not reported  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.005  
Waste Quantity: 10  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121205  
Creation Date: 5/3/2013 22:15:23  
Receipt Date: 20121221  
Manifest ID: 005622335FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: Not reported  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.4965  
Waste Quantity: 993  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121115  
Creation Date: 4/17/2013 22:15:43  
Receipt Date: 20121127  
Manifest ID: 003531918FLE  
Trans EPA ID: CAR000179382  
Trans Name: ENV ENVIRONMENTAL INTERNATIONAL INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: NVT330010000  
Trans Name: US ECOLOGY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: D004  
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)  
Quantity Tons: 5.4  
Waste Quantity: 10800  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121114  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 005622334FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS  
TSDF EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 281 - Adhesives  
RCRA Code: D035  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.003  
Waste Quantity: 6  
Quantity Unit: P  
Additional Code 1: D001  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121114  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 005622334FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS  
TSDF EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0005

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121114
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005622334FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20121114
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	005622334FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0555
Waste Quantity:	111
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Shipment Date: 20121114  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 005622334FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.004  
Waste Quantity: 8  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20121114  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 005622334FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 352 - Other organic solids  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.065  
Waste Quantity: 130  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 2011  
Gen EPA ID: CA8210020832

Shipment Date: 20111219  
Creation Date: Not reported  
Receipt Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID: 000129930MWI  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS ENV SVCS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 281 - Adhesives  
RCRA Code: D035  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.008  
Waste Quantity: 16  
Quantity Unit: P  
Additional Code 1: D007  
Additional Code 2: D001  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Shipment Date: 20111219  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000129930MWI  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS ENV SVCS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D035  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0015  
Waste Quantity: 3  
Quantity Unit: P  
Additional Code 1: D001  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Shipment Date: 20111219  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000129930MWI  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: MAD039322250  
Trans 2 Name: CLEAN HARBORS ENV SVCS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D007
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.015

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111219
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000129930MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans 2 Name: CLEAN HARBORS ENV SVCS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5)  
RCRA Code: Not reported  
Meth Code: H135 - Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)  
  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 1994  
Gen EPA ID: CA8210020832

Shipment Date: 19941228  
Creation Date: 10/20/1995 0:00:00  
Receipt Date: 19941228  
Manifest ID: 92003950  
Trans EPA ID: CAD980887046  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000646117  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000646117  
TSDf Alt Name: Not reported  
Waste Code Description: 751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 22  
Waste Quantity: 22  
Quantity Unit: T  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19941228  
Creation Date: 10/19/1995 0:00:00  
Receipt Date: 19941228  
Manifest ID: 92003951  
Trans EPA ID: CAD980887046  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000646117  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000646117

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

TSDf Alt Name: Not reported  
Waste Code Description: 751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 22  
Waste Quantity: 22  
Quantity Unit: T  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19941228  
Creation Date: 3/28/1996 0:00:00  
Receipt Date: 19941228  
Manifest ID: 92003934  
Trans EPA ID: CAD980694723  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000646117  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000646117  
TSDf Alt Name: Not reported  
Waste Code Description: 751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 22  
Waste Quantity: 22  
Quantity Unit: T  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19941228  
Creation Date: 3/28/1996 0:00:00  
Receipt Date: 19941228  
Manifest ID: 92003933  
Trans EPA ID: CAD980694723  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000646117  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000646117  
TSDf Alt Name: Not reported  
Waste Code Description: 751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 27  
Waste Quantity: 27  
Quantity Unit: T  
Additional Code 1: Not reported  
Additional Code 2: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19941228
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941228
Manifest ID:	92003932
Trans EPA ID:	CAD980694723
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000646117
TSDf Alt Name:	Not reported
Waste Code Description:	751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	22
Waste Quantity:	22
Quantity Unit:	T
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19941228
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941228
Manifest ID:	92003931
Trans EPA ID:	CAD980694723
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000646117
TSDf Alt Name:	Not reported
Waste Code Description:	751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	22
Waste Quantity:	22
Quantity Unit:	T
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19941228
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941228
Manifest ID:	92003930
Trans EPA ID:	CAD980694723

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000646117
TSDf Alt Name:	Not reported
Waste Code Description:	751 - Solids or sludge with halogenated organic comp. > 1000 mg/kg
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	22
Waste Quantity:	22
Quantity Unit:	T
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19941228
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941228
Manifest ID:	95032810
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000613968
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0333
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19941228
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941228
Manifest ID:	95032809
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000613968
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0291
Waste Quantity:	7
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19941228
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941228
Manifest ID:	95032808
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000613968
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0333
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2002
Gen EPA ID:	CA8210020832
Shipment Date:	20021219
Creation Date:	4/1/2003 18:31:07
Receipt Date:	20021227
Manifest ID:	22037096
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	2.56
Waste Quantity:	5120
Quantity Unit:	P
Additional Code 1:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20021217
Creation Date:	3/31/2003 18:31:15
Receipt Date:	20021223
Manifest ID:	22200737
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20021203
Creation Date:	4/2/2003 18:31:15
Receipt Date:	20021217
Manifest ID:	99167393
Trans EPA ID:	CAD981634892
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD982042475
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	8.428
Waste Quantity:	10
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20021108
Creation Date:	3/15/2003 18:31:28
Receipt Date:	20021114
Manifest ID:	22035122

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080033681  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.0325  
Waste Quantity: 65  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20021108  
Creation Date: 3/15/2003 18:30:36  
Receipt Date: 20021112  
Manifest ID: 22035123  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980884183  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: D99 - Disposal, Other  
Quantity Tons: 0.0325  
Waste Quantity: 65  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20021108  
Creation Date: 3/15/2003 18:31:28  
Receipt Date: 20021114  
Manifest ID: 22035122  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080033681  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.081
Waste Quantity:	162
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20021108
Creation Date:	3/15/2003 18:31:28
Receipt Date:	20021114
Manifest ID:	22035122
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080033681
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.0945
Waste Quantity:	189
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20021030
Creation Date:	2/21/2003 10:42:43
Receipt Date:	20021111
Manifest ID:	22144625
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Additional Code 5: Not reported

Shipment Date: 20021022  
Creation Date: 2/13/2003 18:31:35  
Receipt Date: 20021030  
Manifest ID: 22034805  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080033681  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 512 - Other empty containers 30 gallons or more  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.05  
Waste Quantity: 100  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20021022  
Creation Date: 2/21/2003 10:42:43  
Receipt Date: 20021101  
Manifest ID: 22034806  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD088504881  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 792 - Not reported  
RCRA Code: D002  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0125  
Waste Quantity: 25  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 2001  
Gen EPA ID: CA8210020832

Shipment Date: 20011206  
Creation Date: 1/29/2002 0:00:00  
Receipt Date: 20011206

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID:	21197845
Trans EPA ID:	CAD004778742
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000646117
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	7.9
Waste Quantity:	15800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20011129
Creation Date:	1/29/2002 0:00:00
Receipt Date:	20011205
Manifest ID:	21317867
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20011127
Creation Date:	1/16/2002 0:00:00
Receipt Date:	20011127
Manifest ID:	21356944
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000646117
TSDf Alt Name:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	9.6
Waste Quantity:	19200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20011114
Creation Date:	2/13/2002 0:00:00
Receipt Date:	20011128
Manifest ID:	21356937
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080033681
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT080033681
TSDf Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20011114
Creation Date:	2/13/2002 0:00:00
Receipt Date:	20011128
Manifest ID:	21356937
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080033681
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT080033681
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.5175
Waste Quantity:	1035
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Shipment Date: 20011114  
Creation Date: 2/20/2002 0:00:00  
Receipt Date: 20011211  
Manifest ID: 21356938  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: WID988566543  
Trans 2 Name: Not reported  
TSDf EPA ID: AZ0000337360  
Trans Name: Not reported  
TSDf Alt EPA ID: AZ0000337360  
TSDf Alt Name: Not reported  
Waste Code Description: 261 - Not reported  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 0.1289  
Waste Quantity: 117  
Quantity Unit: K  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20011114  
Creation Date: 2/20/2002 0:00:00  
Receipt Date: 20011211  
Manifest ID: 21356938  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: WID988566543  
Trans 2 Name: Not reported  
TSDf EPA ID: AZ0000337360  
Trans Name: Not reported  
TSDf Alt EPA ID: AZ0000337360  
TSDf Alt Name: Not reported  
Waste Code Description: 261 - Not reported  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 0.1135  
Waste Quantity: 103  
Quantity Unit: K  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20011114  
Creation Date: 2/20/2002 0:00:00  
Receipt Date: 20011203  
Manifest ID: 21356939  
Trans EPA ID: CAD028277036  
Trans Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080013352  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT080013352  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: R01 - Recycler  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20011114  
Creation Date: 2/20/2002 0:00:00  
Receipt Date: 20011203  
Manifest ID: 21356939  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080013352  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT080013352  
TSDf Alt Name: Not reported  
Waste Code Description: 221 - Waste oil and mixed oil  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 0.212  
Waste Quantity: 424  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20011114  
Creation Date: 1/16/2002 0:00:00  
Receipt Date: 20011114  
Manifest ID: 21356940  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAL000190080  
Trans Name: Not reported  
TSDf Alt EPA ID: CAL000190080  
TSDf Alt Name: Not reported  
Waste Code Description: 151 - Asbestos-containing waste  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Quantity Tons: 15.6175  
Waste Quantity: 31235  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2007  
Gen EPA ID: CA8210020832

Shipment Date: 20071228  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 291 - Latex waste  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.366  
Waste Quantity: 732  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20071228  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.085  
Waste Quantity: 170  
Quantity Unit: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071228
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	003303915JJK
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTR000007708
Trans 2 Name:	SLT EXPRESSWAY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.236
Waste Quantity:	472
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D001
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071228
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	003303915JJK
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTR000007708
Trans 2 Name:	SLT EXPRESSWAY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	Not reported
Meth Code:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.0755
Waste Quantity:	151
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071228
Creation Date:	Not reported
Receipt Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D035  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.02  
Waste Quantity: 40  
Quantity Unit: P  
Additional Code 1: D001  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20071228  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.  
RCRA Code: D001  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.08  
Waste Quantity: 160  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20071228  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D035  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.052  
Waste Quantity: 104  
Quantity Unit: P  
Additional Code 1: D001  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20071228  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 281 - Adhesives  
RCRA Code: D007  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.011  
Waste Quantity: 22  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20071228  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 003303915JJK  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTR000007708  
Trans 2 Name: SLT EXPRESSWAY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: D001  
Meth Code: H040 - Incineration--Thermal Destruction Other Than Use As A Fuel  
Quantity Tons: 0.1185  
Waste Quantity: 237  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071228
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	003303915JJK
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTR000007708
Trans 2 Name:	SLT EXPRESSWAY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D001
Meth Code:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.0135
Waste Quantity:	27
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2005
Gen EPA ID:	CA8210020832
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5)
RCRA Code:	D002
Meth Code:	- Not reported
Quantity Tons:	0.063
Waste Quantity:	126
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Receipt Date:	Not reported
Manifest ID:	24182430
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	NONE
Meth Code:	- Not reported
Quantity Tons:	0.0495
Waste Quantity:	99
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0475
Waste Quantity:	95
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0205
Waste Quantity:	41
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24182412
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	NONE
Meth Code:	- Not reported
Quantity Tons:	0.06
Waste Quantity:	120
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2013
Gen EPA ID:	CA8210020832
Shipment Date:	20131221
Creation Date:	5/14/2014 22:15:08
Receipt Date:	20131230
Manifest ID:	010191220JJK
Trans EPA ID:	CAR000171017
Trans Name:	FREMOUW ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	CAR000175422
Trans 2 Name:	WORLDWIDE RECOVERY SYSTEM INC
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.273
Waste Quantity:	65
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131113
Creation Date:	1/12/2014 22:15:07
Receipt Date:	20131114
Manifest ID:	006753530FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	2.4
Waste Quantity:	4800
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	006753541FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	TXR000081205
Trans 2 Name:	SAFETY KLEEN SYSTEMS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: D001  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20131106  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 006753541FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: TXR000081205  
Trans 2 Name: SAFETY KLEEN SYSTEMS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 281 - Adhesives  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.004  
Waste Quantity: 8  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20131106  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 006753541FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: TXR000081205  
Trans 2 Name: SAFETY KLEEN SYSTEMS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0475  
Waste Quantity: 95  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Shipment Date:	20131106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	006753541FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	TXR000081205
Trans 2 Name:	SAFETY KLEEN SYSTEMS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	006753541FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	TXR000081205
Trans 2 Name:	SAFETY KLEEN SYSTEMS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	006753541FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	TXR000081205

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans 2 Name: SAFETY KLEEN SYSTEMS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.009  
Waste Quantity: 18  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20131106  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 006753541FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: TXR000081205  
Trans 2 Name: SAFETY KLEEN SYSTEMS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20131106  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 006753541FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: TXR000081205  
Trans 2 Name: SAFETY KLEEN SYSTEMS INC  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.091  
Waste Quantity: 182  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 1998  
Gen EPA ID: CA8210020832

Shipment Date: 19981223  
Creation Date: 2/8/1999 0:00:00  
Receipt Date: 19981224  
Manifest ID: 98454803  
Trans EPA ID: CAD982484370  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD009466392  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD009466392  
TSDf Alt Name: Not reported  
Waste Code Description: 512 - Other empty containers 30 gallons or more  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 10  
Waste Quantity: 20000  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19981223  
Creation Date: 2/8/1999 0:00:00  
Receipt Date: 19981224  
Manifest ID: 98454805  
Trans EPA ID: CAD982484370  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD009466392  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD009466392  
TSDf Alt Name: Not reported  
Waste Code Description: 512 - Other empty containers 30 gallons or more  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 6.275  
Waste Quantity: 12550  
Quantity Unit: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981223
Creation Date:	2/8/1999 0:00:00
Receipt Date:	19981224
Manifest ID:	98454804
Trans EPA ID:	CAD982484370
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD009466392
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD009466392
TSDf Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	12
Waste Quantity:	24000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981223
Creation Date:	2/8/1999 0:00:00
Receipt Date:	19981223
Manifest ID:	98454802
Trans EPA ID:	CAD982484370
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD009466392
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD009466392
TSDf Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	1
Waste Quantity:	2000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981223
Creation Date:	2/8/1999 0:00:00
Receipt Date:	19981223

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID: 98454800  
Trans EPA ID: CAD982484370  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD009466392  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD009466392  
TSDf Alt Name: Not reported  
Waste Code Description: 512 - Other empty containers 30 gallons or more  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 10  
Waste Quantity: 20000  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19981223  
Creation Date: 2/8/1999 0:00:00  
Receipt Date: 19981223  
Manifest ID: 98454801  
Trans EPA ID: CAD982484370  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD009466392  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD009466392  
TSDf Alt Name: Not reported  
Waste Code Description: 512 - Other empty containers 30 gallons or more  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 10  
Waste Quantity: 20000  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19981221  
Creation Date: 4/20/1999 0:00:00  
Receipt Date: 19981228  
Manifest ID: 98838711  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: SCD987574647  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD059494310  
TSDf Alt Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Waste Code Description:	281 - Adhesives
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.0525
Waste Quantity:	105
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981221
Creation Date:	4/20/1999 0:00:00
Receipt Date:	19981228
Manifest ID:	98838711
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981221
Creation Date:	4/20/1999 0:00:00
Receipt Date:	19981228
Manifest ID:	98838711
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.067
Waste Quantity:	134
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19981221
Creation Date:	4/20/1999 0:00:00
Receipt Date:	19981228
Manifest ID:	98838711
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D002
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.0675
Waste Quantity:	135
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2014
Gen EPA ID:	CA8210020832
Shipment Date:	20141113
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141121
Manifest ID:	013783520JJK
Trans EPA ID:	CAR000147025
Trans Name:	FUTURE ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD982042475
Trans Name:	RECOLOGY HAY ROAD
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.23
Waste Quantity:	1
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140905

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.0315
Waste Quantity:	63
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140905
Creation Date:	2/12/2015 22:14:58
Receipt Date:	20140925
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.172
Waste Quantity:	344
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140905
Creation Date:	2/12/2015 22:14:58
Receipt Date:	20140925
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDF EPA ID: NVT330010000  
Trans Name: US ECOLOGY NEVADA INC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.104  
Waste Quantity: 208  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20140905  
Creation Date: 2/12/2015 22:14:58  
Receipt Date: 20140925  
Manifest ID: 007484068FLE  
Trans EPA ID: NVR000089375  
Trans Name: DOUBLE BARREL ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: CAR000221820  
Trans 2 Name: DOUBLE BARREL ENVIRONMENTAL SERVICES  
TSDF EPA ID: NVT330010000  
Trans Name: US ECOLOGY NEVADA INC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D035  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0495  
Waste Quantity: 99  
Quantity Unit: P  
Additional Code 1: D001  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20140905  
Creation Date: 2/26/2015 22:14:59  
Receipt Date: 20140930  
Manifest ID: 007483974FLE  
Trans EPA ID: NVR000089375  
Trans Name: DOUBLE BARREL ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: CAR000221820  
Trans 2 Name: DOUBLE BARREL ENVIRONMENTAL SERVICES  
TSDF EPA ID: NVD980895338  
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LL  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D007  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Quantity Tons:	Treatment/Reovery (H010-H129) Or (H131-H135) 0.599
Waste Quantity:	1198
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140905
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140905
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	222 - Oil/water separation sludge
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4105
Waste Quantity:	821
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 5:	Not reported
Shipment Date:	20140905
Creation Date:	2/12/2015 22:14:58
Receipt Date:	20140925
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140905
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007484068FLE
Trans EPA ID:	NVR000089375
Trans Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAR000221820
Trans 2 Name:	DOUBLE BARREL ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.1805
Waste Quantity:	361
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2016
Gen EPA ID:	CA8210020832
Shipment Date:	20150220

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Creation Date: 8/21/2015 22:15:46  
Receipt Date: 20150317  
Manifest ID: 006020570FLE  
Trans EPA ID: CAR000247189  
Trans Name: ENV ENVIRONMENTAL INTERNATIONAL  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: NVT330010000  
Trans Name: US ECOLOGY  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As  
Landfill( To Include On-Site Treatment And/Or Stabilization)  
  
Quantity Tons: 0.15  
Waste Quantity: 300  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 1999  
Gen EPA ID: CA8210020832

Shipment Date: 19991220  
Creation Date: 2/28/2000 0:00:00  
Receipt Date: 19991229  
Manifest ID: 99536250  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: SCR000074591  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code Description: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.  
RCRA Code: F005  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19991216  
Creation Date: 4/4/2000 0:00:00  
Receipt Date: 19991216  
Manifest ID: 99450247  
Trans EPA ID: CAT000624247

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	Not reported
TSDf Alt EPA ID:	HAHQ36005487
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D006
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19991216
Creation Date:	4/4/2000 0:00:00
Receipt Date:	19991216
Manifest ID:	99450247
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	Not reported
TSDf Alt EPA ID:	HAHQ36005487
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0675
Waste Quantity:	135
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19991216
Creation Date:	3/7/2000 0:00:00
Receipt Date:	19991222
Manifest ID:	99450248
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD980675276
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.44
Waste Quantity:	880
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19991216
Creation Date:	3/7/2000 0:00:00
Receipt Date:	19991222
Manifest ID:	99450248
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD980675276
TSDf Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.5875
Waste Quantity:	1175
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19991216
Creation Date:	4/4/2000 0:00:00
Receipt Date:	19991216
Manifest ID:	99450247
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	Not reported
TSDf Alt EPA ID:	HAHQ36005487
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.03
Waste Quantity:	60
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Shipment Date: 19991216  
Creation Date: 4/4/2000 0:00:00  
Receipt Date: 19991216  
Manifest ID: 99450247  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: Not reported  
TSDf Alt EPA ID: HAHQ36005487  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: D99 - Disposal, Other  
Quantity Tons: 0.255  
Waste Quantity: 510  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19991216  
Creation Date: 3/7/2000 0:00:00  
Receipt Date: 19991222  
Manifest ID: 99450248  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980675276  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD980675276  
TSDf Alt Name: Not reported  
Waste Code Description: 223 - Unspecified oil-containing waste  
RCRA Code: Not reported  
Meth Code: T01 - Treatment, Tank  
Quantity Tons: 0.12  
Waste Quantity: 240  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19991216  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 99450247  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name: Not reported  
TSDF Alt EPA ID: HAHQ36005487  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: D99 - Disposal, Other  
Quantity Tons: 0.0355  
Waste Quantity: 71  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19991216  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 99450247  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD059494310  
Trans Name: Not reported  
TSDF Alt EPA ID: HAHQ36005487  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: D99 - Disposal, Other  
Quantity Tons: 0.1575  
Waste Quantity: 315  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 1996  
Gen EPA ID: CA8210020832

Shipment Date: 19961231  
Creation Date: 5/20/1997 0:00:00  
Receipt Date: 19970107  
Manifest ID: 96435051  
Trans EPA ID: CAD009466392  
Trans Name: Not reported  
Trans 2 EPA ID: CAD982524480  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD028409019  
Trans Name: Not reported  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 352 - Other organic solids  
RCRA Code: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Meth Code:	H01 - Transfer Station
Quantity Tons:	0.6
Waste Quantity:	1200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961226
Creation Date:	5/20/1997 0:00:00
Receipt Date:	19961226
Manifest ID:	96360415
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.2126
Waste Quantity:	51
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961226
Creation Date:	5/21/1997 0:00:00
Receipt Date:	19970107
Manifest ID:	96650020
Trans EPA ID:	CAL000827834
Trans Name:	Not reported
Trans 2 EPA ID:	CAD982524480
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD028409019
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0
Waste Quantity:	0
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Shipment Date:	19961226
Creation Date:	5/21/1997 0:00:00
Receipt Date:	19970107
Manifest ID:	96650020
Trans EPA ID:	CAL000827834
Trans Name:	Not reported
Trans 2 EPA ID:	CAD982524480
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD028409019
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961226
Creation Date:	6/26/1997 0:00:00
Receipt Date:	19961226
Manifest ID:	96591685
Trans EPA ID:	CAL000827834
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD982042475
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD982042475
TSDf Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.8428
Waste Quantity:	1
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961226
Creation Date:	5/20/1997 0:00:00
Receipt Date:	19961226
Manifest ID:	96360415
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.3336  
Waste Quantity: 80  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19961218  
Creation Date: 5/30/1997 0:00:00  
Receipt Date: 19961218  
Manifest ID: 95980467  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000613968  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0625  
Waste Quantity: 15  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19961212  
Creation Date: 5/30/1997 0:00:00  
Receipt Date: 19961223  
Manifest ID: 96112120  
Trans EPA ID: MOD095038998  
Trans Name: Not reported  
Trans 2 EPA ID: MDD980554653  
Trans 2 Name: Not reported  
TSDf EPA ID: TND000614321  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.04  
Waste Quantity: 80  
Quantity Unit: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961212
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19961223
Manifest ID:	96112120
Trans EPA ID:	MOD095038998
Trans Name:	Not reported
Trans 2 EPA ID:	MDD980554653
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D009
Meth Code:	- Not reported
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19961212
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19961223
Manifest ID:	96112121
Trans EPA ID:	MOD095038998
Trans Name:	Not reported
Trans 2 EPA ID:	MDD980554653
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2006
Gen EPA ID:	CA8210020832

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0045  
Waste Quantity: 9  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0165  
Waste Quantity: 33  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.089  
Waste Quantity: 178  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.023  
Waste Quantity: 46  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.5505  
Waste Quantity: 1101  
Quantity Unit: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20061214
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000357359FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.1185
Waste Quantity:	237
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20061214
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000357359FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.1505
Waste Quantity:	301
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20061214
Creation Date:	Not reported
Receipt Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.2955  
Waste Quantity: 591  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.0235  
Waste Quantity: 47  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20061214  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 000357359FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: UTD988074712  
Trans 2 Name: TW COMPANY  
TSDf EPA ID: UTD981552177  
Trans Name: CLEAN HARBORS ARAGONITE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: - Not reported  
Quantity Tons: 0.016  
Waste Quantity: 32  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2004  
Gen EPA ID: CA8210020832

Shipment Date: Not reported  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 23535169  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.131  
Waste Quantity: 262  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: Not reported  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 23535169  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: D008  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.004  
Waste Quantity: 8

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	23535169
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.09
Waste Quantity:	180
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	23535169
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.0565
Waste Quantity:	113
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Receipt Date: Not reported  
Manifest ID: 23535169  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: D99 - Disposal, Other  
Quantity Tons: 0.0375  
Waste Quantity: 75  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: Not reported  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 23535169  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.063  
Waste Quantity: 126  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: Not reported  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 23535169  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDf Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.037
Waste Quantity:	74
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	23535169
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.5115
Waste Quantity:	1023
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	23535169
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.03
Waste Quantity:	60
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	23535169
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0475
Waste Quantity:	95
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	1995
Gen EPA ID:	CA8210020832
Shipment Date:	19951229
Creation Date:	9/18/1996 0:00:00
Receipt Date:	19951229
Manifest ID:	95825491
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000613968
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000613968
TSDf Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.3044
Waste Quantity:	73
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951229

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Creation Date: 9/18/1996 0:00:00  
Receipt Date: 19951229  
Manifest ID: 95825491  
Trans EPA ID: ILD984908202  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT000613968  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT000613968  
TSDf Alt Name: Not reported  
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l  
RCRA Code: D001  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.271  
Waste Quantity: 65  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19951221  
Creation Date: 10/9/1996 0:00:00  
Receipt Date: 19960105  
Manifest ID: 95726404  
Trans EPA ID: OKD981605363  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: TND000614321  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.  
RCRA Code: D001  
Meth Code: - Not reported  
Quantity Tons: 0.3065  
Waste Quantity: 613  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19951221  
Creation Date: 10/9/1996 0:00:00  
Receipt Date: 19960105  
Manifest ID: 95726405  
Trans EPA ID: OKD981605363  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: TND000614321  
Trans Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0885
Waste Quantity:	177
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951221
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960105
Manifest ID:	95726405
Trans EPA ID:	OKD981605363
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0155
Waste Quantity:	31
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951221
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960105
Manifest ID:	95726405
Trans EPA ID:	OKD981605363
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951221
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960105
Manifest ID:	95726405
Trans EPA ID:	OKD981605363
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.004
Waste Quantity:	8
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951221
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960105
Manifest ID:	95726406
Trans EPA ID:	OKD981605363
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.029
Waste Quantity:	58
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951221
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960105
Manifest ID:	95726406



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans EPA ID:	OKD981605363
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19951221
Creation Date:	10/9/1996 0:00:00
Receipt Date:	19960105
Manifest ID:	95726406
Trans EPA ID:	OKD981605363
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.1805
Waste Quantity:	361
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	1997
Gen EPA ID:	CA8210020832
Shipment Date:	19971222
Creation Date:	7/23/1998 0:00:00
Receipt Date:	19980305
Manifest ID:	97314177
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	NED001792910
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	1.9785
Waste Quantity:	3957
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	4/16/1998 0:00:00
Receipt Date:	19980212
Manifest ID:	97314163
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	NED001792910
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0205
Waste Quantity:	41
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	3/31/1998 0:00:00
Receipt Date:	19971223
Manifest ID:	97314176
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD980675276
TSDf Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.4815
Waste Quantity:	963
Quantity Unit:	P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	3/31/1998 0:00:00
Receipt Date:	19971223
Manifest ID:	97314176
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD980675276
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.425
Waste Quantity:	850
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	3/31/1998 0:00:00
Receipt Date:	19971223
Manifest ID:	97314175
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD980675276
TSDf Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	1.322
Waste Quantity:	2644
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	3/31/1998 0:00:00
Receipt Date:	19971223

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID: 97314175  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980675276  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD980675276  
TSDf Alt Name: Not reported  
Waste Code Description: 223 - Unspecified oil-containing waste  
RCRA Code: Not reported  
Meth Code: T01 - Treatment, Tank  
Quantity Tons: 0.454  
Waste Quantity: 908  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19971219  
Creation Date: 3/31/1998 0:00:00  
Receipt Date: 19971223  
Manifest ID: 97314175  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980675276  
Trans Name: Not reported  
TSDf Alt EPA ID: CAD980675276  
TSDf Alt Name: Not reported  
Waste Code Description: 223 - Unspecified oil-containing waste  
RCRA Code: Not reported  
Meth Code: T01 - Treatment, Tank  
Quantity Tons: 1.351  
Waste Quantity: 2702  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 19971219  
Creation Date: 4/16/1998 0:00:00  
Receipt Date: 19980212  
Manifest ID: 97314171  
Trans EPA ID: CAT000624247  
Trans Name: Not reported  
Trans 2 EPA ID: NED001792910  
Trans 2 Name: Not reported  
TSDf EPA ID: TND000614321  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.011
Waste Quantity:	22
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	4/16/1998 0:00:00
Receipt Date:	19980212
Manifest ID:	97314171
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	NED001792910
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D003
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19971219
Creation Date:	4/16/1998 0:00:00
Receipt Date:	19980212
Manifest ID:	97314171
Trans EPA ID:	CAT000624247
Trans Name:	Not reported
Trans 2 EPA ID:	NED001792910
Trans 2 Name:	Not reported
TSDf EPA ID:	TND000614321
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D002
Meth Code:	R01 - Recycler
Quantity Tons:	0.07
Waste Quantity:	140
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2000  
Gen EPA ID: CA8210020832

Shipment Date: 20001227  
Creation Date: 3/22/2001 0:00:00  
Receipt Date: 20010105  
Manifest ID: 20237410  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD088504881  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 792 - Not reported  
RCRA Code: D002  
Meth Code: H01 - Transfer Station  
Quantity Tons: 0.0635  
Waste Quantity: 127  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20001227  
Creation Date: 4/9/2001 0:00:00  
Receipt Date: 20010111  
Manifest ID: 20237545  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080013352  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT080013352  
TSDf Alt Name: Not reported  
Waste Code Description: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)  
RCRA Code: D001  
Meth Code: R01 - Recycler  
Quantity Tons: 0.055  
Waste Quantity: 110  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20001227  
Creation Date: 4/9/2001 0:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Receipt Date: 20010111  
Manifest ID: 20237545  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080013352  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT080013352  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 0.1105  
Waste Quantity: 221  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20001227  
Creation Date: 4/9/2001 0:00:00  
Receipt Date: 20010122  
Manifest ID: 20237547  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: CAD981634116  
Trans 2 Name: Not reported  
TSDf EPA ID: TND000772186  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 214 - Unspecified solvent mixture  
RCRA Code: F003  
Meth Code: - Not reported  
Quantity Tons: 0.257  
Waste Quantity: 514  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20001227  
Creation Date: 3/22/2001 0:00:00  
Receipt Date: 20010105  
Manifest ID: 20237577  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080033681  
Trans Name: Not reported  
TSDf Alt EPA ID: CAT080033681

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDF Alt Name: Not reported  
Waste Code Description: 343 - Unspecified organic liquid mixture  
RCRA Code: D002  
Meth Code: T01 - Treatment, Tank  
Quantity Tons: 0.0275  
Waste Quantity: 55  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20001227  
Creation Date: 3/22/2001 0:00:00  
Receipt Date: 20010105  
Manifest ID: 20237577  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT080033681  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT080033681  
TSDF Alt Name: Not reported  
Waste Code Description: 352 - Other organic solids  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.0155  
Waste Quantity: 31  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20001227  
Creation Date: 3/22/2001 0:00:00  
Receipt Date: 20010105  
Manifest ID: 20237577  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT080033681  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT080033681  
TSDF Alt Name: Not reported  
Waste Code Description: 352 - Other organic solids  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.424  
Waste Quantity: 848  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20001205
Creation Date:	3/6/2001 0:00:00
Receipt Date:	20001206
Manifest ID:	20556951
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080013352
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT080013352
TSDf Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	3.724
Waste Quantity:	980
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20001122
Creation Date:	3/6/2001 0:00:00
Receipt Date:	20001208
Manifest ID:	20556945
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080033681
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT080033681
TSDf Alt Name:	Not reported
Waste Code Description:	561 - Not reported
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.007
Waste Quantity:	14
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20001108
Creation Date:	1/9/2001 0:00:00
Receipt Date:	20001127
Manifest ID:	99577500
Trans EPA ID:	CAR000002774

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	ALD983167891
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	261 - Not reported
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.5851
Waste Quantity:	531
Quantity Unit:	K
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Additional Info:	
Year:	2015
Gen EPA ID:	CA8210020832
Shipment Date: 20150220	
Creation Date: 8/21/2015 22:15:46	
Receipt Date: 20150317	
Manifest ID: 006020570FLE	
Trans EPA ID: CAR000247189	
Trans Name: ENV ENVIRONMENTAL INTERNATIONAL	
Trans 2 EPA ID: Not reported	
Trans 2 Name: Not reported	
TSDf EPA ID: NVT330010000	
Trans Name: US ECOLOGY	
TSDf Alt EPA ID: Not reported	
TSDf Alt Name: Not reported	
Waste Code Description: 181 - Other inorganic solid waste Organics	
RCRA Code: Not reported	
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)	
Quantity Tons: 0.15	
Waste Quantity: 300	
Quantity Unit: P	
Additional Code 1: Not reported	
Additional Code 2: Not reported	
Additional Code 3: Not reported	
Additional Code 4: Not reported	
Additional Code 5: Not reported	
Additional Info:	
Year:	2010
Gen EPA ID:	CA8210020832
Shipment Date: 20101227	
Creation Date: 2/23/2011 18:30:25	
Receipt Date: 20101228	
Manifest ID: 000068172MWI	

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980675276  
Trans Name: CLEAN HARBORS BUTTONWILLOW LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: D008  
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)  
  
Quantity Tons: 0.404  
Waste Quantity: 808  
Quantity Unit: P  
Additional Code 1: D006  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Shipment Date: 20101227  
Creation Date: 2/23/2011 18:30:25  
Receipt Date: 20101228  
Manifest ID: 000068173MWI  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980675276  
Trans Name: CLEAN HARBORS BUTTONWILLOW LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: D008  
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)  
  
Quantity Tons: 0.19  
Waste Quantity: 380  
Quantity Unit: P  
Additional Code 1: D006  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Shipment Date: 20101227  
Creation Date: 2/23/2011 18:30:25  
Receipt Date: 20101228  
Manifest ID: 000068173MWI  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD980675276  
Trans Name: CLEAN HARBORS BUTTONWILLOW LLC  
TSDf Alt EPA ID: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDF Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: D008  
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)  
Quantity Tons: 0.001  
Waste Quantity: 2  
Quantity Unit: P  
Additional Code 1: D006  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20101227  
Creation Date: 2/23/2011 18:30:25  
Receipt Date: 20101228  
Manifest ID: 000068172MWI  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SVCS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD980675276  
Trans Name: CLEAN HARBORS BUTTONWILLOW LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: D008  
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)

Quantity Tons: 0.0005  
Waste Quantity: 1  
Quantity Unit: P  
Additional Code 1: D006  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20101117  
Creation Date: 1/12/2011 18:30:38  
Receipt Date: 20101124  
Manifest ID: 006445062JJK  
Trans EPA ID: CAR000159665  
Trans Name: PARC SPECIALTY CONTRACTORS  
Trans 2 EPA ID: CAR000177527  
Trans 2 Name: PHILIP WEST INDUSTRIAL SERVICES  
TSDF EPA ID: CAD008364432  
Trans Name: RHO-CHEM LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 181 - Other inorganic solid waste Organics  
RCRA Code: D005  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.4  
Waste Quantity: 800

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20101108
Creation Date:	1/3/2011 18:31:10
Receipt Date:	20101112
Manifest ID:	005578912JJK
Trans EPA ID:	CAR000177527
Trans Name:	PHILIP WEST INDUSTRIAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	4.13
Waste Quantity:	8260
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20101104
Creation Date:	1/3/2011 18:31:17
Receipt Date:	20101111
Manifest ID:	000065339MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Shipment Date:	20101104
Creation Date:	1/3/2011 18:31:17
Receipt Date:	20101111
Manifest ID:	000065339MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20101104
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000065338MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC
TSDf EPA ID:	TXD982290140
Trans Name:	CLEAN HARBORS LAPORTE LP
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20101104
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000065338MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SVCS INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

TSDF EPA ID: TXD982290140  
Trans Name: CLEAN HARBORS LAPORTE LP  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H121 - Neutralization Only  
Quantity Tons: 0.01  
Waste Quantity: 20  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2003  
Gen EPA ID: CA8210020832

Shipment Date: Not reported  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 22813242  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT080033681  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT080033681  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.536  
Waste Quantity: 1072  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: Not reported  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 22457536  
Trans EPA ID: CAD028277036  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT080033681  
Trans Name: Not reported  
TSDF Alt EPA ID: CAT080033681  
TSDF Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.035
Waste Quantity:	70
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	22457536
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080033681
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT080033681
TSDf Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.1415
Waste Quantity:	283
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	22813242
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080033681
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT080033681
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)

S112836628

Additional Code 5:	Not reported
Shipment Date:	20031211
Creation Date:	8/13/2004 7:53:20
Receipt Date:	20031220
Manifest ID:	23338817
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDf Alt EPA ID:	CAT080013352
TSDf Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.042
Waste Quantity:	84
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20031211
Creation Date:	8/13/2004 7:53:20
Receipt Date:	20031220
Manifest ID:	23338817
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDf Alt EPA ID:	CAT080013352
TSDf Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	R01 - Recycler
Quantity Tons:	0.011
Waste Quantity:	22
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20031211
Creation Date:	8/13/2004 7:53:20
Receipt Date:	20031220
Manifest ID:	23338817
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans 2 Name: Not reported  
TSDF EPA ID: CAT080013352  
Trans Name: DEMENNO / KERDOON  
TSDF Alt EPA ID: CAT080013352  
TSDF Alt Name: Not reported  
Waste Code Description: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 0.017  
Waste Quantity: 34  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20031211  
Creation Date: 8/13/2004 7:53:20  
Receipt Date: 20031220  
Manifest ID: 23338817  
Trans EPA ID: CAD028277036  
Trans Name: ASBURY ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT080013352  
Trans Name: DEMENNO / KERDOON  
TSDF Alt EPA ID: CAT080013352  
TSDF Alt Name: Not reported  
Waste Code Description: 135 - Unspecified aqueous solution  
RCRA Code: Not reported  
Meth Code: R01 - Recycler  
Quantity Tons: 0.126  
Waste Quantity: 252  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20031211  
Creation Date: 8/19/2004 11:23:00  
Receipt Date: 20031223  
Manifest ID: 23338818  
Trans EPA ID: CAD028277036  
Trans Name: ASBURY ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAT080033681  
Trans Name: D/K ENVIRONMENTAL  
TSDF Alt EPA ID: CAT080033681  
TSDF Alt Name: Not reported  
Waste Code Description: 151 - Asbestos-containing waste  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.22

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Waste Quantity: 440  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20031211  
Creation Date: 8/19/2004 11:23:00  
Receipt Date: 20031223  
Manifest ID: 23338818  
Trans EPA ID: CAD028277036  
Trans Name: ASBURY ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAT080033681  
Trans Name: D/K ENVIRONMENTAL  
TSDf Alt EPA ID: CAT080033681  
TSDf Alt Name: Not reported  
Waste Code Description: 291 - Latex waste  
RCRA Code: Not reported  
Meth Code: D80 - Disposal, Land Fill  
Quantity Tons: 0.0425  
Waste Quantity: 85  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 2017  
Gen EPA ID: CA8210020832

Shipment Date: 20170523  
Creation Date: 7/24/2018 18:30:51  
Receipt Date: 20170607  
Manifest ID: 000670672WAS  
Trans EPA ID: IND058484114  
Trans Name: HERITAGE TRANSPORT LLC- TS HAYWARD  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: AZD081705402  
Trans Name: HERITAGE ENVIRONMENTAL SERVICES  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 223 - Unspecified oil-containing waste  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.1  
Waste Quantity: 200  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170523
Creation Date:	7/17/2018 18:30:28
Receipt Date:	20170616
Manifest ID:	000670673WAS
Trans EPA ID:	IND058484114
Trans Name:	HERITAGE TRANSPORT LLC- TS HAYWARD
Trans 2 EPA ID:	AZR000516211
Trans 2 Name:	SALT RIVER EXTRACTION
TSDf EPA ID:	CAT080013352
Trans Name:	DEMENNO/KERDOON
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.209
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170523
Creation Date:	7/24/2018 18:30:51
Receipt Date:	20170607
Manifest ID:	000670672WAS
Trans EPA ID:	IND058484114
Trans Name:	HERITAGE TRANSPORT LLC- TS HAYWARD
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	AZD081705402
Trans Name:	HERITAGE ENVIRONMENTAL SERVICES
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170523
Creation Date:	7/24/2018 18:30:51
Receipt Date:	20170607

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Manifest ID: 000670672WAS  
Trans EPA ID: IND058484114  
Trans Name: HERITAGE TRANSPORT LLC- TS HAYWARD  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: AZD081705402  
Trans Name: HERITAGE ENVIRONMENTAL SERVICES  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 343 - Unspecified organic liquid mixture  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.034  
Waste Quantity: 10  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:

Year: 2008  
Gen EPA ID: CA8210020832

Shipment Date: 20081125  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 002200661FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 141 - Off-specification, aged, or surplus inorganics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Quantity Tons: 0.0035  
Waste Quantity: 7  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20081125  
Creation Date: 2/4/2009 18:30:08  
Receipt Date: 20081201  
Manifest ID: 002200661FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0295
Waste Quantity:	59
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081125
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002200661FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H135 - Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Quantity Tons:	0.718
Waste Quantity:	1436
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081125
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002200661FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

RCRA Code: D001  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.722  
Waste Quantity: 1444  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20081125  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 002200661FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5)

RCRA Code: D002  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.039  
Waste Quantity: 78  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20081125  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 002200661FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported

Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D005  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0215  
Waste Quantity: 43  
Quantity Unit: P  
Additional Code 1: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081125
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002200661FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081125
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002200661FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0175
Waste Quantity:	35
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081125
Creation Date:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Receipt Date: Not reported  
Manifest ID: 002200661FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.004  
Waste Quantity: 8  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Shipment Date: 20081125  
Creation Date: Not reported  
Receipt Date: Not reported  
Manifest ID: 002200661FLE  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: Not reported  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.0015  
Waste Quantity: 3  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Additional Info:  
Year: 2009  
Gen EPA ID: CA8210020832

Shipment Date: 20091125  
Creation Date: 2/3/2010 18:30:55  
Receipt Date: 20091202  
Manifest ID: 000023137MWI  
Trans EPA ID: MAD039322250

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.73
Waste Quantity:	1460
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091125
Creation Date:	2/3/2010 18:30:55
Receipt Date:	20091202
Manifest ID:	000023137MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.021
Waste Quantity:	42
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091117
Creation Date:	2/3/2010 18:30:49
Receipt Date:	20091117
Manifest ID:	000022944MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	7.65
Waste Quantity:	15300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091116
Creation Date:	2/3/2010 18:30:49
Receipt Date:	20091117
Manifest ID:	000023145MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD980675276
Trans Name:	CLEAN HARBORS BUTTONWILLOW LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	16.856
Waste Quantity:	20
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091109
Creation Date:	6/29/2010 18:30:32
Receipt Date:	20091130
Manifest ID:	000022953MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENV SERV
TSDf EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.076
Waste Quantity:	152
Quantity Unit:	P
Additional Code 1:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000022954MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0185
Waste Quantity:	37
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000022954MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	281 - Adhesives
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.017
Waste Quantity:	34
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091106
Creation Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Receipt Date:	Not reported
Manifest ID:	000022954MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D003
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0255
Waste Quantity:	51
Quantity Unit:	P
Additional Code 1:	D002
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000022954MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D007
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091106
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000022954MWI
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code Description: 331 - Off-specification, aged, or surplus organics  
RCRA Code: D018  
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Quantity Tons: 0.0525  
Waste Quantity: 105  
Quantity Unit: P  
Additional Code 1: D007  
Additional Code 2: D001  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

ICE:

Envirostor ID: 3000739  
Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE  
Address: ROTH ROAD BLDG S-4  
City,State,Zip: LATHROP, CA 95331  
EPA ID: CA8210020832  
Site Type: INSPECTION  
Facility Status: No Action

Inspection:

Action Type: Compliance Evaluation Inspection - Generator  
Action Date: 05/16/2017  
Violation Class: No Violations  
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Action Date: 06/24/2004  
Violation Class: No Violations  
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Generator  
Action Date: 03/25/2010  
Violation Class: No Violations  
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Action Date: 03/24/2005  
Violation Class: No Violations  
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Action Date: 03/26/2002  
Violation Class: Class 2, Minor  
RTC Date: 07/17/2002

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Action Date: 02/04/2003  
Violation Class: Class 2, Minor  
RTC Date: 05/26/2004

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Action Date: 04/26/2001  
Violation Class: No Violations  
RTC Date: Not reported  
  
Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Action Date: 03/29/2000  
Violation Class: No Violations  
RTC Date: Not reported

**HWP:**

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE  
Address: ROTH ROAD BLDG S-4  
City,State,Zip: LATHROP, CA 953310000  
EPA Id: CA8210020832  
Cleanup Status: UNDERGOING CLOSURE  
Latitude: 37.83498  
Longitude: -121.2691  
Facility Type: Historical - Non-Operating  
Facility Size: Not reported  
Team: Not reported  
Supervisor: Not reported  
Site Code: 100499  
Assembly District: 12  
Senate District: 05  
Public Information Officer: Not reported  
Public Information Officer: Not reported

**Activities:**

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - APPLICATION PART B RECEIVED  
Actual Date: 07/30/1996  
  
EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit), CONTAIN2-Building 530 (GPRA Unit), TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: New Operating Permit - FINAL PERMIT  
Actual Date: 08/20/1985  
  
EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit), CONTAIN2-Building 530 (GPRA Unit), TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: New Operating Permit - FINAL PERMIT (EFFECTIVE)  
Actual Date: 08/20/1985  
  
EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit), CONTAIN2-Building 530 (GPRA Unit), TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: New Operating Permit - APPLICATION PART B RECEIVED  
Actual Date: 07/15/1982  
  
EPA Id: CA8210020832

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit), CONTAIN2-Building 530 (GPRA Unit), TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: New Operating Permit - CALL-IN LETTER ISSUED  
Actual Date: 04/30/1981

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit), CONTAIN2-Building 530 (GPRA Unit), TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: New Operating Permit - PUBLIC COMMENT (BEGIN)  
Actual Date: 04/26/1985

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit), CONTAIN2-Building 530 (GPRA Unit), TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: New Operating Permit - FINAL PERMIT (EXPIRES)  
Actual Date: 08/20/1995

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - TECHNICAL COMPLETE LETTER  
Actual Date: 02/20/1997

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - PUBLIC COMMENT (BEGIN)  
Actual Date: 09/04/1997

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - FINAL PERMIT RENEWAL (EFFECTIVE)  
Actual Date: 01/12/1998

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - FINAL PERMIT RENEWAL  
Actual Date: 12/12/1997

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - FINAL PERMIT RENEWAL (EXPIRES)  
Actual Date: 01/12/2008

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Renewal - Historical - CALL-IN LETTER ISSUED  
Actual Date: 07/01/1996



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Closure:

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Closure - RECEIVE CLOSURE CERTIFICATION  
Actual Date: 09/30/2008

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN2-Building 530 (GPRA Unit)  
Event Description: Closure - ISSUE CLOSURE VERIFICATION  
Actual Date: 02/09/1996

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Closure - ISSUE CLOSURE VERIFICATION  
Actual Date: 02/25/2009

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Closure - CLOSURE PLAN APPROVED  
Actual Date: 01/12/1998

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN2-Building 530 (GPRA Unit)  
Event Description: Closure - CLOSURE PLAN APPROVED  
Actual Date: 10/05/1984

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN1-Building 605 (GPRA Unit)  
Event Description: Closure - CLOSURE PLAN RECEIVED  
Actual Date: 01/12/1998

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN2-Building 530 (GPRA Unit)  
Event Description: Closure - CLOSURE PLAN RECEIVED  
Actual Date: 06/04/1984

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: TANKSTR1-348 and 349 (GPRA Unit), TANKTRT1-348 and 349 (GPRA Unit)  
Event Description: Referred for closure to other agency - REFERRED FOR CLOSURE TO OTHER AGENCY  
Actual Date: 08/07/2013

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Unit Names: CONTAIN2-Building 530 (GPRA Unit)  
Event Description: Closure - RECEIVE CLOSURE CERTIFICATION  
Actual Date: 06/30/1985

Alias:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

EPA Id: CA8210020832  
Facility Type: Historical - Non-Operating  
Alias Type: Project Code (Site Code)  
Alias: 100499

**CERS:**

Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE  
Address: ROTH ROAD BLDG S-4  
City,State,Zip: LATHROP, CA 953310000  
Site ID: 243565  
CERS ID: CA8210020832  
CERS Description: Hazardous Waste

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-04-2003  
Violations Found: Yes  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Return To Compliance: 2004-05-26 00:00:00  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-24-2005  
Violations Found: No  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-25-2010  
Violations Found: No  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Generator  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-26-2002  
Violations Found: Yes  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Return To Compliance: 2002-07-17 00:00:00  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-29-2000  
Violations Found: No  
Eval Type: DTSC Compliance Evaluation Inspection

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Eval Notes: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-26-2001  
Violations Found: No  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-16-2017  
Violations Found: No  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Generator  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-24-2004  
Violations Found: No  
Eval Type: DTSC Compliance Evaluation Inspection  
Eval Notes: Compliance Evaluation Inspection - Treatment, Storage and Disposal  
Eval Division: Department of Toxic Substances Control  
Eval Program: DTSC\_ENF  
Eval Source: ENVSTORHAZ

Affiliation:  
Affiliation Type Desc: Facility Owner  
Entity Name: DEFENSE DISTRIBUTION DEPOT SAN  
Entity Title: Not reported  
Affiliation Address: PO BOX 960001DES-JFE BLDG 235  
Affiliation City: STOCKTON  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 952960710  
Affiliation Phone: 2098394862

Affiliation Type Desc: Facility Contact  
Entity Name: Edward McNair  
Entity Title: Not reported  
Affiliation Address: PO BOX 96001 BLDG 235  
Affiliation City: STOCKTON  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95296  
Affiliation Phone: 2098395539

HWTS:  
Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE (Continued)**

**S112836628**

Address: ROTH ROAD BLDG S-4  
Address 2: Not reported  
City,State,Zip: LATHROP, CA 953310000  
EPA ID: CA8210020832  
Inactive Date: 04/28/2015  
Create Date: 07/23/1982  
Last Act Date: 08/22/2016  
Mailing Name: Not reported  
Mailing Address: PO BOX 960001  
Mailing Address 2: BLDG 235  
Mailing City,State,Zip: STOCKTON, CA 952960710  
Owner Name: DEFENSE DISTRIBUTION DEPOT SAN  
Owner Address: PO BOX 960001  
Owner Address 2: DES-JFE BLDG 235  
Owner City,State,Zip: STOCKTON, CA 952960710  
Contact Name: EDWARD MCNAIR  
Contact Address: PO BOX 96001 BLDG 235  
Contact Address 2: Not reported  
City,State,Zip: STOCKTON, CA 95296

NAICS:  
EPA ID: CA8210020832  
Create Date: 2002-03-14 16:36:26.000  
NAICS Code: 92119  
NAICS Description: Other General Government Support  
Issued EPA ID Date: 1982-07-23 00:00:00  
Inactive Date: 2015-04-28 00:00:00  
Facility Name: DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN - SHARPE SITE  
Facility Address: ROTH ROAD BLDG S-4  
Facility Address 2: Not reported  
Facility City: LATHROP  
Facility County: Not reported  
Facility State: CA  
Facility Zip: 953310000

26  
NNE  
1/2-1  
0.934 mi.  
4930 ft.

**4TH HIGH SCHOOL/WESTON RANCH  
FRENCH CAMP ROAD/WOLFE ROAD  
STOCKTON, CA 95206**

**ENVIROSTOR S104549147  
SCH N/A**

**Relative:  
Higher  
Actual:  
15 ft.**

ENVIROSTOR:  
Name: 4TH HIGH SCHOOL/WESTON RANCH  
Address: FRENCH CAMP ROAD/WOLFE ROAD  
City,State,Zip: STOCKTON, CA 95206  
Facility ID: 39010002  
Status: No Further Action  
Status Date: 06/11/2001  
Site Code: 104027  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 50  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Juan Koponen

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**4TH HIGH SCHOOL/WESTON RANCH (Continued)**

**S104549147**

Division Branch: Northern California Schools & Santa Susana  
Assembly: 12  
Senate: 05  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 37.84709  
Longitude: -121.2903  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: Arsenic DDD DDE  
Confirmed COC: NONE SPECIFIED  
Potential Description: SOIL  
Alias Name: 4TH HIGH SCHOOL/WESTON RANCH  
Alias Type: Alternate Name  
Alias Name: MANTECA UNIFIED SCHOOL DISTRICT  
Alias Type: Alternate Name  
Alias Name: MANTECA USD- 4TH HI SCH/VCA  
Alias Type: Alternate Name  
Alias Name: MANTECA USD-4TH HIGH SCHOOL  
Alias Type: Alternate Name  
Alias Name: 104018  
Alias Type: Project Code (Site Code)  
Alias Name: 104027  
Alias Type: Project Code (Site Code)  
Alias Name: 39010002  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/11/2001  
Comments: DTSC approved the Preliminary Endangerment Assessment (PEA). Based on the information presented in the PEA, neither an actual a potential release of hazardous material, nor the presence of naturally occurring hazardous material indicated a the site pose threat to human health or the environment under any land use. Therefore, DTSC concurred that no further environmental investigation or cleanup was required at this site, and approved the PEA.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 01/06/2000  
Comments: Phase 1- Pursuant to an agreement between the Department of Toxic Substances Control (DTSC) and the California Department of Education, DTSC's Site Mitigation Program completed a review of a Phase I Environmental Assessment and has determined that a Preliminary Endangerment Assessment is required. The PEA will be conducted under DTSC's oversight pursuant to agreements between DTSC and the pertinent school district. Any subsequent cleanup activities (if needed) after the PEA would be conducted pursuant to agreements between DTSC and the Manteca Unified School District.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**4TH HIGH SCHOOL/WESTON RANCH (Continued)**

**S104549147**

Completed Document Type: Preliminary Endangerment Assessment Workplan  
Completed Date: 01/23/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 02/26/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 06/22/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 12/15/2000  
Comments: DTSC entered into an Environmental Oversight Agreement (Docket Number HSA-A 00/01-132) with Manteca Unified School District to provide oversight for a Preliminary Endangerment Assessment for the proposed 4th High School Weston Ranch Site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 03/02/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**SCH:**

Name: 4TH HIGH SCHOOL/WESTON RANCH  
Address: FRENCH CAMP ROAD/WOLFE ROAD  
City,State,Zip: STOCKTON, CA 95206  
Facility ID: 39010002  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 50  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Juan Koponen

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**4TH HIGH SCHOOL/WESTON RANCH (Continued)**

**S104549147**

Division Branch: Northern California Schools & Santa Susana  
Site Code: 104027  
Assembly: 12  
Senate: 05  
Special Program Status: Not reported  
Status: No Further Action  
Status Date: 06/11/2001  
Restricted Use: NO  
Funding: School District  
Latitude: 37.84709  
Longitude: -121.2903  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: Arsenic, DDD, DDE  
Confirmed COC: NONE SPECIFIED  
Potential Description: SOIL  
Alias Name: 4TH HIGH SCHOOL/WESTON RANCH  
Alias Type: Alternate Name  
Alias Name: MANTECA UNIFIED SCHOOL DISTRICT  
Alias Type: Alternate Name  
Alias Name: MANTECA USD- 4TH HI SCH/VCA  
Alias Type: Alternate Name  
Alias Name: MANTECA USD-4TH HIGH SCHOOL  
Alias Type: Alternate Name  
Alias Name: 104018  
Alias Type: Project Code (Site Code)  
Alias Name: 104027  
Alias Type: Project Code (Site Code)  
Alias Name: 39010002  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/11/2001  
Comments: DTSC approved the Preliminary Endangerment Assessment (PEA). Based on the information presented in the PEA, neither an actual a potential release of hazardous material, nor the presence of naturally occurring hazardous material indicated a the site pose threat to human health or the environment under any land use. Therefore, DTSC concurred that no further environmental investigation or cleanup was required at this site, and approved the PEA.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 01/06/2000  
Comments: Phase 1- Pursuant to an agreement between the Department of Toxic Substances Control (DTSC) and the California Department of Education, DTSC's Site Mitigation Program completed a review of a Phase I Environmental Assessment and has determined that a Preliminary Endangerment Assessment is required. The PEA will be conducted under DTSC's oversight pursuant to agreements between DTSC and the pertinent school district. Any subsequent cleanup activities (if needed) after the PEA would be conducted pursuant to agreements between DTSC and the Manteca Unified School District.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**4TH HIGH SCHOOL/WESTON RANCH (Continued)**

**S104549147**

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Preliminary Endangerment Assessment Workplan  
 Completed Date: 01/23/2001  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Site Inspections/Visit (Non LUR)  
 Completed Date: 02/26/2001  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Cost Recovery Closeout Memo  
 Completed Date: 06/22/2001  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Environmental Oversight Agreement  
 Completed Date: 12/15/2000  
 Comments: DTSC entered into an Environmental Oversight Agreement (Docket Number HSA-A 00/01-132) with Manteca Unified School District to provide oversight for a Preliminary Endangerment Assessment for the proposed 4th High School Weston Ranch Site.

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Cost Recovery Closeout Memo  
 Completed Date: 03/02/2000  
 Comments: Not reported

Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported

27  
 South  
 1/2-1  
 0.938 mi.  
 4953 ft.

**LOUISE AVENUE COMMUNITY SCHOOL**  
**245 LOUISE AVENUE**  
**LATHROP, CA 95330**

**ENVIROSTOR S105954579**  
**SCH N/A**

**Relative:**  
**Higher**  
**Actual:**  
**17 ft.**

ENVIROSTOR:  
 Name: LOUISE AVENUE COMMUNITY SCHOOL  
 Address: 245 LOUISE AVENUE  
 City,State,Zip: LATHROP, CA 95330  
 Facility ID: 39010011  
 Status: No Further Action  
 Status Date: 10/19/2001  
 Site Code: 104142  
 Site Type: School Investigation



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LOUISE AVENUE COMMUNITY SCHOOL (Continued)**

**S105954579**

Site Type Detailed: School  
Acres: 2.5  
NPL: NO  
Regulatory Agencies: DTSC  
Lead Agency: DTSC  
Program Manager: Not reported  
Supervisor: Charles Ridenour  
Division Branch: Northern California Schools & Santa Susana  
Assembly: 12  
Senate: 05  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 37.81286  
Longitude: -121.2916  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: Barium and compounds Copper and compounds Nickel Cobalt Lead Cadmium and compounds Zinc Arsenic Vanadium and compounds Beryllium and compounds  
Confirmed COC: NONE SPECIFIED  
Potential Description: SOIL  
Alias Name: LOUISE AVENUE COMMUNITY SCHOOL  
Alias Type: Alternate Name  
Alias Name: SAN JOAQUIN COE/PROP. LOUISE AVE SCH/VCA  
Alias Type: Alternate Name  
Alias Name: SAN JOAQUIN COUNTY OFFICE OF EDUCATION  
Alias Type: Alternate Name  
Alias Name: 104142  
Alias Type: Project Code (Site Code)  
Alias Name: 39010011  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 11/14/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 02/05/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 10/19/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Workplan  
Completed Date: 11/15/2000  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LOUISE AVENUE COMMUNITY SCHOOL (Continued)**

**S105954579**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 09/18/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:

Name: LOUISE AVENUE COMMUNITY SCHOOL  
Address: 245 LOUISE AVENUE  
City,State,Zip: LATHROP, CA 95330  
Facility ID: 39010011  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 2.5  
National Priorities List: NO  
Cleanup Oversight Agencies: DTSC  
Lead Agency: DTSC  
Lead Agency Description: \* DTSC  
Project Manager: Not reported  
Supervisor: Charles Ridenour  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104142  
Assembly: 12  
Senate: 05  
Special Program Status: Not reported  
Status: No Further Action  
Status Date: 10/19/2001  
Restricted Use: NO  
Funding: School District  
Latitude: 37.81286  
Longitude: -121.2916  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: Barium and compounds, Barium and compounds, Copper and compounds, Nickel, Cobalt, Lead, Cadmium and compounds, Zinc, Arsenic, Vanadium and compounds, Beryllium and compounds  
Confirmed COC: NONE SPECIFIED  
Potential Description: SOIL  
Alias Name: LOUISE AVENUE COMMUNITY SCHOOL  
Alias Type: Alternate Name  
Alias Name: SAN JOAQUIN COE/PROP. LOUISE AVE SCH/VCA  
Alias Type: Alternate Name  
Alias Name: SAN JOAQUIN COUNTY OFFICE OF EDUCATION  
Alias Type: Alternate Name  
Alias Name: 104142

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LOUISE AVENUE COMMUNITY SCHOOL (Continued)**

**S105954579**

Alias Type: Project Code (Site Code)  
Alias Name: 39010011  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 11/14/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 02/05/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 10/19/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Workplan  
Completed Date: 11/15/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Environmental Oversight Agreement  
Completed Date: 09/18/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

28  
South  
1/2-1  
0.976 mi.  
5153 ft.

**ARCO #6080 CASE #2**  
**85 LOUISE AVE E**  
**LATHROP, CA 95330**

**LUST S104403647**  
**Cortese N/A**  
**Notify 65**  
**CERS**

**Relative:**  
**Higher**

LUST REG 5:

**Actual:**  
**17 ft.**

Name: ARCO #6080 CASE #2  
Address: 85 LOUISE AVE E  
City: LATHROP  
Region: 5  
Status: Case Closed  
Case Number: 391094

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #6080 CASE #2 (Continued)**

**S104403647**

Case Type: Drinking Water Aquifer affected  
Substance: GASOLINE  
Staff Initials: JLB  
Lead Agency: Local  
Program: LUST  
MTBE Code: 3

LUST:

Name: ARCO #6080 CASE #2  
Address: 85 LOUISE AVE E  
City,State,Zip: LATHROP, CA 95330  
Lead Agency: SAN JOAQUIN COUNTY  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0607700909](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607700909)  
Global Id: T0607700909  
Latitude: 37.81228  
Longitude: -121.294216  
Status: Completed - Case Closed  
Status Date: 12/12/2007  
Case Worker: Not reported  
RB Case Number: 391094  
Local Agency: Not reported  
File Location: Local Agency  
Local Case Number: 0712  
Potential Media Affect: Aquifer used for drinking water supply  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST:

Global Id: T0607700909  
Contact Type: Regional Board Caseworker  
Contact Name: Alan Buehler  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: alan.buehler@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0607700909  
Action Type: ENFORCEMENT  
Date: 09/08/1999  
Action: Notification - Proposition 65

Global Id: T0607700909  
Action Type: ENFORCEMENT  
Date: 06/01/2006  
Action: Technical Correspondence / Assistance / Other

Global Id: T0607700909  
Action Type: ENFORCEMENT  
Date: 01/31/2000  
Action: Unauthorized Release Form - #99-120

Global Id: T0607700909  
Action Type: ENFORCEMENT  
Date: 05/03/2007

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #6080 CASE #2 (Continued)**

**S104403647**

Action: Technical Correspondence / Assistance / Other

Global Id: T0607700909  
Action Type: ENFORCEMENT  
Date: 12/12/2007  
Action: Closure/No Further Action Letter

Global Id: T0607700909  
Action Type: Other  
Date: 01/31/2000  
Action: Leak Discovery

Global Id: T0607700909  
Action Type: Other  
Date: 01/31/2000  
Action: Leak Reported

Global Id: T0607700909  
Action Type: ENFORCEMENT  
Date: 02/14/2000  
Action: Notice of Responsibility - #00-U05

**LUST:**

Global Id: T0607700909  
Status: Open - Case Begin Date  
Status Date: 09/08/1999

Global Id: T0607700909  
Status: Open - Site Assessment  
Status Date: 01/31/2000

Global Id: T0607700909  
Status: Open - Site Assessment  
Status Date: 06/12/2000

Global Id: T0607700909  
Status: Open - Site Assessment  
Status Date: 05/26/2005

Global Id: T0607700909  
Status: Completed - Case Closed  
Status Date: 12/12/2007

Name: ARCO #6080 CASE #1  
Address: 85 LOUISE AVE E  
City,State,Zip: LATHROP, CA 95330  
Lead Agency: SAN JOAQUIN COUNTY  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0607700052](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607700052)  
Global Id: T0607700052  
Latitude: 37.81228  
Longitude: -121.294216  
Status: Completed - Case Closed  
Status Date: 11/30/1995  
Case Worker: Not reported  
RB Case Number: 390075

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #6080 CASE #2 (Continued)**

**S104403647**

Local Agency: Not reported  
File Location: Local Agency  
Local Case Number: 1656  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
Site History: Not reported

**LUST:**

Global Id: T0607700052  
Contact Type: Regional Board Caseworker  
Contact Name: Alan Buehler  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: alan.buehler@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**

Global Id: T0607700052  
Action Type: Other  
Date: 01/02/1985  
Action: Leak Reported

**LUST:**

Global Id: T0607700052  
Status: Completed - Case Closed  
Status Date: 11/30/1995

Global Id: T0607700052  
Status: Open - Case Begin Date  
Status Date: 11/30/1995

**CORTESE:**

Name: ARCO #6080 CASE #2  
Address: 85 LOUISE AVE E  
City,State,Zip: LATHROP, CA 95330  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0607700909  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: COMPLETED - CASE CLOSED  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #6080 CASE #2 (Continued)**

**S104403647**

Waste Management Unit Name: Not reported  
File Name: Active Open

**NOTIFY 65:**

Name: ARCO #6080 CASE #2  
Address: 85 LOUISE AVE E  
City,State,Zip: LATHROP, CA 95330  
Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported  
Issue Date: 09/08/1999  
Incident Description: Not reported  
Global ID: Not reported  
Status: Not reported

Name: ARCO #6080 CASE #2  
Address: 85 LOUISE AVE E  
City,State,Zip: LATHROP, CA 95330  
Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported  
Issue Date: Not reported  
Incident Description: Not reported  
Global ID: Not reported  
Status: Not reported

**CERS:**

Name: ARCO #6080 CASE #2  
Address: 85 LOUISE AVE E  
City,State,Zip: LATHROP, CA 95330  
Site ID: 213577  
CERS ID: T0607700909  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: Alan Buehler - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**29**  
**SE**  
**1/2-1**  
**0.981 mi.**  
**5179 ft.**

**LANGSTON'S**  
**15615 7 TH STREET**  
**LATHROP, CA 93502**

**Notify 65**    **S100179552**  
                          **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**22 ft.**

NOTIFY 65:  
 Name:                    LANGSTON'S  
 Address:                15615 7 TH STREET  
 City,State,Zip:        LATHROP, CA 93502  
 Date Reported:        Not reported  
 Staff Initials:         Not reported  
 Board File Number:   Not reported  
 Facility Type:          Not reported  
 Discharge Date:       Not reported  
 Issue Date:            Not reported  
 Incident Description: Not reported  
 Global ID:              Not reported  
 Status:                  Not reported



Count: 5 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LATHROP	S126976732	TESLA INC	17100 LATHROP MURPHY PKWY	95330	CERS HAZ WASTE
LATHROP	S126984295	DEFENSE DISTRIBUTION REGION WEST	LATHROP CA 95331, S13&14 T1S R	95330	SWF/LF
LATHROP	S107533424		375 E LATHROP RD	95330	CDL
LATHROP	S106230470	CHANNEL CONSTRUCTION ALONG SHULTE	SHULTE RD & LATHROP PARKWAY		CPS-SLIC
SAN JOAQUIN CITY	S126984279	DOWNING AVE DUMP	STOCKTON OFFRAMP, I-5 SE CORNE	95206	SWF/LF

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: N/A
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 01/14/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: N/A
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 01/14/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/30/2020  
Date Data Arrived at EDR: 01/14/2021  
Date Made Active in Reports: 02/09/2021  
Number of Days to Update: 26

Source: EPA  
Telephone: N/A  
Last EDR Contact: 01/14/2021  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019  
Date Data Arrived at EDR: 04/05/2019  
Date Made Active in Reports: 05/14/2019  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 12/23/2020  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/30/2020  
Date Data Arrived at EDR: 01/14/2021  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 35

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 01/14/2021  
Next Scheduled EDR Contact: 04/26/2021  
Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 800-424-9346
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 01/14/2021
Number of Days to Update: 35	Next Scheduled EDR Contact: 04/26/2021
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/14/2020	Source: EPA
Date Data Arrived at EDR: 12/17/2020	Telephone: 800-424-9346
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

## RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/11/2020	Source: Department of the Navy
Date Data Arrived at EDR: 11/17/2020	Telephone: 843-820-7326
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 02/08/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

### US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/14/2020  
Date Data Arrived at EDR: 12/15/2020  
Date Made Active in Reports: 12/22/2020  
Number of Days to Update: 7

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 12/15/2020  
Next Scheduled EDR Contact: 04/05/2021  
Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/26/2020  
Date Data Arrived at EDR: 10/26/2020  
Date Made Active in Reports: 01/13/2021  
Number of Days to Update: 79

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/26/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/26/2020  
Date Data Arrived at EDR: 10/26/2020  
Date Made Active in Reports: 01/13/2021  
Number of Days to Update: 79

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/26/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/09/2020  
Date Data Arrived at EDR: 11/10/2020  
Date Made Active in Reports: 01/14/2021  
Number of Days to Update: 65

Source: Department of Resources Recycling and Recovery  
Telephone: 916-341-6320  
Last EDR Contact: 02/09/2021  
Next Scheduled EDR Contact: 05/24/2021  
Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: see region list
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/06/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: No Update Planned

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001  
Date Data Arrived at EDR: 04/23/2001  
Date Made Active in Reports: 05/21/2001  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-637-5595  
Last EDR Contact: 09/26/2011  
Next Scheduled EDR Contact: 01/09/2012  
Data Release Frequency: No Update Planned

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004  
Date Data Arrived at EDR: 02/26/2004  
Date Made Active in Reports: 03/24/2004  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)  
Telephone: 760-776-8943  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA, Region 5  
Telephone: 312-886-7439  
Last EDR Contact: 12/16/2020  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 12/16/2020  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020	Source: EPA Region 10
Date Data Arrived at EDR: 05/20/2020	Telephone: 206-553-2857
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3372
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6271
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-8677
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: No Update Planned

## SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: No Update Planned

## **State and tribal registered storage tank lists**

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 07/21/2020  
Date Data Arrived at EDR: 09/03/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 83

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Varies

### MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 09/03/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-327-7844
Date Made Active in Reports: 12/03/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

## UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/04/2020	Source: SWRCB
Date Data Arrived at EDR: 12/04/2020	Telephone: 916-341-5851
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Semi-Annually

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 12/09/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: Varies

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020	Source: EPA Region 9
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3368
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 10
Date Data Arrived at EDR: 05/20/2020	Telephone: 206-553-2857
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/15/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020	Source: EPA, Region 1
Date Data Arrived at EDR: 05/20/2020	Telephone: 617-918-1313
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6137
Date Made Active in Reports: 08/13/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-9424
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-7591
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-6136
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

## ***State and tribal voluntary cleanup sites***

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 12/15/2020
Number of Days to Update: 142	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

## VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/26/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/26/2020	Telephone: 916-323-3400
Date Made Active in Reports: 01/13/2021	Last EDR Contact: 01/26/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/10/2021
	Data Release Frequency: Quarterly

## **State and tribal Brownfields sites**

### BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/21/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/22/2020	Telephone: 916-323-7905
Date Made Active in Reports: 12/11/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2020	Telephone: 202-566-2777
Date Made Active in Reports: 12/10/2020	Last EDR Contact: 12/11/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: Semi-Annually

### **Local Lists of Landfill / Solid Waste Disposal Sites**

#### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 01/25/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020  
Date Data Arrived at EDR: 11/23/2020  
Date Made Active in Reports: 02/08/2021  
Number of Days to Update: 77

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 02/08/2021  
Next Scheduled EDR Contact: 05/24/2021  
Data Release Frequency: Varies

## INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 01/25/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Varies

## DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: No Update Planned

## ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 01/29/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020  
Date Data Arrived at EDR: 03/19/2020  
Date Made Active in Reports: 06/09/2020  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

### **HIST CAL-SITES: Calsites Database**

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/23/2009  
Next Scheduled EDR Contact: 05/25/2009  
Data Release Frequency: No Update Planned

### **SCH: School Property Evaluation Program**

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/26/2020  
Date Data Arrived at EDR: 10/26/2020  
Date Made Active in Reports: 01/13/2021  
Number of Days to Update: 79

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/26/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Labs**

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019  
Date Data Arrived at EDR: 05/28/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-255-6504  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Varies

### **CERS HAZ WASTE: CERS HAZ WASTE**

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/19/2020  
Date Made Active in Reports: 01/07/2021  
Number of Days to Update: 80

Source: CalEPA  
Telephone: 916-323-2514  
Last EDR Contact: 01/20/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Quarterly

### **TOXIC PITS: Toxic Pits Cleanup Act Sites**

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020  
Date Data Arrived at EDR: 03/19/2020  
Date Made Active in Reports: 06/09/2020  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Quarterly

## PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 12/01/2020  
Number of Days to Update: 84

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## Local Lists of Registered Storage Tanks

### SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994  
Date Data Arrived at EDR: 07/07/2005  
Date Made Active in Reports: 08/11/2005  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/03/2005  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/06/2020  
Number of Days to Update: 78

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Annually

### HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990  
Date Data Arrived at EDR: 01/25/1991  
Date Made Active in Reports: 02/12/1991  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-341-5851  
Last EDR Contact: 07/26/2001  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 11/05/2020  
Date Data Arrived at EDR: 11/06/2020  
Date Made Active in Reports: 01/26/2021  
Number of Days to Update: 81

Source: San Francisco County Department of Public Health  
Telephone: 415-252-3896  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/19/2020  
Date Made Active in Reports: 01/07/2021  
Number of Days to Update: 80

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 01/20/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Quarterly

## **Local Land Records**

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/24/2020  
Date Data Arrived at EDR: 11/30/2020  
Date Made Active in Reports: 02/10/2021  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/30/2020  
Date Data Arrived at EDR: 01/14/2021  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 35

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 01/14/2021  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Semi-Annually

### DEED: Deed Restriction Listing

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2020	Source: DTSC and SWRCB
Date Data Arrived at EDR: 12/01/2020	Telephone: 916-323-3400
Date Made Active in Reports: 02/12/2021	Last EDR Contact: 12/01/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Semi-Annually

### **Records of Emergency Release Reports**

#### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/20/2020	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/22/2020	Telephone: 202-366-4555
Date Made Active in Reports: 12/14/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

#### CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 09/30/2020	Source: Office of Emergency Services
Date Data Arrived at EDR: 10/19/2020	Telephone: 916-845-8400
Date Made Active in Reports: 01/07/2021	Last EDR Contact: 01/20/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Semi-Annually

#### LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2020	Source: State Water Quality Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

#### MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 09/29/2020	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 11/17/2020	Telephone: 202-528-4285
Date Made Active in Reports: 01/25/2021	Last EDR Contact: 02/17/2021
Number of Days to Update: 69	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/15/2021
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/26/2021
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 01/07/2021
Number of Days to Update: 574	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017  
Date Data Arrived at EDR: 02/03/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 02/09/2021  
Next Scheduled EDR Contact: 05/24/2021  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/21/2020  
Date Data Arrived at EDR: 09/22/2020  
Date Made Active in Reports: 12/14/2020  
Number of Days to Update: 83

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 12/17/2020  
Next Scheduled EDR Contact: 04/05/2021  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 02/02/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017  
Date Data Arrived at EDR: 05/08/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 73

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 02/05/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 06/17/2020  
Date Made Active in Reports: 09/10/2020  
Number of Days to Update: 85

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 12/18/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 08/14/2020  
Date Made Active in Reports: 11/04/2020  
Number of Days to Update: 82

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 02/02/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/19/2020  
Date Made Active in Reports: 01/04/2021  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 01/21/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/30/2020  
Date Data Arrived at EDR: 01/14/2021  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 35

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 01/14/2021  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2020  
Date Data Arrived at EDR: 11/12/2020  
Date Made Active in Reports: 01/25/2021  
Number of Days to Update: 74

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 01/14/2021
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 01/08/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 12/30/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Quarterly

## FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

## FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/10/2020	Telephone: 301-415-7169
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 59	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 12/01/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/30/2020
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 02/05/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 01/08/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020  
Date Data Arrived at EDR: 01/28/2020  
Date Made Active in Reports: 04/17/2020  
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 01/27/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Quarterly

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2020  
Date Data Arrived at EDR: 10/08/2020  
Date Made Active in Reports: 01/04/2021  
Number of Days to Update: 88

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/22/2020  
Date Made Active in Reports: 11/20/2020  
Number of Days to Update: 151

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 12/23/2020  
Next Scheduled EDR Contact: 04/05/2021  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 01/08/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017  
Date Data Arrived at EDR: 09/11/2018  
Date Made Active in Reports: 09/14/2018  
Number of Days to Update: 3

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 02/02/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2019  
Date Data Arrived at EDR: 11/15/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 74

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 02/18/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/30/2020  
Date Data Arrived at EDR: 01/14/2021  
Date Made Active in Reports: 02/09/2021  
Number of Days to Update: 26

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 01/14/2021  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/03/2020  
Date Data Arrived at EDR: 11/23/2020  
Date Made Active in Reports: 01/25/2021  
Number of Days to Update: 63

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Semi-Annually

## MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/24/2020  
Date Data Arrived at EDR: 11/30/2020  
Date Made Active in Reports: 01/25/2021  
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi  
Telephone: 202-693-9424  
Last EDR Contact: 11/24/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020  
Date Data Arrived at EDR: 05/27/2020  
Date Made Active in Reports: 08/13/2020  
Number of Days to Update: 78

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/25/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/25/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/16/2020  
Date Data Arrived at EDR: 09/17/2020  
Date Made Active in Reports: 12/10/2020  
Number of Days to Update: 84

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 12/10/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2020  
Date Data Arrived at EDR: 12/01/2020  
Date Made Active in Reports: 01/25/2021  
Number of Days to Update: 55

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 07/02/2020  
Date Made Active in Reports: 09/17/2020  
Number of Days to Update: 77

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 01/15/2021  
Next Scheduled EDR Contact: 04/26/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 10/03/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/06/2020	Telephone: 202-564-2280
Date Made Active in Reports: 01/04/2021	Last EDR Contact: 01/08/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/17/2020	Telephone: 202-564-0527
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 11/17/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/13/2020	Source: EPA
Date Data Arrived at EDR: 11/13/2020	Telephone: 800-385-6164
Date Made Active in Reports: 01/25/2021	Last EDR Contact: 02/17/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: Quarterly

## CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/22/2020	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 06/22/2020	Telephone: 916-323-3400
Date Made Active in Reports: 09/04/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

## CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 02/12/2021
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: Varies

## DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/23/2020  
Date Data Arrived at EDR: 11/24/2020  
Date Made Active in Reports: 02/10/2021  
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Varies

**DRYCLEAN SOUTH COAST:** South Coast Air Quality Management District Drycleaner Listing  
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2020  
Date Data Arrived at EDR: 11/18/2020  
Date Made Active in Reports: 02/04/2021  
Number of Days to Update: 78

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

**DRYCLEANERS:** Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 11/23/2020  
Date Data Arrived at EDR: 11/25/2020  
Date Made Active in Reports: 02/10/2021  
Number of Days to Update: 77

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Annually

**EMI:** Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 06/16/2020  
Date Made Active in Reports: 08/28/2020  
Number of Days to Update: 73

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 12/18/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Varies

**ENF:** Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 10/16/2020  
Date Data Arrived at EDR: 10/19/2020  
Date Made Active in Reports: 01/07/2021  
Number of Days to Update: 80

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 01/20/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

**Financial Assurance 1:** Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/13/2020  
Date Data Arrived at EDR: 10/14/2020  
Date Made Active in Reports: 01/04/2021  
Number of Days to Update: 82

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 01/22/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

**Financial Assurance 2:** Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/12/2020  
Date Data Arrived at EDR: 11/13/2020  
Date Made Active in Reports: 01/29/2021  
Number of Days to Update: 77

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 02/08/2021  
Next Scheduled EDR Contact: 05/24/2021  
Data Release Frequency: Varies

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019  
Date Data Arrived at EDR: 04/15/2020  
Date Made Active in Reports: 07/02/2020  
Number of Days to Update: 78

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 01/05/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Annually

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/13/2020  
Date Data Arrived at EDR: 11/13/2020  
Date Made Active in Reports: 02/01/2021  
Number of Days to Update: 80

Source: Department of Toxic Substances Control  
Telephone: 877-786-9427  
Last EDR Contact: 02/17/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 01/22/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/22/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/13/2020  
Date Data Arrived at EDR: 11/13/2020  
Date Made Active in Reports: 02/01/2021  
Number of Days to Update: 80

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/17/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Quarterly

## HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/05/2020  
Date Data Arrived at EDR: 10/06/2020  
Date Made Active in Reports: 12/23/2020  
Number of Days to Update: 78

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 01/05/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-322-1080
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

## MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/30/2020	Source: Department of Public Health
Date Data Arrived at EDR: 12/01/2020	Telephone: 916-558-1784
Date Made Active in Reports: 02/12/2021	Last EDR Contact: 12/01/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/10/2020	Telephone: 916-445-9379
Date Made Active in Reports: 01/27/2021	Last EDR Contact: 02/09/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2020	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 12/01/2020	Telephone: 916-445-4038
Date Made Active in Reports: 02/12/2021	Last EDR Contact: 12/01/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-323-3836
Date Made Active in Reports: 12/01/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/07/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/09/2020	Telephone: 916-445-3846
Date Made Active in Reports: 12/10/2020	Last EDR Contact: 12/07/2020
Number of Days to Update: 1	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-445-2408
Date Made Active in Reports: 12/01/2020	Last EDR Contact: 02/18/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 12/04/2020	Source: State Water Resource Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 01/07/2020	Telephone: 559-445-5577
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 01/08/2021
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 02/16/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: No Update Planned

## WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 12/15/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: No Update Planned

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/04/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/04/2020	Telephone: 866-480-1028
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 12/04/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 12/01/2020  
Number of Days to Update: 84

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Quarterly

## CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020  
Date Data Arrived at EDR: 12/01/2020  
Date Made Active in Reports: 02/12/2021  
Number of Days to Update: 73

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/19/2020  
Date Made Active in Reports: 01/07/2021  
Number of Days to Update: 80

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 01/20/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/04/2020  
Date Data Arrived at EDR: 12/04/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 76

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011  
Date Data Arrived at EDR: 08/05/2011  
Date Made Active in Reports: 09/29/2011  
Number of Days to Update: 55

Source: EPA, Office of Water  
Telephone: 202-564-2496  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Semi-Annually

## PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014  
Date Data Arrived at EDR: 01/06/2015  
Date Made Active in Reports: 05/06/2015  
Number of Days to Update: 120

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Semi-Annually

## PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 02/05/2015  
Date Made Active in Reports: 03/06/2015  
Number of Days to Update: 29

Source: EPA  
Telephone: 202-564-2497  
Last EDR Contact: 12/30/2020  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Varies

## MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/06/2018  
Date Data Arrived at EDR: 10/21/2019  
Date Made Active in Reports: 10/24/2019  
Number of Days to Update: 3

Source: USGS  
Telephone: 703-648-6533  
Last EDR Contact: 11/25/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

## HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/13/2020  
Date Data Arrived at EDR: 10/14/2020  
Date Made Active in Reports: 11/03/2020  
Number of Days to Update: 20

Source: Department of Toxic Substances Control  
Telephone: 916-324-2444  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019  
Date Data Arrived at EDR: 01/11/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 53

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Semi-Annually

#### UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/01/2020  
Date Data Arrived at EDR: 10/06/2020  
Date Made Active in Reports: 12/23/2020  
Number of Days to Update: 78

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/22/2020  
Date Made Active in Reports: 01/12/2021  
Number of Days to Update: 82

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## BUTTE COUNTY:

### CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 12/30/2020  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 12/15/2020  
Date Data Arrived at EDR: 12/16/2020  
Date Made Active in Reports: 12/24/2020  
Number of Days to Update: 8

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 12/15/2020  
Next Scheduled EDR Contact: 04/05/2021  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 04/06/2020  
Date Data Arrived at EDR: 04/23/2020  
Date Made Active in Reports: 07/10/2020  
Number of Days to Update: 78

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

### SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/22/2020  
Date Made Active in Reports: 01/13/2021  
Number of Days to Update: 83

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 01/25/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 06/08/2020  
Date Data Arrived at EDR: 08/13/2020  
Date Made Active in Reports: 10/22/2020  
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 01/25/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 10/22/2020  
Date Data Arrived at EDR: 11/03/2020  
Date Made Active in Reports: 01/20/2021  
Number of Days to Update: 78

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 02/08/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/02/2020  
Date Data Arrived at EDR: 10/06/2020  
Date Made Active in Reports: 12/22/2020  
Number of Days to Update: 77

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 01/15/2021  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: No Update Planned

## HUMBOLDT COUNTY:

### CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 11/18/2020  
Date Data Arrived at EDR: 11/19/2020  
Date Made Active in Reports: 02/04/2021  
Number of Days to Update: 77

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 10/14/2020  
Date Data Arrived at EDR: 10/15/2020  
Date Made Active in Reports: 01/05/2021  
Number of Days to Update: 82

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 72

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

## KERN COUNTY:

### CUPA KERN: CUPA Facility List

A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/29/2020  
Date Data Arrived at EDR: 10/30/2020  
Date Made Active in Reports: 01/15/2021  
Number of Days to Update: 77

Source: Kern County Public Health  
Telephone: 661-321-3000  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021  
Date Data Arrived at EDR: 01/21/2021  
Date Made Active in Reports: 01/28/2021  
Number of Days to Update: 7

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/11/2020  
Date Data Arrived at EDR: 05/12/2020  
Date Made Active in Reports: 07/27/2020  
Number of Days to Update: 76

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

## LAKE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/13/2020  
Date Data Arrived at EDR: 08/13/2020  
Date Made Active in Reports: 10/23/2020  
Number of Days to Update: 71

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 01/11/2021  
Next Scheduled EDR Contact: 04/26/2021  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/31/2020  
Date Data Arrived at EDR: 08/21/2020  
Date Made Active in Reports: 11/09/2020  
Number of Days to Update: 80

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: N/A  
Telephone: N/A  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/19/2020  
Date Data Arrived at EDR: 10/20/2020  
Date Made Active in Reports: 01/12/2021  
Number of Days to Update: 84

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 01/04/2021  
Next Scheduled EDR Contact: 04/19/2021  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/09/2020  
Date Data Arrived at EDR: 10/09/2020  
Date Made Active in Reports: 12/29/2020  
Number of Days to Update: 81

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 01/12/2021  
Next Scheduled EDR Contact: 04/26/2021  
Data Release Frequency: Varies

### LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2019  
Date Data Arrived at EDR: 08/17/2020  
Date Made Active in Reports: 11/05/2020  
Number of Days to Update: 80

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 01/11/2021  
Next Scheduled EDR Contact: 04/26/2021  
Data Release Frequency: Varies



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/18/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Varies

### LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 01/15/2021
Number of Days to Update: 42	Next Scheduled EDR Contact: 04/26/2021
	Data Release Frequency: No Update Planned

### LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/18/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Varies

### LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/18/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Varies

### SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/20/2020	Source: Community Health Services
Date Data Arrived at EDR: 10/09/2020	Telephone: 323-890-7806
Date Made Active in Reports: 12/29/2020	Last EDR Contact: 01/12/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 04/26/2021
	Data Release Frequency: Annually

### UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/07/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST LONG BEACH: City of Long Beach Underground Storage Tank  
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 01/19/2021
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 09/11/2020	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/07/2020	Telephone: 310-618-2973
Date Made Active in Reports: 12/23/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 02/16/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites  
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 12/21/2020
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 02/04/2021	Source: Merced County Environmental Health
Date Data Arrived at EDR: 02/09/2021	Telephone: 209-381-1094
Date Made Active in Reports: 02/18/2021	Last EDR Contact: 01/29/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: Varies

MONO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 11/16/2020  
Date Data Arrived at EDR: 11/23/2020  
Date Made Active in Reports: 02/08/2021  
Number of Days to Update: 77

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/15/2020  
Next Scheduled EDR Contact: 03/08/3021  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020  
Date Data Arrived at EDR: 07/15/2020  
Date Made Active in Reports: 07/31/2020  
Number of Days to Update: 16

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 12/21/2020  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

### UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 10/26/2020  
Date Data Arrived at EDR: 10/28/2020  
Date Made Active in Reports: 01/15/2021  
Number of Days to Update: 79

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 01/25/2021  
Next Scheduled EDR Contact: 05/10/2021  
Data Release Frequency: Varies

## ORANGE COUNTY:

### IND\_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2020  
Date Data Arrived at EDR: 11/05/2020  
Date Made Active in Reports: 01/26/2021  
Number of Days to Update: 82

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups  
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/2020  
Date Data Arrived at EDR: 11/06/2020  
Date Made Active in Reports: 01/26/2021  
Number of Days to Update: 81

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 02/05/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities  
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 09/01/2020  
Date Data Arrived at EDR: 11/03/2020  
Date Made Active in Reports: 01/21/2021  
Number of Days to Update: 79

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 02/02/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/24/2020  
Date Data Arrived at EDR: 11/24/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 1

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites  
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/06/2020  
Date Data Arrived at EDR: 10/07/2020  
Date Made Active in Reports: 11/03/2020  
Number of Days to Update: 27

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/06/2020  
Date Data Arrived at EDR: 10/07/2020  
Date Made Active in Reports: 11/03/2020  
Number of Days to Update: 27

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020  
Date Data Arrived at EDR: 03/31/2020  
Date Made Active in Reports: 06/15/2020  
Number of Days to Update: 76

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/30/2020  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Quarterly

### ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020  
Date Data Arrived at EDR: 03/31/2020  
Date Made Active in Reports: 06/17/2020  
Number of Days to Update: 78

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/30/2020  
Next Scheduled EDR Contact: 04/12/2021  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 10/28/2020  
Date Data Arrived at EDR: 10/30/2020  
Date Made Active in Reports: 01/15/2021  
Number of Days to Update: 77

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/16/2020  
Date Data Arrived at EDR: 11/18/2020  
Date Made Active in Reports: 02/04/2021  
Number of Days to Update: 78

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2020  
Date Data Arrived at EDR: 12/01/2020  
Date Made Active in Reports: 02/16/2021  
Number of Days to Update: 77

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020  
Date Data Arrived at EDR: 11/23/2020  
Date Made Active in Reports: 02/08/2021  
Number of Days to Update: 77

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020  
Date Data Arrived at EDR: 07/16/2020  
Date Made Active in Reports: 09/29/2020  
Number of Days to Update: 75

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 11/05/2020  
Date Data Arrived at EDR: 11/06/2020  
Date Made Active in Reports: 01/27/2021  
Number of Days to Update: 82

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: No Update Planned

## UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2020  
Date Data Arrived at EDR: 11/06/2020  
Date Made Active in Reports: 01/26/2021  
Number of Days to Update: 81

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018  
Date Data Arrived at EDR: 06/26/2018  
Date Made Active in Reports: 07/11/2018  
Number of Days to Update: 15

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 11/12/2020  
Date Data Arrived at EDR: 11/13/2020  
Date Made Active in Reports: 02/01/2021  
Number of Days to Update: 80

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020  
Date Data Arrived at EDR: 02/20/2020  
Date Made Active in Reports: 04/24/2020  
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/11/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019  
Date Data Arrived at EDR: 03/29/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:

### CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 11/20/2020  
Date Data Arrived at EDR: 11/23/2020  
Date Made Active in Reports: 02/05/2021  
Number of Days to Update: 74

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

### HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

### LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

### SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020  
Date Data Arrived at EDR: 11/05/2020  
Date Made Active in Reports: 01/26/2021  
Number of Days to Update: 82

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 02/15/2021  
Next Scheduled EDR Contact: 05/16/2021  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

## SHASTA COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 02/16/2021  
Next Scheduled EDR Contact: 05/31/2021  
Data Release Frequency: Varies

## SOLANO COUNTY:

### LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 08/13/2019  
Number of Days to Update: 68

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

### UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 12/03/2020  
Date Data Arrived at EDR: 12/03/2020  
Date Made Active in Reports: 02/18/2021  
Number of Days to Update: 77

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/03/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 12/15/2020  
Date Data Arrived at EDR: 12/16/2020  
Date Made Active in Reports: 12/23/2020  
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 12/15/2020  
Next Scheduled EDR Contact: 04/05/2021  
Data Release Frequency: Varies

### LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 09/18/2020  
Date Data Arrived at EDR: 09/22/2020  
Date Made Active in Reports: 12/14/2020  
Number of Days to Update: 83

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 12/15/2020  
Next Scheduled EDR Contact: 04/05/2021  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 10/01/2020  
Date Data Arrived at EDR: 10/06/2020  
Date Made Active in Reports: 12/22/2020  
Number of Days to Update: 77

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 01/11/2021  
Next Scheduled EDR Contact: 04/26/2021  
Data Release Frequency: Varies

## SUTTER COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2020  
Date Data Arrived at EDR: 11/24/2020  
Date Made Active in Reports: 02/10/2021  
Number of Days to Update: 78

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 08/11/2020  
Date Data Arrived at EDR: 08/12/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 10/14/2020  
Date Data Arrived at EDR: 10/15/2020  
Date Made Active in Reports: 01/05/2021  
Number of Days to Update: 82

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List

Cupa program facilities

Date of Government Version: 10/30/2020  
Date Data Arrived at EDR: 11/03/2020  
Date Made Active in Reports: 01/20/2021  
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 02/01/2021  
Next Scheduled EDR Contact: 05/17/2021  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA TUOLUMNE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Division of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 01/19/2021  
Next Scheduled EDR Contact: 05/03/2021  
Data Release Frequency: Varies

## VENTURA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/28/2020	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 10/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 01/12/2021	Last EDR Contact: 01/19/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/02/2021
	Data Release Frequency: Quarterly

## LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 12/21/2020
Number of Days to Update: 49	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: No Update Planned

## LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 02/08/2021
Number of Days to Update: 37	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: No Update Planned

## MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/28/2020	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 10/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 01/12/2021	Last EDR Contact: 01/20/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Quarterly

## UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/26/2020	Source: Environmental Health Division
Date Data Arrived at EDR: 09/08/2020	Telephone: 805-654-2813
Date Made Active in Reports: 12/01/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/21/2020	Source: Yolo County Department of Health
Date Data Arrived at EDR: 12/23/2020	Telephone: 530-666-8646
Date Made Active in Reports: 01/04/2021	Last EDR Contact: 12/20/2020
Number of Days to Update: 12	Next Scheduled EDR Contact: 04/11/2021
	Data Release Frequency: Annually

## YUBA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2021

Date Data Arrived at EDR: 01/28/2021

Date Made Active in Reports: 02/03/2021

Number of Days to Update: 6

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523

Last EDR Contact: 01/25/2021

Next Scheduled EDR Contact: 05/10/2021

Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

## CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020

Date Data Arrived at EDR: 10/20/2020

Date Made Active in Reports: 11/02/2020

Number of Days to Update: 13

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375

Last EDR Contact: 02/12/2021

Next Scheduled EDR Contact: 05/24/2021

Data Release Frequency: No Update Planned

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018

Date Data Arrived at EDR: 04/10/2019

Date Made Active in Reports: 05/16/2019

Number of Days to Update: 36

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 01/08/2021

Next Scheduled EDR Contact: 04/19/2021

Data Release Frequency: Annually

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019

Date Data Arrived at EDR: 04/29/2020

Date Made Active in Reports: 07/10/2020

Number of Days to Update: 72

Source: Department of Environmental Conservation

Telephone: 518-402-8651

Last EDR Contact: 01/29/2021

Next Scheduled EDR Contact: 05/10/2021

Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018

Date Data Arrived at EDR: 07/19/2019

Date Made Active in Reports: 09/10/2019

Number of Days to Update: 53

Source: Department of Environmental Protection

Telephone: 717-783-8990

Last EDR Contact: 01/11/2021

Next Scheduled EDR Contact: 04/26/2021

Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018

Date Data Arrived at EDR: 10/02/2019

Date Made Active in Reports: 12/10/2019

Number of Days to Update: 69

Source: Department of Environmental Management

Telephone: 401-222-2797

Last EDR Contact: 02/09/2021

Next Scheduled EDR Contact: 05/31/2021

Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018

Date Data Arrived at EDR: 06/19/2019

Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 12/03/2020

Next Scheduled EDR Contact: 03/22/2021

Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

### Electric Power Transmission Line Data

Source: Endeavor Business Media

This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory  
Source: Department of Fish and Wildlife  
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

### **STREET AND ADDRESS INFORMATION**

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

APN 191-220-14, 191-220-59, AND 191-220-60  
14101 S MANTHEY RD  
LATHROP, CA 95330

### **TARGET PROPERTY COORDINATES**

Latitude (North):	37.831922 - 37° 49' 54.92"
Longitude (West):	121.294187 - 121° 17' 39.07"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	650116.2
UTM Y (Meters):	4188332.2
Elevation:	12 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	5640064 LATHROP, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

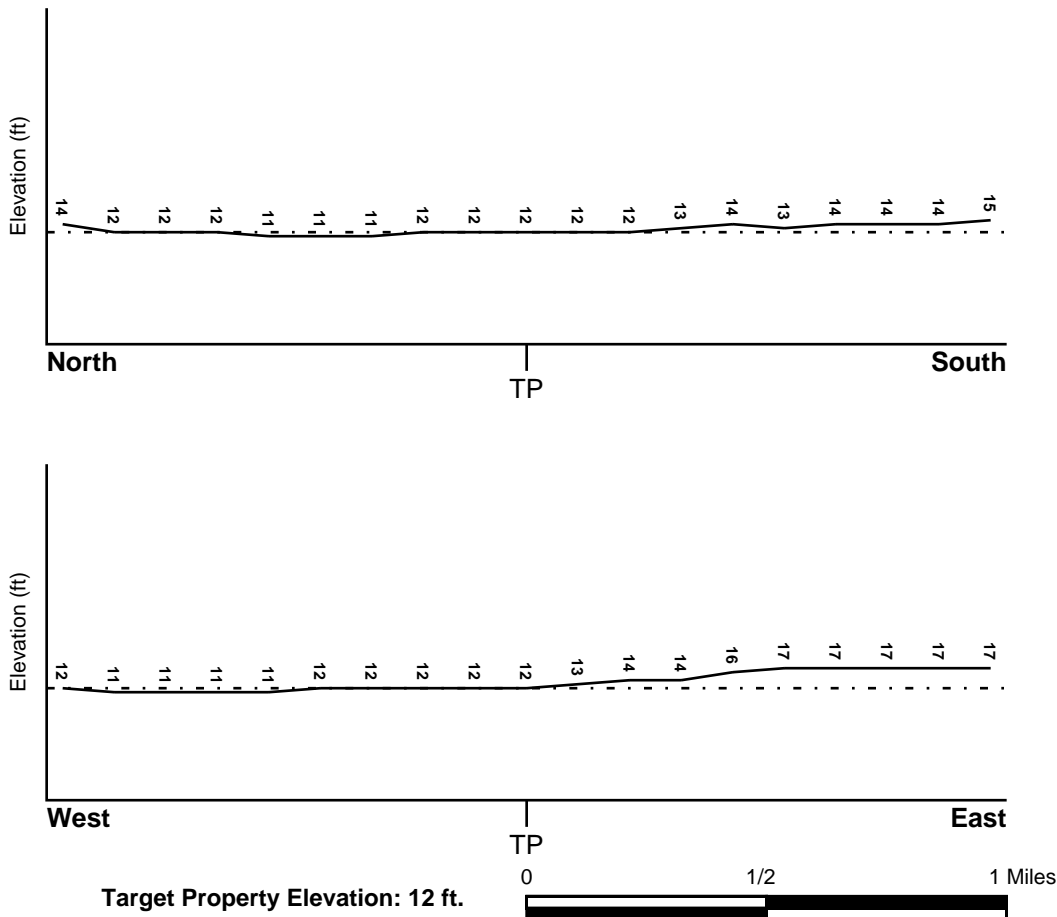
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06077C0610F	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
Not Reported	

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
LATHROP	YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Status:	Not found

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

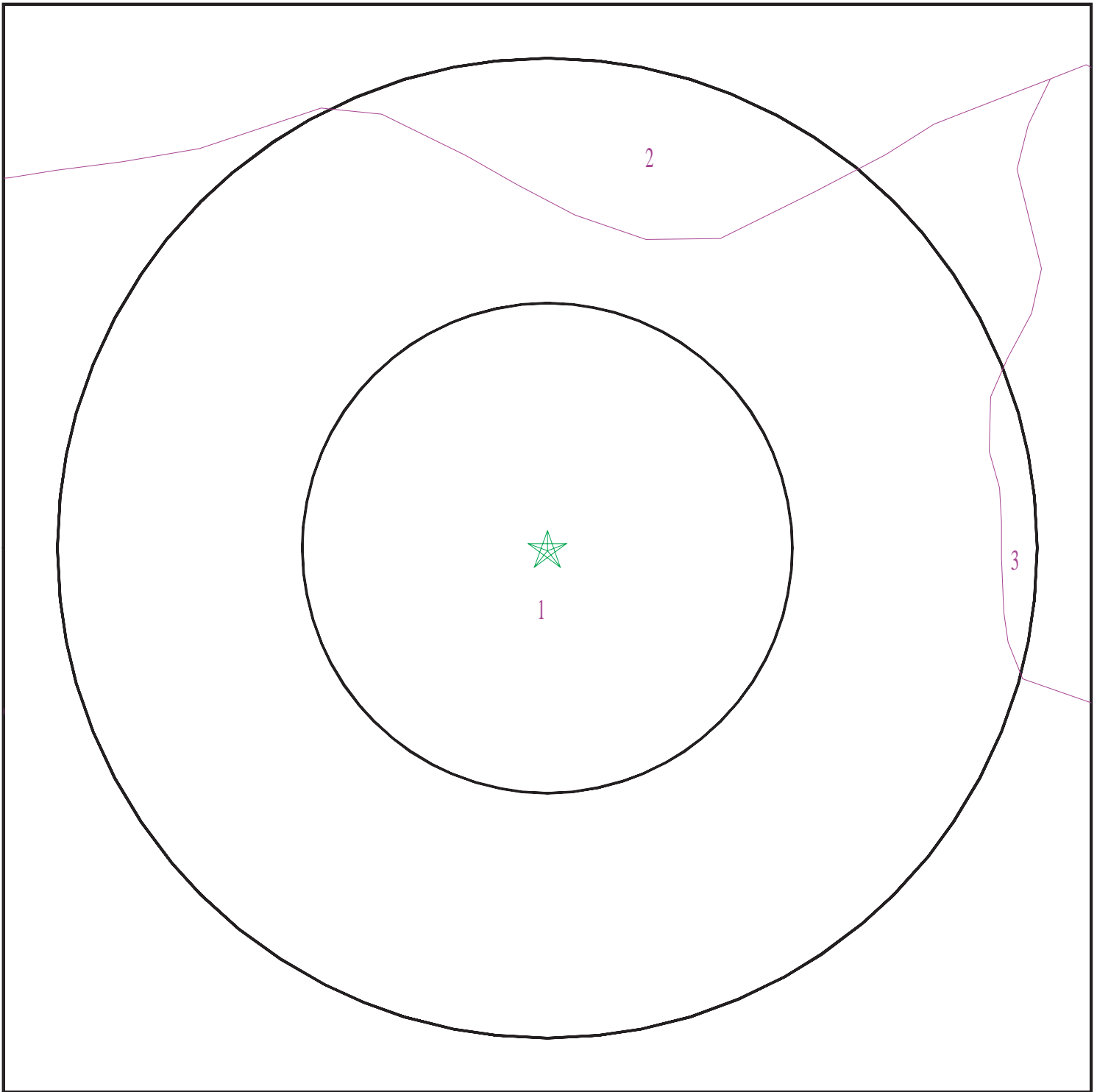
Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 6375198.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: APN 191-220-14, 191-220-59, and 191-220-60  
ADDRESS: 14101 S Manthey Rd  
Lathrop CA 95330  
LAT/LONG: 37.831922 / 121.294187

CLIENT: Partner Engineering and Science, Inc.  
CONTACT: Vanessa Pina  
INQUIRY #: 6375198.2s  
DATE: February 22, 2021 2:04 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: TINNIN

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	27 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 6.6
2	27 inches	53 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 6.6
3	53 inches	74 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 6.6

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 2

Soil Component Name: VERITAS

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	14 inches	53 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	53 inches	70 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

### Soil Map ID: 3

Soil Component Name: TIMOR

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Moderately well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	Not reported	Max: 0 Min: 0	Max: Min:
2	14 inches	55 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	Not reported	Max: 0 Min: 0	Max: Min:
3	55 inches	59 inches	cemented	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	Not reported	Max: 0 Min: 0	Max: Min:

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C10	USGS40000185865	1/4 - 1/2 Mile ENE
12	USGS40000185859	1/2 - 1 Mile East
E23	USGS40000185869	1/2 - 1 Mile NE
I30	USGS40000185871	1/2 - 1 Mile NE
K55	USGS40000185886	1/2 - 1 Mile NNE
59	USGS40000185889	1/2 - 1 Mile NNW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADWR0000027067	1/8 - 1/4 Mile ENE
2	CADWR8000036498	1/4 - 1/2 Mile WSW
3	CADWR0000017940	1/4 - 1/2 Mile West
A4	CADWR0000016754	1/4 - 1/2 Mile East
A5	CADWR0000024351	1/4 - 1/2 Mile East
A6	CADWR0000013241	1/4 - 1/2 Mile East
A7	CADWR0000031127	1/4 - 1/2 Mile East
B8	CADWR0000025128	1/4 - 1/2 Mile ESE
B9	CADWR0000032870	1/4 - 1/2 Mile ESE
C11	CADWR0000032311	1/4 - 1/2 Mile NE
13	CADWR0000023452	1/2 - 1 Mile SW
D14	CADWR0000027526	1/2 - 1 Mile SE
D15	CADWR0000013193	1/2 - 1 Mile SE
16	CADWR0000002948	1/2 - 1 Mile WSW
E17	CADWR0000010308	1/2 - 1 Mile NE
F18	CADDW0000009974	1/2 - 1 Mile SSW
F19	CADWR0000010223	1/2 - 1 Mile South
G20	CADWR0000016795	1/2 - 1 Mile South
G21	CADWR0000029118	1/2 - 1 Mile South
F22	2544	1/2 - 1 Mile SSW
E24	CAUSGSN00017867	1/2 - 1 Mile NE
H25	CAEDF0000121714	1/2 - 1 Mile SSE
G26	CAEDF0000131862	1/2 - 1 Mile SSE
G27	CAEDF0000075893	1/2 - 1 Mile SSE
I28	CADWR8000036523	1/2 - 1 Mile NNE
H29	CAEDF0000038893	1/2 - 1 Mile SSE
I31	CAUSGSN00007708	1/2 - 1 Mile NE
I32	CADWR8000036524	1/2 - 1 Mile NNE
33	CADWR0000035415	1/2 - 1 Mile SE
G34	CAEDF0000065305	1/2 - 1 Mile SSE
G35	CAEDF0000067104	1/2 - 1 Mile SSE

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
H36	CAEDF0000032977	1/2 - 1 Mile SSE
H37	CAEDF0000111402	1/2 - 1 Mile SSE
I38	CADWR0000017645	1/2 - 1 Mile NE
H39	CAEDF0000041270	1/2 - 1 Mile SSE
J40	CAEDF0000040225	1/2 - 1 Mile SSE
J41	CAEDF0000071668	1/2 - 1 Mile SSE
J42	CAEDF0000075724	1/2 - 1 Mile SSE
J43	CAEDF0000050998	1/2 - 1 Mile SSE
J44	CAEDF0000090253	1/2 - 1 Mile SSE
H45	CAEDF0000117387	1/2 - 1 Mile SSE
I46	CADWR0000014787	1/2 - 1 Mile NE
J47	CAEDF0000001283	1/2 - 1 Mile South
J48	CAEDF0000059684	1/2 - 1 Mile SSE
J49	CAEDF0000007187	1/2 - 1 Mile SSE
J50	CAEDF0000038509	1/2 - 1 Mile SSE
J51	CAEDF0000020729	1/2 - 1 Mile South
J52	CAEDF0000127134	1/2 - 1 Mile SSE
J53	CAEDF0000036881	1/2 - 1 Mile SSE
K54	CAUSGSN00012696	1/2 - 1 Mile NNE
L56	CAEDF0000110533	1/2 - 1 Mile South
L57	CAEDF0000137220	1/2 - 1 Mile South
L58	CAEDF0000061556	1/2 - 1 Mile South

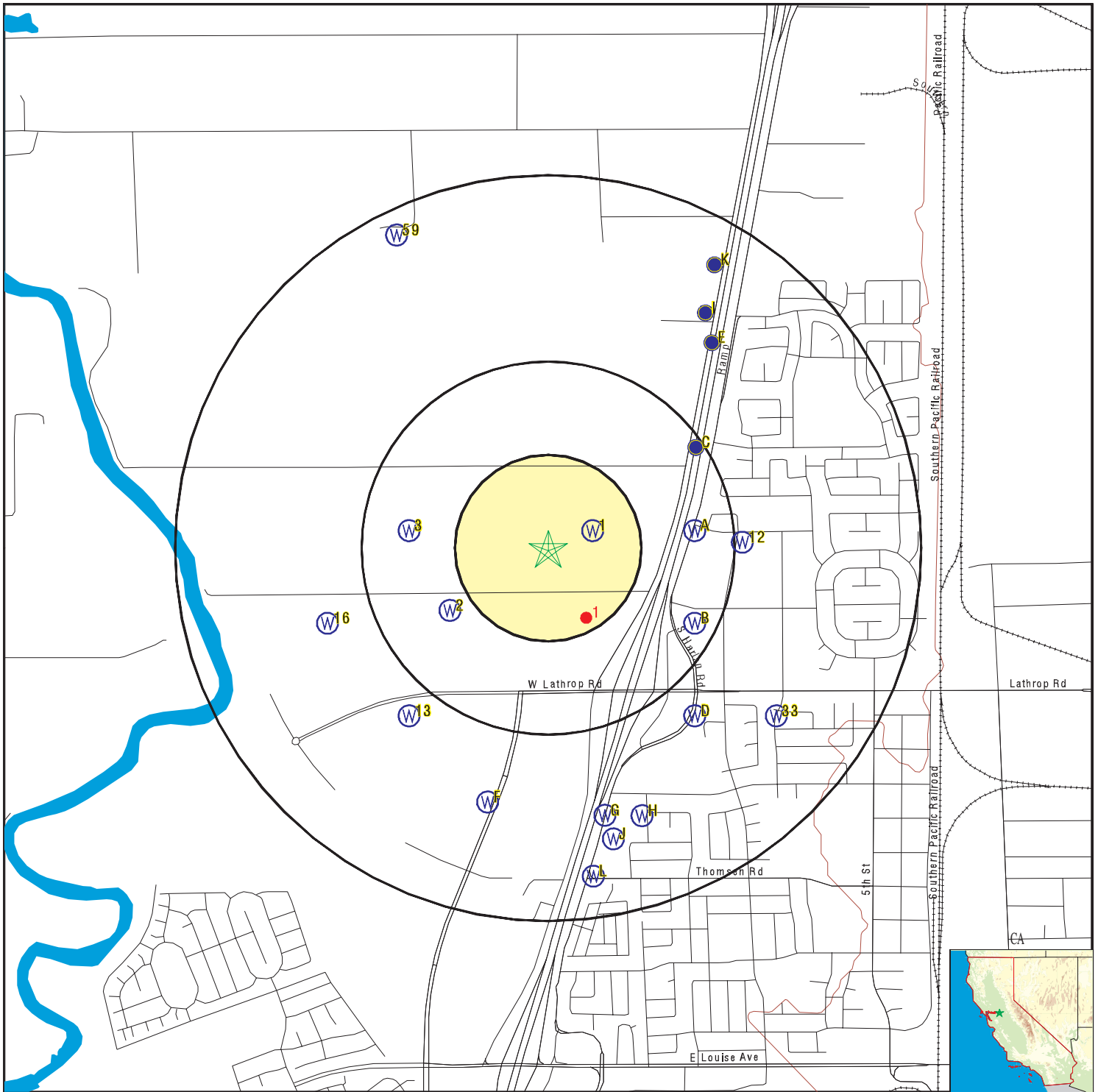
## OTHER STATE DATABASE INFORMATION

### STATE OIL/GAS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CAOG14000008237	1/8 - 1/4 Mile SSE



# PHYSICAL SETTING SOURCE MAP - 6375198.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: APN 191-220-14, 191-220-59, and 191-220-60  
 ADDRESS: 14101 S Manthey Rd  
 Lathrop CA 95330  
 LAT/LONG: 37.831922 / 121.294187

CLIENT: Partner Engineering and Science, Inc.  
 CONTACT: Vanessa Pina  
 INQUIRY #: 6375198.2s  
 DATE: February 22, 2021 2:04 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**1**  
**ENE**  
**1/8 - 1/4 Mile**  
**Higher**

**CA WELLS      CADWR0000027067**

Well ID:	01S06E23E001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23E001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23E001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23E001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**2**  
**WSW**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR8000036498**

State Well #:	01S06E22Q002M	Station ID:	3211
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	138
Basin Name:	Eastern San Joaquin	Well Completion Rpt #:	Not Reported

**3**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000017940**

Well ID:	01S06E22G001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E22G001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E22G001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E22G001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**A4**  
**East**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000016754**

Well ID:	01S06E23F003M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23F003M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23F003M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23F003M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A5**  
**East**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000024351**

Well ID:                      01S06E23F001M                      Well Type:                      UNK  
 Source:                      Department of Water Resources  
 Other Name:                01S06E23F001M                      GAMA PFAS Testing:              Not Reported  
 Groundwater Quality Data:    [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp\\_date=&global\\_id=&assigned\\_name=01S06E23F001M&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S06E23F001M&store_num=)  
 GeoTracker Data:              Not Reported

**A6**  
**East**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000013241**

Well ID:                      01S06E23F080M                      Well Type:                      UNK  
 Source:                      Department of Water Resources  
 Other Name:                01S06E23F080M                      GAMA PFAS Testing:              Not Reported  
 Groundwater Quality Data:    [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp\\_date=&global\\_id=&assigned\\_name=01S06E23F080M&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S06E23F080M&store_num=)  
 GeoTracker Data:              Not Reported

**A7**  
**East**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000031127**

Well ID:                      01S06E23F002M                      Well Type:                      UNK  
 Source:                      Department of Water Resources  
 Other Name:                01S06E23F002M                      GAMA PFAS Testing:              Not Reported  
 Groundwater Quality Data:    [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp\\_date=&global\\_id=&assigned\\_name=01S06E23F002M&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S06E23F002M&store_num=)  
 GeoTracker Data:              Not Reported

**B8**  
**ESE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000025128**

Well ID:                      01S06E23L002M                      Well Type:                      UNK  
 Source:                      Department of Water Resources  
 Other Name:                01S06E23L002M                      GAMA PFAS Testing:              Not Reported  
 Groundwater Quality Data:    [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp\\_date=&global\\_id=&assigned\\_name=01S06E23L002M&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S06E23L002M&store_num=)  
 GeoTracker Data:              Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**B9**  
**ESE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000032870**

Well ID:	01S06E23L001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23L001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23L001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23L001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**C10**  
**ENE**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000185865**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S006E23D001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19680328	Well Depth:	240
Well Depth Units:	ft	Well Hole Depth:	240
Well Hole Depth Units:	ft		

**C11**  
**NE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR0000032311**

Well ID:	01S06E23C001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23C001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23C001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23C001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**12**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000185859**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S006E23L002M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Date:	19520301	Well Depth:	84
Well Depth Units:	ft	Well Hole Depth:	120
Well Hole Depth Units:	ft		

**13  
SW  
1/2 - 1 Mile  
Higher**

**CA WELLS    CADWR0000023452**

Well ID:	01S06E22Q001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E22Q001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E22Q001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E22Q001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**D14  
SE  
1/2 - 1 Mile  
Higher**

**CA WELLS    CADWR0000027526**

Well ID:	01S06E23P002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23P002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23P002M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23P002M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**D15  
SE  
1/2 - 1 Mile  
Higher**

**CA WELLS    CADWR0000013193**

Well ID:	01S06E23P001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23P001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23P001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23P001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**16  
WSW  
1/2 - 1 Mile  
Lower**

**CA WELLS    CADWR0000002948**

Well ID:	01S06E22L001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E22L001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E22L001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E22L001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**E17**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000010308**

Well ID:	01S06E14P001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E14P001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E14P001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E14P001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**F18**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADDW0000009974**

Well ID:	3910023-002	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 02 - MHP NORTH WELL - ABANDONED		
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&amp;samp_date=&amp;global_id=&amp;assigned_name=3910023-002&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&amp;samp_date=&amp;global_id=&amp;assigned_name=3910023-002&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**F19**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000010223**

Well ID:	01S06E27A001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E27A001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E27A001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E27A001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**G20**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000016795**

Well ID:	01S06E26D001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E26D001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E26D001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E26D001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**G21**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000029118**

Well ID:	01S06E26D002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E26D002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E26D002M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E26D002M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**F22**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      2544**

Seq:	2544	Prim sta c:	02S/06E-10F01 M
Frds no:	3910023002	County:	39
District:	10	User id:	PTA
System no:	3910023	Water type:	G
Source nam:	WELL 02 - MHP NORTH WELL - ABANDONED		
Station ty:	WELL/AMBNT/MUN/INTAKE	Latitude:	374920.0
Longitude:	1211750.0	Precision:	3
Status:	AB	Comment 1:	Not Reported
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	3910023	System nam:	Oakwood Lake Water District
Hqname:	Not Reported	Address:	874 E. WOODWARD
City:	MANTECA	State:	CA
Zip:	95337	Zip ext:	Not Reported
Pop serv:	400	Connection:	435
Area serve:	OAKWOOD LAKE RESORT		

**E23**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000185869**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S006E23C002M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvial Fan Deposits	Aquifer Type:	Not Reported
Construction Date:	19680611	Well Depth:	184
Well Depth Units:	ft	Well Hole Depth:	203
Well Hole Depth Units:	ft		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**E24**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAUSGSN00017867**

Well ID:                      USGS-375024121170501                      Well Type:                      UNK  
 Source:                      United States Geological Survey  
 Other Name:                      USGS-375024121170501                      GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp\\_date=&global\\_id=&assigned\\_name=USGS-375024121170501&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-375024121170501&store_num=)  
 GeoTracker Data:                      Not Reported

**H25**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000121714**

Well ID:                      T0607700597-MWO-1                      Well Type:                      MONITORING  
 Source:                      EDF                      Other Name:                      MWO-1  
 GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0607700597&assigned\\_name=MWO-1&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607700597&assigned_name=MWO-1&store_num=)  
 GeoTracker Data:                      [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0607700597&assigned\\_name=MWO-1](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607700597&assigned_name=MWO-1)

**G26**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000131862**

Well ID:                      T0607700597-MW-15B                      Well Type:                      MONITORING  
 Source:                      EDF                      Other Name:                      MW-15B  
 GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0607700597&assigned\\_name=MW-15B&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607700597&assigned_name=MW-15B&store_num=)  
 GeoTracker Data:                      [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0607700597&assigned\\_name=MW-15B](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607700597&assigned_name=MW-15B)

**G27**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000075893**

Well ID:                      T0607700597-MW-15A                      Well Type:                      MONITORING  
 Source:                      EDF                      Other Name:                      MW-15A  
 GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0607700597&assigned\\_name=MW-15A&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607700597&assigned_name=MW-15A&store_num=)  
 GeoTracker Data:                      [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0607700597&assigned\\_name=MW-15A](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607700597&assigned_name=MW-15A)



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**I28**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR8000036523**

State Well #:	01S06E23C003M	Station ID:	3213
Well Name:	01S06E23C003M	Well Use:	Residential
Well Type:	Single Well	Well Depth:	145
Basin Name:	Eastern San Joaquin	Well Completion Rpt #:	086055

**H29**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000038893**

Well ID:	T0607700597-MWO-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MWO-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MWO-3&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MWO-3&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MWO-3">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MWO-3</a>		

**I30**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000185871**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S006E23C003M	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

**I31**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAUSGSN00007708**

Well ID:	USGS-375027121170701	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-375027121170701	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp;samp_date=&amp;global_id=&amp;assigned_name=USGS-375027121170701&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp;samp_date=&amp;global_id=&amp;assigned_name=USGS-375027121170701&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**I32**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR8000036524**

State Well #:	01S06E23C002M	Station ID:	3212
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	203
Basin Name:	Eastern San Joaquin	Well Completion Rpt #:	Not Reported

**33**  
**SE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000035415**

Well ID:	01S06E23Q001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23Q001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23Q001M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23Q001M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**G34**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000065305**

Well ID:	T0607700597-MW-13A/B	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13A/B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-13A/B&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-13A/B&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-13A/B">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-13A/B</a>		

**G35**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000067104**

Well ID:	T0607700597-MW-13C	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-13C&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-13C&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-13C">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-13C</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**H36**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000032977**

Well ID:	T0607700597-MW-14A	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-14A&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-14A&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-14A">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-14A</a>		

**H37**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000111402**

Well ID:	T0607700597-MW-14B	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-14B&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-14B&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-14B">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-14B</a>		

**I38**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000017645**

Well ID:	01S06E23C003M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23C003M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23C003M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23C003M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**H39**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000041270**

Well ID:	T0607700597-MWO-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MWO-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MWO-2&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MWO-2&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MWO-2">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MWO-2</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**J40**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000040225**

Well ID:	T0607700597-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-9&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-9&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-9">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-9</a>		

**J41**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000071668**

Well ID:	T0607700597-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-8&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-8&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-8">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-8</a>		

**J42**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000075724**

Well ID:	T0607700597-MW-12C	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12C
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-12C&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-12C&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-12C">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-12C</a>		

**J43**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000050998**

Well ID:	T0607700597-MWO-1X	Well Type:	MONITORING
Source:	EDF	Other Name:	MWO-1X
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MWO-1X&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MWO-1X&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MWO-1X">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MWO-1X</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**J44**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000090253**

Well ID:	T0607700597-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-2&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-2&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-2">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-2</a>		

**H45**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000117387**

Well ID:	T0607700597-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-11&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-11&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-11">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-11</a>		

**I46**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR0000014787**

Well ID:	01S06E23C002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01S06E23C002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23C002M&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&amp;samp_date=&amp;global_id=&amp;assigned_name=01S06E23C002M&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**J47**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000001283**

Well ID:	T0607700597-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-1&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-1&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-1">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-1</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**J48**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000059684**

Well ID:	T0607700597-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-3&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-3&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-3">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-3</a>		

**J49**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000007187**

Well ID:	T0607700597-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-7&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-7&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-7">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-7</a>		

**J50**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000038509**

Well ID:	T0607700597-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-10&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-10&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-10">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-10</a>		

**J51**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000020729**

Well ID:	T0607700597-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-6&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-6&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-6">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-6</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**J52**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000127134**

Well ID:	T0607700597-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-4&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-4&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-4">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-4</a>		

**J53**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000036881**

Well ID:	T0607700597-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-5&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607700597&amp;assigned_name=MW-5&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-5">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607700597&amp;assigned_name=MW-5</a>		

**K54**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAUSGSN00012696**

Well ID:	USGS-375035121170601	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-375035121170601	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp;samp_date=&amp;global_id=&amp;assigned_name=USGS-375035121170601&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp;samp_date=&amp;global_id=&amp;assigned_name=USGS-375035121170601&amp;store_num=</a>		
GeoTracker Data:	Not Reported		

**K55**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000185886**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S006E14P001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvial Fan Deposits	Aquifer Type:	Not Reported
Construction Date:	19740718	Well Depth:	233
Well Depth Units:	ft	Well Hole Depth:	233
Well Hole Depth Units:	ft		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels, Number of Measurements:	1	Level reading date:	1974-07-18
Feet below surface:	40.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**L56**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000110533**

Well ID:	T0607705881-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607705881&amp;assigned_name=MW-2&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607705881&amp;assigned_name=MW-2&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607705881&amp;assigned_name=MW-2">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607705881&amp;assigned_name=MW-2</a>		

**L57**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000137220**

Well ID:	T0607705881-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607705881&amp;assigned_name=MW-3&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607705881&amp;assigned_name=MW-3&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607705881&amp;assigned_name=MW-3">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607705881&amp;assigned_name=MW-3</a>		

**L58**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000061556**

Well ID:	T0607705881-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607705881&amp;assigned_name=MW-1&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0607705881&amp;assigned_name=MW-1&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607705881&amp;assigned_name=MW-1">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0607705881&amp;assigned_name=MW-1</a>		

**59**  
**NNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000185889**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center		
Monitor Location:	001S006E15P001M	HUC:	18040003
Description:	Not Reported		
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19760518	Well Depth:	182
Well Depth Units:	ft	Well Hole Depth:	200
Well Hole Depth Units:	ft		
Ground water levels, Number of Measurements:	1	Level reading date:	1976-05-18
Feet below surface:	25.00	Feet to sea level:	Not Reported
Note:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

---

1

SSE

1/8 - 1/4 Mile

OIL\_GAS

CAOG14000008237

API #: 0407700327  
Well Status: Plugged  
Lease Name: G.B. Unit 22  
Area Name: Any Area  
Confidential Well: N  
Spud Date: 07/11/1962

Well #: 1  
Well Type: Dry Hole  
Field Name: Any Field  
GIS Source: hud  
Directionally Drilled: N

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95330	2	0

Federal EPA Radon Zone for SAN JOAQUIN County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

---

### Federal Area Radon Information for SAN JOAQUIN COUNTY, CA

Number of sites tested: 20

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.530 pCi/L	90%	10%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.050 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

### Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

### California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

### California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

## RADON

### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

## STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

**APPENDIX D: QUALIFICATIONS/INSURANCE**

---

## Education

BA, Environmental Studies, University of California at Santa Barbara  
MBA, Finance and Marketing, Santa Clara University, Leavey School of Business, Santa Clara, CA

## Registrations

AHERA Asbestos Building Inspection Certification, State of California

## Highlights

24 years of experience in the environmental consulting/real estate due diligence industries  
19 years performing Phase Environmental Site Assessments; Transaction Screen Assessments; Environmental Desktop Reports; Asbestos Surveys; HUD Phase I Environmental Site Assessments; Freddie Mac and Fannie Mae Phase I Environmental Site Assessments; and Radon Testing

## Experience Summary

Beginning in the early 1990s, Mr. Olsen worked for various San Jose based environmental firms as a research analyst, gathering government agency, historical research and geologic information utilized in ESAs. In the late 1990s through early 2000s he managed the day-to-day operations of a team of research analyst and GIS related research and projects. From the early 2000s through the present, Mr. Olsen has been conducting and performing Phase I ESAs and subsurface investigations for various national environmental consulting firms.

## Project Experience

*Westfield Oakridge Shopping Mall.* Mr. Olsen conducted a Phase I Environmental Site Assessments on a 1.2 million square foot Westfield Shoppingtown mall (Oakridge Mall, San Jose, California)

*Humboldt Redwood Company.* Mr. Olsen conducted a Phase I Environmental Site Assessments on a 660-acre Humboldt Redwood Company lumber mill, co-generation plant and maintenance facility, along with 207,000 acres of timberland (Scotia, California)

*Talavera.* Mr. Olsen conducted a Freddie Mac Phase I Environmental Site Assessments on a 350-unit multi-family residential apartment facility (Las Vegas, Nevada)

*Automobile Dealership Portfolio.* Mr. Olsen recently conducted seven (7) Phase I Environmental Site Assessments on automobile dealerships/service facilities (San Jose, Newark, Pleasanton, Colma and Hayward, California)

*Greka Energy.* Mr. Olsen conducted a Phase I Environmental Site Assessment on an asphalt and crude oil refinery (Santa Maria, California)



## **Education**

Bachelor of Arts in Biological Sciences and Minor in Energy and Water Sustainability, Rice University, Houston, TX

## **Training**

24 Hour Asbestos Training Course

## **Highlights**

5+ years performing environmental due diligence assessments  
Phase I Environmental Site Assessments  
HUD Phase I Environmental Site Assessments  
Transaction Screen Assessments  
Environmental Desktop Reports  
Limited Naturally Occurring Radioactive Material (NORM) Surveys

## **Experience Summary**

Ms. Plymell currently holds the role of a Project Assessor and her responsibilities include thorough site assessment and technical report writing in line with the American Society of Testing and Materials (ASTM) standard and US Environmental Protection Agency's All Appropriate Inquiry (AAI), as well as customized client formats. In addition, Ms. Plymell performs limited asbestos surveys and radon testing as required per scope of work.

Ms. Plymell has worked on numerous large scope projects located throughout the Houston Area and surrounding cities with known historical environmental concerns. Ms. Plymell works closely with state and local regulatory agencies to obtain environmentally significant documents regarding current and former underground storage tanks, subsurface investigations performed onsite, current or former dry cleaning facilities, and more. Ms. Plymell is persistent, timely as well as client conscientious.

Ms. Plymell has worked on numerous sites occupied by machine shops, auto repair facilities, car dealerships, manufacturing plants, distribution facilities, and commercial strip centers. Her knowledge of the due diligence industry is a proven asset in identifying potential environmental hazards.

Ms. Plymell is Freddie Mac Qualified to do Phase I Environmental Site Assessments (ESA).

## **Project Experience**

Ms. Plymell has over five years of experience performing due diligence assessments for a variety of property types including multi-family residences, commercial office buildings, retail shopping centers, machine shops, auto repair facilities, distribution facilities, and more. For each assessment she performs, she reviews the condition of the building structure and systems and develops a thorough report.

*Two Business Parks, San Antonio, Texas.* Ms. Plymell performed a Phase I Environmental Site Assessment on a 20-acre business park constructed on a landfill with a methane recovery system and onsite monitoring wells.

*The Sam Houston Hotel, Houston, Texas.* Ms. Plymell performed a Phase I Environmental Assessment on a full service hotel with 100 guest rooms located in the heart of historic Downtown Houston.

*Steel Fabrication Facilities, Splendora, Texas and Elmendorf, Texas.* Ms. Plymell performed Phase I Environmental Site Assessments on active industrial steel fabrication facilities.

*Crude Transloading, Rail Car Storage, and Frac Sand Storage, New Town, North Dakota.* Ms. Plymell performed Phase I Environmental Site Assessment on a 200-acre site with crude oil transloading (18-wheeler and pipeline to rail), clean fracturing (frac) sand transloading (rail to 18-wheeler), and rail car storage on railroad spurs.

*RV Resort, etc., Elmendorf, Texas.* Ms. Plymell performed a Phase I Environmental Site Assessment on a 50+ acre site which consisted of a RV Resort with associated buildings, community center, small business park, event space, and RV and Boat Storage.

*Pipe Yard, Bryan, Texas.* Ms. Plymell performed a client-specific environmental site assessment called an Exit Audit and limited NORM survey on an active pipe yard.

*Multi-Family Apartment Complexes, Houston, Texas.* Ms. Plymell performed Environmental Site Assessments on two 1,000+ unit apartment complexes.

*Formerly Single-Family Residential, Houston, Texas.* Ms. Plymell performed a HUD Phase I Environmental Site Assessment on lot with a vacant single-family residence.

### Contact

[jpymell@partneresi.com](mailto:jpymell@partneresi.com)

## Education

B.S. in Environmental Technology, North Carolina State University

## Registrations

North Carolina-Licensed Asbestos Inspector (No.12453)

South Carolina-Licensed Asbestos Inspector (No. BI-00537)

## Training

AHERA Certified Asbestos Building Inspector

OSHA 40-hour HAZWOPER Certification

OSHA 8-hour HAZWOPER Annual Refresher

Structural Pest Control Board of California Branch III Technical Training, Certificate

Fannie Mae Property Condition Assessment Training, Certificate

## Highlights

Over 11 years in the environmental and engineering consulting industry

Principal of Partner Engineering and Science, Inc. (Partner)

Client Manager at Partner Engineering and Science, Inc. (Partner)

## Experience Summary

Mr. Chang currently serves as a Client Manager for Partner providing solutions to clients' due diligence and engineering needs. He is responsible for account development and management and for ensuring consistency, quality, and on-time delivery of due diligence and engineering services provided by Partner. Mr. Chang has extensive experience managing all aspects of due diligence, specializing in environmental and engineering due diligence, for nationwide and local clients such as:

- Residential Developers
- Commercial Developers
- Mortgage Brokers
- Real Estate Brokers
- Individual Property Owners and Buyers
- Institutional Investors
- REITS
- Financial Institutions including:
  - Portfolio Lenders
  - SBA Lenders
  - HUD Lenders
  - Fannie Mae Lenders
  - Freddie Mac Lenders
  - Private Equity Funds
  - Insurance Lenders

Mr. Chang has been personally involved in the details of over 5,000 real estate transactions for various client types and therefore understands the specific needs and scopes of work required for the different parties involved in the transaction. Mr. Chang has served as an environmental scientist, project manager, senior author, or client manager for projects associated with thousands of real estate transactions. Mr. Chang is familiar with the due diligence requirements of a varied number of reporting standards, including the current standard ASTM E1527-13, EPA's All Appropriate Inquiry (AAI). Mr. Chang has extensive knowledge of the specialized requirements of Fannie Mae and Freddie Mac. He also has experience with fulfilling and designing numerous customized client scopes of work including institutional level assessments.

Mr. Chang's due diligence resume includes experience at all levels, advising lenders and real estate investors through the following product types:

- Phase I Environmental Site Assessments
- Phase II Subsurface Investigations
- Phase III Site Characterizations
- Remedial Cost Estimates
- Remediation Design and Implementation
- Environmental Transaction Screens
- Property Condition Assessments
- Probable Maximum Loss Assessments
- Property Condition Evaluations
- Industrial Hygiene Evaluations

Specifically, Mr. Chang has performed Phase I Environmental Site Assessments, Environmental Transaction Screens, Phase II and III Subsurface Investigations, Underground Storage Tank Removals, Property Condition Assessments (PCAs), Small Loan PCAs, Regulatory Compliance Assessments, Asbestos Surveys, Lead-based Paint Surveys, Radon Studies, Mold Assessments and Lead-in-water sampling and analysis.

### **Project Experience**

*Confidential Investor, Various Locations, South Eastern United States.* Client Manager for Phase I ESAs and Property Condition Assessments for the acquisition of a 62-building office portfolio that included 6.9 MM square feet for over \$1 Billion.

*Confidential Auto Repair Client, Various Locations, United States.* Project Manager and Senior Reviewer for Phase I ESAs of an acquisition of 66 automotive repair facilities across the United States.

*Plum Creek Timberland, Eastern North Carolina.* Conducted site reconnaissance, aerial photograph review, regulatory agency database review, meeting with owner's representatives, historical research, and report preparation for approximately 55,000 acres of timberland located throughout eastern North Carolina using the ASTM E 2247-02 Standard.

*Confidential Client, Marion, North Carolina.* Project Manager and site assessor for a Phase I ESA and Compliance Audit for an approximately 70,000 square foot metal plating facility.

*Equity Office Portfolio, Various Locations, United States.* Site assessor for equity-level PCAs of 13 office buildings in Colorado and California ranging from four- to 16-stories and associated parking garages. The buildings contained a total of approximately 2.9 million square feet of office and support space. The assessments included the use of specialists including mechanical and electrical engineers.

*Genworth Financial, Various Locations, United States.* Site assessor for numerous commercial properties including: office buildings, apartments, shopping centers, restaurants, and warehouses ranging in-size from 3,000 square feet to greater than 100,000 square feet.

*Dry-Cleaning Solvent Clean-up Act Program, North Carolina.* Project manager for DENR enforced assessment of VOC-affected groundwater beneath Dry Cleaning sites within the state of North Carolina.

Projects have involved both soil and groundwater assessment activities to define onsite soil source areas and onsite/offsite groundwater plumes. Activities are currently ongoing.

*Asbestos Surveys, Various Locations.* Conducted bulk sample collection, report preparation and abatement oversight for private and municipal clients in North Carolina and South Carolina.

*SPCC Plans, Various Locations.* Conducted site reconnaissance and report preparation of multiple spill prevention control and countermeasure (SPCC) plans for government and industrial clients. Additionally, prepared and conducted initial training session for SPCC plans.

*Environmental Compliance, Various Locations.* Conducted environmental compliance audits, prepared waste stream determination profiles, and updated environmental compliance manuals with federal, state and local regulations for terminal trucking facilities throughout the east coast. Managed Environmental, Health and Safety audits at facilities throughout the US. Managed the preparation of SWPPPs, submittal of NOIs, and certificate of no exposures throughout the southeast.

*Petroleum Impacted Sites, Various Locations.* Remedial activities on petroleum impacted sites including refineries, bulk storage plants, and retail stations. Activities include; remediation system installation and O&M, monitor well installation, underground storage tank removal, and other tasks.

### **Affiliations**

Member, Urban Land Institute

Member, Commercial Real Estate Women

### **Speaking**

Bisnow Conference Series Moderator

### **Publications**

*Should You Pick a Freddie or Fannie Report?* GlobeSt.com, February 21, 2014.

### **Contact**

mchang@partneresi.com



# PARTNER

## SHALLOW SOIL INVESTIGATION REPORT

**APNs 192-020-140-000, 192-020-590-000, and 192-020-600-000**  
Lathrop, California 95330

May 27, 2021  
Partner Project Number: 21-308862.2

Prepared for:

**HMC Construction, Inc.**

1461 East Cooley Drive, #230  
Colton, California 92324



Engineers who understand your business

May 27, 2021

Sean Asmus  
HMC Construction, Inc.  
1461 East Cooley Drive, #230  
Colton, California 92324

Subject: Shallow Soil Investigation Report  
APNs 192-020-140-000, 192-020-590-000, and 192-020-600-000  
Lathrop, California 95330  
Partner Project Number: 21-308862.2

Dear Mr. Asmus:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed at the above-referenced property. The following report describes the field activities, methods, and findings of the Shallow Soil Investigation conducted at the above-referenced property.

This assessment was performed consistent with acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Michael Chang at (704) 994-8423.

Sincerely,

**Partner Engineering and Science, Inc.**

**DRAFT**  
Nate Maroon  
Project Scientist

**DRAFT**  
Michel Helou  
Project Scientist

**DRAFT**  
Joe Mangine, PG  
Senior Project Manager

**DRAFT**  
Michael Chang  
Principal



# TABLE OF CONTENTS

---

<b>1.0</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Purpose .....	1
1.2	Limitations .....	1
1.3	User Reliance .....	1
<b>2.0</b>	<b>Site Background.....</b>	<b>2</b>
2.1	Site Description.....	2
2.2	Site History .....	2
2.3	Geology.....	2
<b>3.0</b>	<b>Field Activities .....</b>	<b>3</b>
3.1	Preparatory Activities.....	3
3.1.1	Health and Safety Plan.....	3
3.2	Sampling Equipment .....	3
3.3	Sample Locations .....	3
3.4	Soil Sampling .....	3
3.5	Post-Sampling Activities.....	3
<b>4.0</b>	<b>Data Analysis.....</b>	<b>4</b>
4.1	Laboratory Analysis .....	4
4.2	Regulatory Agency Comparison Criteria .....	4
4.3	Soil Sample Data Analysis.....	4
4.4	Discussion .....	4
<b>5.0</b>	<b>Summary and Conclusions.....</b>	<b>6</b>

## ATTACHMENTS

Tables	1. Summary of Investigation Scope
	2. Soil Sample Lead Laboratory Results
Figures	1. Site Vicinity Map
	2. Topographic Map
	3. Sample Location Map
Appendix	A. Laboratory Analytical Report

# 1.0 INTRODUCTION

---

## 1.1 Purpose

The purpose of the investigation was to evaluate the potential impact of organochlorine pesticides (OCPs), arsenic, and/or lead to shallow soil as a consequence of a release or releases from historical on-site agricultural-related uses. HMC Construction, Inc. provided project authorization of Partner Proposal Number P21-308862.2.

## 1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third-party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. It cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

## 1.3 User Reliance

Partner was engaged by HMC Construction, Inc. (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted Partner's standard Terms and Conditions, a copy of which can be found at <http://www.partneresi.com/terms-and-conditions.php>.

## 2.0 SITE BACKGROUND

---

### 2.1 Site Description

The subject property consists of three parcels of land comprising 126.29 acres located on the north side of Spartan Way, east and west sides of Golden Valley Parkway, west side of Manthey Road, and north and south sides of Don Reis Road within a mixed residential, commercial, and agricultural area of Lathrop, San Joaquin County, California. The subject property is currently vacant land with no on-site operations and no permanent structures. Soil piles, wood piles, and agricultural equipment exists on the subject property.

The subject property is bound by agricultural properties to the north, commercial properties to the east across South Manthey Road and Highway 5, residential and agricultural properties to the south across Spartan Way, and commercial and agricultural properties to the west. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

### 2.2 Site History

Partner completed a *Draft Phase I Environmental Site Assessment Report* (Phase I) for the subject property, dated March 8, 2021, on behalf of Hodgdon Group Realty, Inc. According to the reviewed historical sources, the subject property was formerly developed with a residential-type building, outbuildings, and agricultural land from at least 1915 to 1968; agricultural land from at least 1975 to 1993; agricultural land and vacant cleared land *circa* 2006; and vacant land since at least 2009.

The subject property has been used for agricultural purposes from at least 1915 until 2006. Since portions of the subject property parcel were historically used for agricultural purposes, there is a potential that agricultural related chemicals including pesticides, herbicides, and fertilizers may have been used and stored on-site.

### 2.3 Geology

Review of the United States Geological Survey (USGS) *Lathrop, California* Quadrangle topographic map, indicates the subject property is situated at elevations ranging from approximately 24 to 12 feet above mean sea level, and the local topography is sloping gently to the south-southwest. Refer to Figure 2 for a topographic map of the site vicinity.

The subject property is situated within the Central Valley physiographic province of the State of California. The uppermost geologic formation underlying the soils at the subject property is the Pleistocene and Holocene Age San Joaquin Valley formation. The San Joaquin Valley formation comprises the underlying stratigraphy and consists mostly of igneous, metamorphic and unconsolidated marine sediment deposits.

Based on shallow soil samples collected during this investigation, the underlying subsurface consists predominantly of gravelly silty sand from the ground surface to approximately one foot below ground surface (bgs).

## 3.0 FIELD ACTIVITIES

---

The Shallow Soil Investigation scope included the collection of 120 shallow soil samples (SS-1 through SS-120) throughout the subject property parcels which were also composited into 30 samples as determined using the Department of Toxic Substances Control (DTSC) 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)*. Refer to Table 1 for a summary of the soil samples, sampling schedule, and laboratory analyses for this investigation.

### 3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

#### 3.1.1 Health and Safety Plan

Partner prepared a site-specific Health and Safety Plan, which was reviewed with on-site personnel involved in the project prior to the commencement of sampling activities.

### 3.2 Sampling Equipment

On May 12, 2021, Partner collected shallow soil samples at the subject property using a hand trowel and shovel. Sampling equipment was decontaminated between sample locations to prevent cross-contamination.

### 3.3 Sample Locations

Shallow soil samples SS-1 through SS-120 were collected from representative and equally distributed locations throughout the subject property parcels. Discrete soil samples were composited based on relative proximity to one another.

Refer to Figure 3 for a map indicating sample locations.

### 3.4 Soil Sampling

The subject property was divided into evenly-sized subareas and discrete representative soil samples were collected from within each subarea. Each soil sample was collected from a depth of six inches below ground surface (bgs) and transferred into a laboratory-provided eight-ounce, wide-mouthed, unpreserved glass jar, which was sealed with a threaded, Teflon-lined lid. The jars were labeled for identification and stored in an iced cooler.

Following the collection of the 120 discrete soil samples, 30 representative composite samples were compiled at the laboratory from the available soil samples.

### 3.5 Post-Sampling Activities

No significant amounts of derived wastes were generated during this investigation.

## 4.0 DATA ANALYSIS

---

### 4.1 Laboratory Analysis

Partner collected 120 shallow soil samples on May 12, 2021, which were transported in an iced cooler under chain-of-custody protocol to SunStar Laboratories Inc., a state-certified laboratory [California Department of Public Health Environmental Laboratory Accreditation Program certificate number 2250] in the City of Lake Forest, California, for analysis. A total of 30 composite samples were analyzed for OCPs via Environmental Protection Agency (EPA) Method 8081. Additionally, 30 discrete soil samples were analyzed for arsenic and lead via EPA Method 6010B.

Laboratory analytical results are included in Appendix A and discussed below.

### 4.2 Regulatory Agency Comparison Criteria

#### *Environmental Screening Levels – 2019*

The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) has established Environmental Screening Levels (ESLs) as an initial screening level evaluation. ESLs aid in assessing the potential threats to human health, terrestrial/aquatic habitats, and/or drinking water resources due to contaminants in soil, soil gas, and/or groundwater. Under most circumstances, the presence of contamination below applicable ESLs can be assumed to not pose a significant, chronic (i.e., long-term) adverse risk to the applicable receptor of concern. Conversely, sites that exceed ESLs generally require further evaluation and/or remediation. Please note that the ESLs were developed using default assumptions (e.g., standard exposure factors) and, consequently, are only meant for screening level assessments. The ESLs should not be considered enforceable regulatory standards. Cleanup levels ultimately dependent on site-specific factors and are established by the regulatory agencies on a case-by-case basis.

### 4.3 Soil Sample Data Analysis

None of the analyzed composite soil samples contained detectable concentrations of OCPs above respective laboratory reporting limits (RLs), and the RLs are below applicable ESLs.

None of the analyzed discrete soil samples contained detectable concentrations of arsenic above the laboratory RL, and the RL is below the applicable ESL and/or background concentration.

Lead was detected in discrete soil samples SS-7 and SS-20 at concentrations of 4.89 and 4.38 milligrams per kilogram (mg/kg), respectively. However, both of these detections are below the residential ESL of 80 mg/kg and commercial ESL of 320 mg/kg and are likely representative of background conditions. None of the other analyzed discrete soil samples contained concentrations of lead above the laboratory RL.

Refer to Table 2 for a summary of the soil sample lead laboratory analysis results.

### 4.4 Discussion

Based on the results, low concentrations of lead were detected in localized areas of the northern parcel (APN 192-020-140). Lead was detected in two discrete soil samples; however, the detections do not exceed residential or commercial screening criteria and are likely representative of background conditions. As such,

the identified lead impacts in soil do not represent a significant risk to human health or the environment at this time.

## 5.0 SUMMARY AND CONCLUSIONS

---

Partner conducted a Shallow Soil Investigation at the subject property to evaluate the potential impact of OCPs, arsenic, and/or lead to shallow soil as a consequence of a release or releases from historical on-site agricultural-related uses. The scope of the Shallow Soil Investigation included the collection of 120 discrete soil samples. A total of 30 composite soil samples were analyzed for OCPs and 30 discrete soil samples were analyzed for arsenic and lead.

Subsurface lithology encountered in the upper one foot consisted predominately of gravelly silty sand.

None of the analyzed soil samples contained detectable concentrations of OCPs, lead, or arsenic above residential and/or commercial screening criteria and/or background levels.

Based on the results of the Shallow Soil Investigation, low concentrations of lead were detected in localized areas of the northern parcel (APN 192-020-140). Lead was detected in two discrete soil samples; however, the detections do not exceed residential or commercial screening criteria and are likely representative of background conditions. As such, the identified lead impacts in soil do not represent a significant risk to human health or the environment.

Partner recommends no further investigation with respect to the historical on-site agricultural-related uses at this time.

## **TABLES**

---



Table 1: Summary of Investigation Scope  
 APNs 192-020-140-000, 192-020-590-000, and 192-020-600-000  
 Lathrop, California 95330  
 Partner Project Number 21-308862.2  
 May 12, 2021

Sample Identification	REC/Issue	Location	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
SS-2, SS-7, SS-10, SS-13, SS-20, SS-25, SS-32, SS-36, SS-38, SS-44, SS-46, SS-49, SS-56, SS-61, SS-65, SS-69	Historical on-site agricultural-related uses	Throughout APN 192-020-140-000	Soil	0.5	Arsenic, Lead
Composites (SS-1 through SS-70)	Historical on-site agricultural-related uses	Throughout APN 192-020-140-000	Soil	0.5	OCPs
SS-71, SS-77, SS-81, SS-87, SS-92, SS-95, SS-97, SS-102, SS-105, SS-109, SS-113	Historical on-site agricultural-related uses	Throughout APN 192-020-600-000	Soil	0.5	Arsenic, Lead
Composites (SS-71 through SS-115)	Historical on-site agricultural-related uses	Throughout APN 192-020-600-000	Soil	0.5	OCPs
SS-118	Historical on-site agricultural-related uses	Throughout APN 192-020-590-000	Soil	0.5	Arsenic, Lead
Composites (SS-116 through SS-120)	Historical on-site agricultural-related uses	Throughout APN 192-020-590-000	Soil	0.5	OCPs

Notes:

\*Discrete sampling depths analyzed for arsenic and lead via United States Environmental Protection Agency (EPA) Method 6010. Composite samples analyzed for organochlorine pesticides (OCPs) via EPA Method 8081.

REC = recognized environmental condition

bgs = below ground surface

Table 2: Soil Sample Lead Laboratory Results (mg/kg)  
 APNs 192-020-140-000, 192-020-590-000, and 192-020-600-000  
 Lathrop, California 95330  
 Partner Project Number 21-308862.2  
 May 12, 2021

Element	Residential ESL	Commercial/ Industrial ESL	Background Concentrations*	SS-7	SS-20	SS-2, SS-10, SS-13, SS-22, SS-25, SS-32, SS-36, SS-38, SS-44, SS-46, SS-49, SS-56, SS-60, SS-61 SS-65, SS-69, SS-71, SS-77, SS-81, SS-87, SS-92, SS-95, SS-97, SS-102, SS-105, SS-109, SS-113, SS-118
Lead (Pb)	80	320	10.1 - 37.7	4.89	4.38	<3

Notes:

\*From Kearney Foundation of Soil Science March 1996 report *Background Concentrations of Trace and Major Elements in California Soils*. Background concentrations of metals are considered to be within one standard deviation from the mean metal concentrations determined by the study. Concentrations indicated in milligrams per kilogram (mg/kg).

ESL = Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board - 2019) for evaluation of direct exposure human health risk, Table S-1

< = not detected above indicated laboratory Reporting Limits (RLs)

Values in bold exceed laboratory RLs

## FIGURES

---

**PARTNER**



890 445 0 890 1,780  
 Approximate Scale: 1" = 1,780'

**PARTNER**  
 1017 22nd Avenue, Suite 107  
 Oakland, California 94606  
 Project Number: 21-308862.2



Subject Property

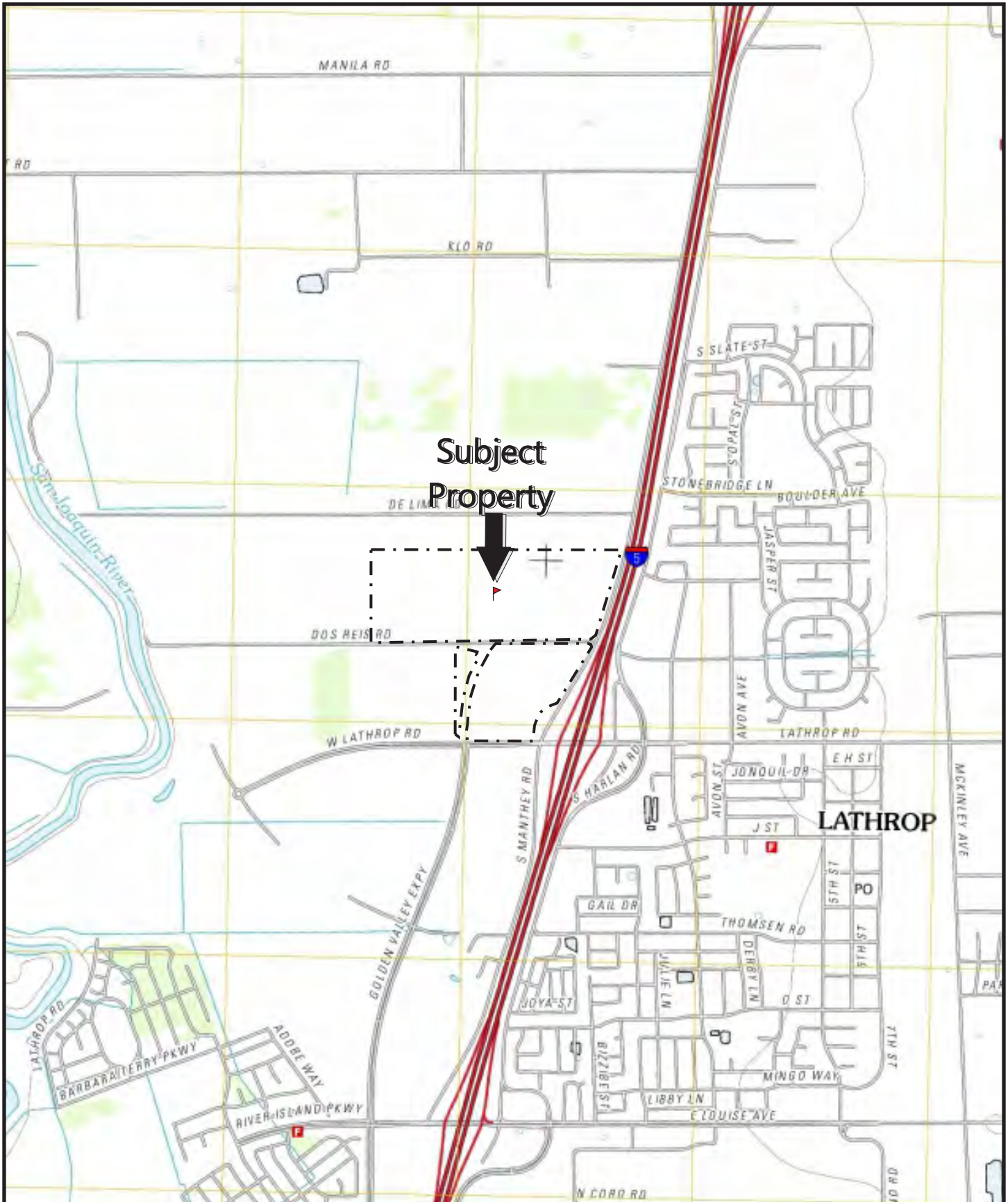


**Legend**

**Site Vicinity Map**

Figure	Prepared By	Date
1	M. Helou	May 2021

APNs 192-020-140-000, 192-020-590-000, & 192-020-600-000, Lathrop, California 95330



**PARTNER**

1017 22nd Avenue, Suite 107  
Oakland, California 94606

Project Number: 21-308862.2



USGS Lathrop, California Quadrangle  
Version: 2012

**Topographic Map**




Figure	Prepared By	Date
2	M. Helou	May 2021

APNs 192-020-140-000, 192-020-590-000, & 192-020-600-000, Lathrop, California 95330



**PARTNER**  
 1017 22nd Avenue, Suite 107  
 Oakland, California 94606  
 Project Number: 21-308862.2

**Legend**

- Subject Property 
- Shallow Soil Sample Location 
- Composite 

Sample Location Map		
Figure	Prepared By	Date
3	M. Helou	May 2021
APNs 192-020-140-000, 192-020-590-000, & 192-020-600-000, Lathrop, California 95330		

## **APPENDIX A: LABORATORY ANALYTICAL REPORT**

---

**PARTNER**



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

21 May 2021

Joe Mangine  
Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland, CA 94606  
RE: APN 191-220-14, 191-220-59 + 191-220-60

Enclosed are the results of analyses for samples received by the laboratory on 05/14/21 08:43. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi  
Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-2	T211631-02	Soil	05/12/21 00:00	05/14/21 08:43
SS-7	T211631-07	Soil	05/12/21 00:00	05/14/21 08:43
SS-10	T211631-10	Soil	05/12/21 00:00	05/14/21 08:43
SS-13	T211631-13	Soil	05/12/21 00:00	05/14/21 08:43
SS-20	T211631-20	Soil	05/12/21 00:00	05/14/21 08:43
SS-22	T211631-22	Soil	05/12/21 00:00	05/14/21 08:43
SS-25	T211631-25	Soil	05/12/21 00:00	05/14/21 08:43
SS-32	T211631-32	Soil	05/12/21 00:00	05/14/21 08:43
SS-36	T211631-36	Soil	05/12/21 00:00	05/14/21 08:43
SS-38	T211631-38	Soil	05/12/21 00:00	05/14/21 08:43
SS-44	T211631-44	Soil	05/12/21 00:00	05/14/21 08:43
SS-46	T211631-46	Soil	05/12/21 00:00	05/14/21 08:43
SS-49	T211631-49	Soil	05/12/21 00:00	05/14/21 08:43
SS-56	T211631-56	Soil	05/12/21 00:00	05/14/21 08:43
SS-60	T211631-60	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-1 - SS-4	T211631-61	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-5 - SS-8	T211631-62	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-9 - SS-12	T211631-63	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-13 - SS-16	T211631-64	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-17 - SS-20	T211631-65	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-21 - SS-24	T211631-66	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-25 - SS-28	T211631-67	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-29 - SS-32	T211631-68	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-33 - SS-36	T211631-69	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-37 - SS-40	T211631-70	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-41 - SS-44	T211631-71	Soil	05/12/21 00:00	05/14/21 08:43

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Composite 4:1 SS-45- SS-48	T211631-72	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-49- SS-52	T211631-73	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-53- SS-56	T211631-74	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-57- SS-60	T211631-75	Soil	05/12/21 00:00	05/14/21 08:43
SS-61	T211632-01	Soil	05/12/21 00:00	05/14/21 08:43
SS-65	T211632-05	Soil	05/12/21 00:00	05/14/21 08:43
SS-69	T211632-09	Soil	05/12/21 00:00	05/14/21 08:43
SS-71	T211632-11	Soil	05/12/21 00:00	05/14/21 08:43
SS-77	T211632-17	Soil	05/12/21 00:00	05/14/21 08:43
SS-81	T211632-21	Soil	05/12/21 00:00	05/14/21 08:43
SS-87	T211632-27	Soil	05/12/21 00:00	05/14/21 08:43
SS-92	T211632-32	Soil	05/12/21 00:00	05/14/21 08:43
SS-95	T211632-35	Soil	05/12/21 00:00	05/14/21 08:43
SS-97	T211632-37	Soil	05/12/21 00:00	05/14/21 08:43
SS-102	T211632-42	Soil	05/12/21 00:00	05/14/21 08:43
SS-105	T211632-45	Soil	05/12/21 00:00	05/14/21 08:43
SS-109	T211632-49	Soil	05/12/21 00:00	05/14/21 08:43
SS-113	T211632-53	Soil	05/12/21 00:00	05/14/21 08:43
SS-118	T211632-58	Soil	05/12/21 00:00	05/14/21 08:43
Composite 2:1 SS-61 - SS-62	T211632-61	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-63 - SS-66	T211632-62	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-67 - SS-70	T211632-63	Soil	05/12/21 00:00	05/14/21 08:43
Composite 5:1 SS-71- SS-75	T211632-64	Soil	05/12/21 00:00	05/14/21 08:43
Composite 5:1 SS-76- SS-80	T211632-65	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-81- SS-84	T211632-66	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-85- SS-88	T211632-67	Soil	05/12/21 00:00	05/14/21 08:43

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

**Reported:**  
 05/21/21 14:25

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Composite 4:1 SS-89- SS-92	T211632-68	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-93- SS-96	T211632-69	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-97- SS-100	T211632-70	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-101- SS-104	T211632-71	Soil	05/12/21 00:00	05/14/21 08:43
Composite 3:1 SS-105- SS-107	T211632-72	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-108- SS-111	T211632-73	Soil	05/12/21 00:00	05/14/21 08:43
Composite 4:1 SS-112 - SS-115	T211632-74	Soil	05/12/21 00:00	05/14/21 08:43
Composite 5:1 SS-116 - SS-120	T211632-75	Soil	05/12/21 00:00	05/14/21 08:43

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**DETECTIONS SUMMARY**

**Sample ID:** SS-2 **Laboratory ID:** T211631-02

No Results Detected

**Sample ID:** SS-7 **Laboratory ID:** T211631-07

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Lead	4.89	3.00		mg/kg	EPA 6010b	

**Sample ID:** SS-10 **Laboratory ID:** T211631-10

No Results Detected

**Sample ID:** SS-13 **Laboratory ID:** T211631-13

No Results Detected

**Sample ID:** SS-20 **Laboratory ID:** T211631-20

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Lead	4.38	3.00		mg/kg	EPA 6010b	

**Sample ID:** SS-22 **Laboratory ID:** T211631-22

No Results Detected

SunStar Laboratories, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

Reported:  
05/21/21 14:25

Sample ID: SS-25

Laboratory ID: T211631-25

No Results Detected

Sample ID: SS-32

Laboratory ID: T211631-32

No Results Detected

Sample ID: SS-36

Laboratory ID: T211631-36

No Results Detected

Sample ID: SS-38

Laboratory ID: T211631-38

No Results Detected

Sample ID: SS-44

Laboratory ID: T211631-44

No Results Detected

Sample ID: SS-46

Laboratory ID: T211631-46

No Results Detected

Sample ID: SS-49

Laboratory ID: T211631-49

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Sample ID:** SS-56

**Laboratory ID:** T211631-56

No Results Detected

**Sample ID:** SS-60

**Laboratory ID:** T211631-60

No Results Detected

**Sample ID:** Composite 4:1 SS-1 - SS-4

**Laboratory ID:** T211631-61

No Results Detected

**Sample ID:** Composite 4:1 SS-5 - SS-8

**Laboratory ID:** T211631-62

No Results Detected

**Sample ID:** Composite 4:1 SS-9 - SS-12

**Laboratory ID:** T211631-63

No Results Detected

**Sample ID:** Composite 4:1 SS-13 - SS-16

**Laboratory ID:** T211631-64

No Results Detected

**Sample ID:** Composite 4:1 SS-17 - SS-20

**Laboratory ID:** T211631-65

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Sample ID:** Composite 4:1 SS-21 - SS-24

**Laboratory ID:** T211631-66

No Results Detected

**Sample ID:** Composite 4:1 SS-25 - SS-28

**Laboratory ID:** T211631-67

No Results Detected

**Sample ID:** Composite 4:1 SS-29 - SS-32

**Laboratory ID:** T211631-68

No Results Detected

**Sample ID:** Composite 4:1 SS-33- SS-36

**Laboratory ID:** T211631-69

No Results Detected

**Sample ID:** Composite 4:1 SS-37- SS-40

**Laboratory ID:** T211631-70

No Results Detected

**Sample ID:** Composite 4:1 SS-41- SS-44

**Laboratory ID:** T211631-71

No Results Detected

**Sample ID:** Composite 4:1 SS-45- SS-48

**Laboratory ID:** T211631-72

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Sample ID:** Composite 4:1 SS-49- SS-52

**Laboratory ID:** T211631-73

No Results Detected

**Sample ID:** Composite 4:1 SS-53- SS-56

**Laboratory ID:** T211631-74

No Results Detected

**Sample ID:** Composite 4:1 SS-57- SS-60

**Laboratory ID:** T211631-75

No Results Detected

**Sample ID:** SS-61

**Laboratory ID:** T211632-01

No Results Detected

**Sample ID:** SS-65

**Laboratory ID:** T211632-05

No Results Detected

**Sample ID:** SS-69

**Laboratory ID:** T211632-09

No Results Detected

**Sample ID:** SS-71

**Laboratory ID:** T211632-11

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

Reported:  
05/21/21 14:25

**Sample ID:** SS-77

**Laboratory ID:** T211632-17

No Results Detected

**Sample ID:** SS-81

**Laboratory ID:** T211632-21

No Results Detected

**Sample ID:** SS-87

**Laboratory ID:** T211632-27

No Results Detected

**Sample ID:** SS-92

**Laboratory ID:** T211632-32

No Results Detected

**Sample ID:** SS-95

**Laboratory ID:** T211632-35

No Results Detected

**Sample ID:** SS-97

**Laboratory ID:** T211632-37

No Results Detected

**Sample ID:** SS-102

**Laboratory ID:** T211632-42

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Sample ID:** SS-105

**Laboratory ID:** T211632-45

No Results Detected

**Sample ID:** SS-109

**Laboratory ID:** T211632-49

No Results Detected

**Sample ID:** SS-113

**Laboratory ID:** T211632-53

No Results Detected

**Sample ID:** SS-118

**Laboratory ID:** T211632-58

No Results Detected

**Sample ID:** Composite 2:1 SS-61 - SS-62

**Laboratory ID:** T211632-61

No Results Detected

**Sample ID:** Composite 4:1 SS-63 - SS-66

**Laboratory ID:** T211632-62

No Results Detected

**Sample ID:** Composite 4:1 SS-67 - SS-70

**Laboratory ID:** T211632-63

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Sample ID:** Composite 5:1 SS-71- SS-75

**Laboratory ID:** T211632-64

No Results Detected

**Sample ID:** Composite 5:1 SS-76- SS-80

**Laboratory ID:** T211632-65

No Results Detected

**Sample ID:** Composite 4:1 SS-81- SS-84

**Laboratory ID:** T211632-66

No Results Detected

**Sample ID:** Composite 4:1 SS-85- SS-88

**Laboratory ID:** T211632-67

No Results Detected

**Sample ID:** Composite 4:1 SS-89- SS-92

**Laboratory ID:** T211632-68

No Results Detected

**Sample ID:** Composite 4:1 SS-93- SS-96

**Laboratory ID:** T211632-69

No Results Detected

**Sample ID:** Composite 4:1 SS-97- SS-100

**Laboratory ID:** T211632-70

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Sample ID:** Composite 4:1 SS-101- SS-104

**Laboratory ID:** T211632-71

No Results Detected

**Sample ID:** Composite 3:1 SS-105- SS-107

**Laboratory ID:** T211632-72

No Results Detected

**Sample ID:** Composite 4:1 SS-108- SS-111

**Laboratory ID:** T211632-73

No Results Detected

**Sample ID:** Composite 4:1 SS-112 - SS-115

**Laboratory ID:** T211632-74

No Results Detected

**Sample ID:** Composite 5:1 SS-116 - SS-120

**Laboratory ID:** T211632-75

No Results Detected

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-2**  
**T211631-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	<b>Reported:</b> 05/21/21 14:25
---	---	------------------------------------

**SS-7**  
**T211631-07 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
<b>Lead</b>	<b>4.89</b>	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-10**  
**T211631-10 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-13**  
**T211631-13 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	<b>Reported:</b> 05/21/21 14:25
---	---	------------------------------------

**SS-20**  
**T211631-20 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
<b>Lead</b>	<b>4.38</b>	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-22**  
**T211631-22 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	<b>Reported:</b> 05/21/21 14:25
---	---	------------------------------------

**SS-25**  
**T211631-25 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-32**  
**T211631-32 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-36**  
**T211631-36 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-38**  
**T211631-38 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-44**  
**T211631-44 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-46**  
**T211631-46 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-49**  
**T211631-49 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-56**  
**T211631-56 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-60**  
**T211631-60 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051418	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-1 - SS-4  
 T211631-61 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		69.6 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		104 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-5 - SS-8  
 T211631-62 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		68.8 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		90.8 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-9 - SS-12  
 T211631-63 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		74.6 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		102 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-13 - SS-16**  
**T211631-64 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		75.5 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		99.6 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Composite 4:1 SS-17 - SS-20  
T211631-65 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		74.5 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		99.4 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-21 - SS-24**  
**T211631-66 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		60.9 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		89.1 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-25 - SS-28**  
**T211631-67 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		78.7 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		110 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

**Composite 4:1 SS-29 - SS-32  
T211631-68 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		77.9 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		108 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-33- SS-36  
 T211631-69 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		77.3 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		106 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-37- SS-40  
 T211631-70 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		77.4 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		103 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-41- SS-44  
 T211631-71 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		86.7 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		116 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-45- SS-48  
 T211631-72 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		70.0 %		35-140		"	"	"	"
Surrogate: Decachlorobiphenyl		93.7 %		35-140		"	"	"	"

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-49- SS-52  
 T211631-73 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		74.1 %		35-140		"	"	"	"
Surrogate: Decachlorobiphenyl		109 %		35-140		"	"	"	"

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-53- SS-56  
 T211631-74 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		71.9 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		91.3 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-57- SS-60  
 T211631-75 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051417	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		73.3 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		105 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-61**  
**T211632-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-65**  
**T211632-05 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-69**  
**T211632-09 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-71**  
**T211632-11 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-77**  
**T211632-17 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-81**  
**T211632-21 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-87**  
**T211632-27 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-92**  
**T211632-32 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-95**  
**T211632-35 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-97**  
**T211632-37 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-102**  
**T211632-42 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-105**  
**T211632-45 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	<b>Reported:</b> 05/21/21 14:25
---	---	------------------------------------

**SS-109**  
**T211632-49 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-113**  
**T211632-53 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**SS-118**  
**T211632-58 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Metals by EPA 6010B**

Arsenic	ND	5.00	mg/kg	1	1051410	05/14/21	05/20/21	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 2:1 SS-61 - SS-62**  
**T211632-61 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/18/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		76.9 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		117 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-63 - SS-66**  
**T211632-62 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		76.4 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		104 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-67 - SS-70**  
**T211632-63 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		72.6 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		97.2 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 5:1 SS-71- SS-75  
 T211632-64 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		68.4 %		35-140		"	"	"	"
Surrogate: Decachlorobiphenyl		92.9 %		35-140		"	"	"	"

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 5:1 SS-76- SS-80  
 T211632-65 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		136 %		35-140		"	"	"	
Surrogate: Decachlorobiphenyl		191 %		35-140		"	"	"	S-11

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-81- SS-84  
 T211632-66 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		66.2 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		91.6 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-85- SS-88  
 T211632-67 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		158 %		35-140		"	"	"	S-11
Surrogate: Decachlorobiphenyl		221 %		35-140		"	"	"	S-11

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-89- SS-92  
 T211632-68 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		83.5 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		119 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

Reported:  
05/21/21 14:25

**Composite 4:1 SS-93- SS-96  
T211632-69 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		66.8 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		100 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-97- SS-100**  
**T211632-70 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		78.0 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		126 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

Reported:  
05/21/21 14:25

**Composite 4:1 SS-101- SS-104  
T211632-71 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		71.3 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		105 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 3:1 SS-105- SS-107**  
**T211632-72 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		79.0 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		120 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-108- SS-111**  
**T211632-73 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		74.0 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		110 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 4:1 SS-112 - SS-115**  
**T211632-74 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		79.0 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		115 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Composite 5:1 SS-116 - SS-120**  
**T211632-75 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Organochlorine Pesticides by EPA Method 8081A**

alpha-BHC	ND	0.0050	mg/kg	1	1051431	05/14/21	05/19/21	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4'-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4'-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4'-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		79.7 %		35-140	"	"	"	"	
Surrogate: Decachlorobiphenyl		118 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Metals by EPA 6010B - Quality Control**

**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1051410 - EPA 3050B**

**Blank (1051410-BLK1)**

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	ND	5.00	mg/kg							
Lead	ND	3.00	"							

**LCS (1051410-BS1)**

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	104	5.00	mg/kg	100		104	75-125			
Lead	101	3.00	"	100		101	75-125			

**Matrix Spike (1051410-MS1)**

Source: T211632-01

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	90.8	5.00	mg/kg	100	ND	90.8	75-125			
Lead	86.4	3.00	"	100	2.52	83.9	75-125			

**Matrix Spike Dup (1051410-MSD1)**

Source: T211632-01

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	88.6	5.00	mg/kg	97.1	ND	91.2	75-125	2.44	20	
Lead	83.8	3.00	"	97.1	2.52	83.7	75-125	3.07	20	

**Batch 1051418 - EPA 3050B**

**Blank (1051418-BLK1)**

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	ND	5.00	mg/kg							
Lead	ND	3.00	"							

**LCS (1051418-BS1)**

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	99.3	5.00	mg/kg	100		99.3	75-125			
Lead	97.3	3.00	"	100		97.3	75-125			

**Matrix Spike (1051418-MS1)**

Source: T211631-02

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	82.7	5.00	mg/kg	93.5	1.01	87.4	75-125			
Lead	77.6	3.00	"	93.5	2.74	80.1	75-125			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland 1017 22nd Ave. Suite 107 Oakland CA, 94606	Project: APN 191-220-14, 191-220-59 + 191-220-60 Project Number: 21-308862.2 Project Manager: Joe Mangine	Reported: 05/21/21 14:25
---	---	-----------------------------

**Metals by EPA 6010B - Quality Control**

**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1051418 - EPA 3050B**

**Matrix Spike Dup (1051418-MSD1)**

Source: T211631-02

Prepared: 05/14/21 Analyzed: 05/20/21

Arsenic	87.5	5.00	mg/kg	97.1	1.01	89.1	75-125	5.68	20	
Lead	82.5	3.00	"	97.1	2.74	82.1	75-125	6.12	20	

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Organochlorine Pesticides by EPA Method 8081A - Quality Control**

**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1051417 - EPA 3550C ECD/GCMS**

**Blank (1051417-BLK1)**

Prepared: 05/14/21 Analyzed: 05/18/21

alpha-BHC	ND	0.0050	mg/kg							
gamma-BHC (Lindane)	ND	0.0050	"							
beta-BHC	ND	0.0050	"							
delta-BHC	ND	0.0050	"							
Heptachlor	ND	0.0050	"							
Aldrin	ND	0.0050	"							
Heptachlor epoxide	ND	0.0050	"							
gamma-Chlordane	ND	0.0050	"							
alpha-Chlordane	ND	0.0050	"							
Endosulfan I	ND	0.0050	"							
4,4'-DDE	ND	0.0050	"							
Dieldrin	ND	0.0050	"							
Endrin	ND	0.0050	"							
4,4'-DDD	ND	0.0050	"							
Endosulfan II	ND	0.0050	"							
4,4'-DDT	ND	0.0050	"							
Endrin aldehyde	ND	0.0050	"							
Endosulfan sulfate	ND	0.0050	"							
Methoxychlor	ND	0.0050	"							
Endrin ketone	ND	0.0050	"							
Toxaphene	ND	0.020	"							
Surrogate: Tetrachloro-meta-xylene	0.00805		"	0.00990		81.3	35-140			
Surrogate: Decachlorobiphenyl	0.0132		"	0.00990		133	35-140			

**LCS (1051417-BS1)**

Prepared: 05/14/21 Analyzed: 05/18/21

gamma-BHC (Lindane)	0.0344	0.0050	mg/kg	0.0400		86.0	40-120			
Heptachlor	0.0339	0.0050	"	0.0400		84.8	40-120			
Aldrin	0.0255	0.0050	"	0.0400		63.7	40-120			
Dieldrin	0.0329	0.0050	"	0.0400		82.4	40-120			
Endrin	0.0335	0.0050	"	0.0400		83.7	40-120			
4,4'-DDT	0.0318	0.0050	"	0.0400		79.6	33-147			
Surrogate: Tetrachloro-meta-xylene	0.00699		"	0.0100		69.9	35-140			
Surrogate: Decachlorobiphenyl	0.00940		"	0.0100		94.0	35-140			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Organochlorine Pesticides by EPA Method 8081A - Quality Control**

**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1051417 - EPA 3550C ECD/GCMS**

**LCS Dup (1051417-BSD1)**

Prepared: 05/14/21 Analyzed: 05/18/21

gamma-BHC (Lindane)	0.0338	0.0050	mg/kg	0.0408		82.8	40-120	3.83	30	
Heptachlor	0.0334	0.0050	"	0.0408		81.8	40-120	3.68	30	
Aldrin	0.0252	0.0050	"	0.0408		61.8	40-120	3.02	30	
Dieldrin	0.0329	0.0050	"	0.0408		80.6	40-120	2.17	30	
Endrin	0.0334	0.0050	"	0.0408		81.7	40-120	2.35	30	
4,4'-DDT	0.0320	0.0050	"	0.0408		78.3	33-147	1.63	30	
Surrogate: Tetrachloro-meta-xylene	0.00690		"	0.0102		67.6	35-140			
Surrogate: Decachlorobiphenyl	0.0100		"	0.0102		98.0	35-140			

**Batch 1051431 - EPA 3550C ECD/GCMS**

**Blank (1051431-BLK1)**

Prepared: 05/14/21 Analyzed: 05/18/21

alpha-BHC	ND	0.0050	mg/kg							
gamma-BHC (Lindane)	ND	0.0050	"							
beta-BHC	ND	0.0050	"							
delta-BHC	ND	0.0050	"							
Heptachlor	ND	0.0050	"							
Aldrin	ND	0.0050	"							
Heptachlor epoxide	ND	0.0050	"							
gamma-Chlordane	ND	0.0050	"							
alpha-Chlordane	ND	0.0050	"							
Endosulfan I	ND	0.0050	"							
4,4'-DDE	ND	0.0050	"							
Dieldrin	ND	0.0050	"							
Endrin	ND	0.0050	"							
4,4'-DDD	ND	0.0050	"							
Endosulfan II	ND	0.0050	"							
4,4'-DDT	ND	0.0050	"							
Endrin aldehyde	ND	0.0050	"							
Endosulfan sulfate	ND	0.0050	"							
Methoxychlor	ND	0.0050	"							
Endrin ketone	ND	0.0050	"							
Toxaphene	ND	0.020	"							
Surrogate: Tetrachloro-meta-xylene	0.00763		"	0.0100		76.3	35-140			
Surrogate: Decachlorobiphenyl	0.0107		"	0.0100		107	35-140			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
 1017 22nd Ave. Suite 107  
 Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
 Project Number: 21-308862.2  
 Project Manager: Joe Mangine

Reported:  
 05/21/21 14:25

**Organochlorine Pesticides by EPA Method 8081A - Quality Control**

**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1051431 - EPA 3550C ECD/GCMS**

<b>LCS (1051431-BS1)</b>		Prepared: 05/14/21 Analyzed: 05/18/21								
gamma-BHC (Lindane)	0.0320	0.0050	mg/kg	0.0396		80.8	40-120			
Heptachlor	0.0311	0.0050	"	0.0396		78.5	40-120			
Aldrin	0.0241	0.0050	"	0.0396		60.7	40-120			
Dieldrin	0.0321	0.0050	"	0.0396		81.1	40-120			
Endrin	0.0318	0.0050	"	0.0396		80.4	40-120			
4,4'-DDT	0.0302	0.0050	"	0.0396		76.2	33-147			
Surrogate: Tetrachloro-meta-xylene	0.00673		"	0.00990		67.9	35-140			
Surrogate: Decachlorobiphenyl	0.0102		"	0.00990		103	35-140			

<b>LCS Dup (1051431-BS1)</b>		Prepared: 05/14/21 Analyzed: 05/18/21								
gamma-BHC (Lindane)	0.0317	0.0050	mg/kg	0.0400		79.1	40-120	2.13	30	
Heptachlor	0.0306	0.0050	"	0.0400		76.5	40-120	2.66	30	
Aldrin	0.0237	0.0050	"	0.0400		59.2	40-120	2.65	30	
Dieldrin	0.0316	0.0050	"	0.0400		79.1	40-120	2.41	30	
Endrin	0.0312	0.0050	"	0.0400		78.0	40-120	2.94	30	
4,4'-DDT	0.0295	0.0050	"	0.0400		73.7	33-147	3.29	30	
Surrogate: Tetrachloro-meta-xylene	0.00652		"	0.0100		65.2	35-140			
Surrogate: Decachlorobiphenyl	0.0118		"	0.0100		118	35-140			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Mike Jaroudi, Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland  
1017 22nd Ave. Suite 107  
Oakland CA, 94606

Project: APN 191-220-14, 191-220-59 + 191-220-60  
Project Number: 21-308862.2  
Project Manager: Joe Mangine

**Reported:**  
05/21/21 14:25

### Notes and Definitions

- S-11 The surrogate recovery was above acceptance criteria in the sample. The sample is ND for the analytes of interest. The surrogate recovery was within acceptance criteria in the method blank and LCS.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

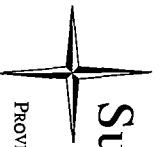
---

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

---

Mike Jaroudi, Project Manager



**SunStar**  
Laboratories, Inc.

**Chain of Custody Record**

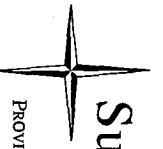
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE  
25712 Commercentre Drive, Lake Forest, CA 92630  
949-297-5020

Client: Partner Engineering + Service Inc (EST)  
Address: 107 2nd Ave, Ste 107, Oakland, CA  
Phone: 704-414-5666 Fax: \_\_\_\_\_  
Project Manager: J. Mangione

Date: 5/12/21 Page: 1 of 8  
Project Name: APU 191-220-14, 191-220-59 + 191-220-60  
Collector: M. Hilde N. Murren Client Project #: 21-205602.2  
Batch #: T-211 (63) EDF #: \_\_\_\_\_

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCPs (composite)	8081 G010 Arsenic + lead	Notes	Total # of containers
C1	SS-1	5/12/21		Soil	8081													4:1 composite of SS-1 thru SS-4 for 8081 OCPs	15
C2	SS-2																	4:1 composite of SS-5 thru SS-8 for 8081 OCPs	
C3	SS-3																	4:1 composite of SS-9 thru SS-12 for 8081 OCPs	
C4	SS-4																	4:1 composite of SS-13 thru SS-16 for 8081 OCPs	
C5	SS-5																		
C6	SS-6																		
C7	SS-7																		
C8	SS-8																		
C9	SS-9																		
C10	SS-10																		
C11	SS-11																		
C12	SS-12																		
C13	SS-13																		
C14	SS-14																		
C15	SS-15																		
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Total # of containers		Chain of Custody seals		Seals intact?		Received good condition/cold		Turn around time:		Notes	
<u>[Signature]</u>		<u>5/13/21 1000</u>		<u>[Signature]</u>		<u>5/13/21 1000</u>		15		Y/N/N/A		Y/N/N/A		Y		<u>5:00</u>		30 composite samples to total (Comp - Comp 30) sent for 8081 OCPs analysis and 30 samples for G010 Arsenic and lead	
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time													
<u>[Signature]</u>		<u>5-14-21 843</u>		<u>[Signature]</u>		<u>5-14-21 843</u>													

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_



**SunStar**  
**Laboratories, Inc.**

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE  
25712 Commercentre Drive, Lake Forest, CA 92630  
949-297-5020

**Chain of Custody Record**

Client: Palmer EST  
Address: "  
Phone: " Fax: "  
Project Manager: "

Date: 5/12/13 Page: 2 Of 8  
Project Name: "  
Collector: " Client Project #: 21-308862.2  
Batch #: T211631 EDF #: "

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCPs (composite)	6010 Arsenic + lead	Comments/Preservative	Total # of containers	Notes	
16	SS-16	5/12/13		Soil	Gas jar															4:1 composite of SS-17 thru SS-20 for soil OCPs	
17	SS-17																			4:1 composite of SS-21 thru SS-24 for soil OCPs	
18	SS-18																			4:1 composite of SS-25 thru SS-28 for soil OCPs	
19	SS-19																			4:1 composite of SS-29 thru SS-30 for soil OCPs	
20	SS-20																				
21	SS-21																				
22	SS-22																				
23	SS-23																				
24	SS-24																				
25	SS-25																				
26	SS-26																				
27	SS-27																				
28	SS-28																				
29	SS-29																				
30	SS-30																				
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Total # of containers		Chain of Custody seals		Seals intact?		Received good condition/cold		Turn around time:					
<u>[Signature]</u>		<u>5/13/13</u>		<u>[Signature]</u>		<u>5/13/13</u>		<u>1000</u>		<u>OK</u>		<u>OK</u>		<u>OK</u>		<u>5</u>					
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Total # of containers		Chain of Custody seals		Seals intact?		Received good condition/cold		Turn around time:					
<u>[Signature]</u>		<u>5-14-21</u>		<u>[Signature]</u>		<u>5-14-21</u>		<u>843</u>		<u>OK</u>		<u>OK</u>		<u>OK</u>		<u>5.92</u>					

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_





# SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE  
25712 Commercentre Drive, Lake Forest, CA 92630  
949-297-5020

## Chain of Custody Record

Client: Parker ESD  
Address: 11  
Phone: 11 Fax:           
Project Manager: 11

Date: 5/12/21 Page: 3 of 8  
Project Name: 11  
Collector: 11 Client Project #: 21-308862.2  
Batch #: T211G31 EDF #:         

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCPs (composite)	6010 Arsenic + lead	Comments/Preservative	Total # of containers	Notes	
31	SS-31	5/12/21		Soil	Box type																
32	SS-32																				
33	SS-33																				
34	SS-34																				
35	SS-35																				
36	SS-36																				
37	SS-37																				
38	SS-38																				
39	SS-39																				
40	SS-40																				
41	SS-41																				
42	SS-42																				
43	SS-43																				
44	SS-44																				
45	SS-45																				
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Total # of containers		Chain of Custody seals Y/N/NA		Seals intact? Y/N/NA		Received good condition/cold		Turn around time:					
<u>[Signature]</u>		5/12/21 1000		<u>[Signature]</u>		5/13/21 1000		15		Y/N/NA		Y/N/NA		3.7E		5					
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time															
<u>CLS</u>		5-14-21 843		<u>[Signature]</u>		5-14-21 843															

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_



# SunStar Laboratories, Inc.

## Chain of Custody Record

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive, Lake Forest, CA 92630  
949-297-5020

Client: Patner EST

Address: " "

Phone: " "

Project Manager: " "

Date: 5/12/21

Project Name: " "

Collector: " "

Batch #: T211631

Page: 4 of 8

Client Project #: 21-308862.2

EDF #: \_\_\_\_\_

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCPs (Composite)	6010 Arsenic + lead	Notes	Total # of containers	
46	SS-46	5/12/21		Soil	6.12 liter														4:1 Composite sample of SS-95 thru SS-48 for 8081 OCPs	15
47	SS-47																			
48	SS-48																			
49	SS-49																		4:1 Composite of SS-49 thru SS-52 for 8081 OCPs	
50	SS-50																			
51	SS-51																			
52	SS-52																		4:1 Composite of SS-53 thru SS-56 for 8081 OCPs	
53	SS-53																			
54	SS-54																			
55	SS-55																			
56	SS-56																			
57	SS-57																		4:1 Composite of SS-57 thru SS-60 for 8081 OCPs	
58	SS-58																			
59	SS-59																			
60	SS-60																			
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Chain of Custody seals		Seals intact?		Received good condition/cold		Turn around time:		Notes				
<i>[Signature]</i>		5/12/21 1000		<i>[Signature]</i>		5/13/21 1000		N/A		N/A		N/A		5						
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time														
<i>[Signature]</i>		5-14-21 843		<i>[Signature]</i>		5-14-21 843														
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time														
<i>[Signature]</i>		5-14-21 843		<i>[Signature]</i>		5-14-21 843														

## SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T211631

Client Name: Partner Project: APN 191-220-59+191-60

Delivered by:  Client  SunStar Courier  GLS  FedEx  Other

If Courier, Received by: \_\_\_\_\_ Date/Time Courier Received: \_\_\_\_\_

Lab Received by: Dave Date/Time Lab Received: 5-14-21 843

Total number of coolers received: 3 Thermometer ID: SC-GUN Calibration due: 8/17/21

Temperature: Cooler #1	6.1	°C +/- the CF (-0.2°C) =	5.9	°C corrected temperature
Temperature: Cooler #2	3.9	°C +/- the CF (-0.2°C) =	3.7	°C corrected temperature
Temperature: Cooler #3	6.0	°C +/- the CF (-0.2°C) =	5.8	°C corrected temperature
<b>Temperature criteria = ≤ 6°C (no frozen containers)</b>		Within criteria?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<b>If NO:</b>				
Samples received on ice?	<input type="checkbox"/> Yes		<input type="checkbox"/> No → <b>Complete Non-Conformance Sheet</b>	
If on ice, samples received same day collected?	<input type="checkbox"/> Yes → Acceptable		<input type="checkbox"/> No → <b>Complete Non-Conformance Sheet</b>	

Custody seals intact on cooler/sample  Yes  No\*  N/A

Sample containers intact  Yes  No\*

Sample labels match Chain of Custody IDs  Yes  No\*

Total number of containers received match COC  Yes  No\*

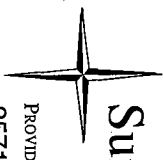
Proper containers received for analyses requested on COC  Yes  No\*

Proper preservative indicated on COC/containers for analyses requested  Yes  No\*  N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times  Yes  No\*

\* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date: DS 5-14-21

**Comments:** \_\_\_\_\_



**SunStar Laboratories, Inc.**  
 PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive, Lake Forest, CA 92630  
 949-297-5020

**Chain of Custody Record**

Client: Parker EST  
 Address: " "  
 Phone: " " Fax: " "  
 Project Manager: " "

Date: 5/12/21 Page: 5 of 8  
 Project Name: " "  
 Collector: " " Client Project #: 21-308862-2  
 Batch #: 7211632 7211632 EDF #: " "

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCBs (Composite)	6010 Arsenic blend	Notes	Total # of containers
51	SS-61	5/12/21		Soil	8260													2:1 Composite of SS-61 thru SS-62 for SOX1 OCBs	15
52	SS-62				8260													4:1 Composite of SS-62 thru SS-63 for SOX1 OCBs	
53	SS-63				8260													4:1 Composite of SS-63 thru SS-64 for SOX1 OCBs	
54	SS-64				8260													4:1 Composite of SS-64 thru SS-65 for SOX1 OCBs	
55	SS-65				8260													4:1 Composite of SS-65 thru SS-66 for SOX1 OCBs	
56	SS-66				8260													4:1 Composite of SS-66 thru SS-67 for SOX1 OCBs	
57	SS-67				8260													4:1 Composite of SS-67 thru SS-68 for SOX1 OCBs	
58	SS-68				8260													4:1 Composite of SS-68 thru SS-69 for SOX1 OCBs	
59	SS-69				8260													4:1 Composite of SS-69 thru SS-70 for SOX1 OCBs	
60	SS-70				8260													4:1 Composite of SS-70 thru SS-71 for SOX1 OCBs	
61	SS-71				8260													4:1 Composite of SS-71 thru SS-72 for SOX1 OCBs	
62	SS-72				8260													4:1 Composite of SS-72 thru SS-73 for SOX1 OCBs	
63	SS-73				8260													4:1 Composite of SS-73 thru SS-74 for SOX1 OCBs	
64	SS-74				8260													4:1 Composite of SS-74 thru SS-75 for SOX1 OCBs	
65	SS-75				8260													4:1 Composite of SS-75 thru SS-76 for SOX1 OCBs	
Relinquished by: (signature)				Date / Time	Received by: (signature)	Date / Time	Chain of Custody seals: <input checked="" type="checkbox"/> N/A										Total # of containers	Notes	
Relinquished by: (signature)				5/13/21	1000	Ed Stevens	5/13/21	Seals intact? <input checked="" type="checkbox"/> N/A										15	
Relinquished by: (signature)				5-14-21	843	AKB	5-14-21	Received good condition/cold										59%	

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_

**Chain of Custody Record**

Client: Patrus ESI  
 Address: "  
 Phone: " Fax: "  
 Project Manager: "

Date: 5/12/21 Page: 6 of 8  
 Project Name: "  
 Collector: "  
 Batch #: T211632 T211632 EDF #: "  
 Client Project #: 21-208622

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	5081 OCBs (composite)	6010 Arsenic + Lead	Comments/Preservative	Total # of containers	Notes	
16	SS-76	5/12/21		Soil	Fire Jar														5:1 Composite of SS-76 thru SS-90 for 5081 OCBs	15	
17	SS-77																		4:1 Composite of SS-84 thru SS-92 for 5081 OCBs		
18	SS-78																		4:1 Composite of SS-85 thru SS-88 for 5081 OCBs		
19	SS-79																				
20	SS-80																				
21	SS-81																				
22	SS-82																				
23	SS-83																				
24	SS-84																				
25	SS-85																				
26	SS-86																				
27	SS-87																				
28	SS-88																				
29	SS-89																				
30	SS-90																				
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Total # of containers		Chain of Custody seals		Seals intact		Received good condition/cold		Turn around time:					
<u>[Signature]</u>		<u>5/13/21 1000</u>		<u>[Signature]</u>		<u>5/13/21 1000</u>				N/A		N/A		N/A		<u>5</u>					
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time															
<u>[Signature]</u>		<u>5-14-21 843</u>		<u>[Signature]</u>		<u>5-14-21 843</u>															

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_



# SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE  
 25712 Commercentre Drive, Lake Forest, CA 92630  
 949-297-5020

## Chain of Custody Record

Client: Partner ESS  
 Address: " "  
 Phone: " " Fax: "  
 Project Manager: " "

Date: 5/12/21 Page: 7 Of 8  
 Project Name: " "  
 Collector: " " Client Project #: 21-308862.2  
 Batch #: T211632 EDF #: \_\_\_\_\_

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCPs (Composite)	6010 Arsenic + lead	Notes	Total # of containers	Chain of Custody seals Seals intact? <input checked="" type="checkbox"/> Y/N/N/A	Received good condition/cold	Turn around time:	
31	SS-91	5/12/21		Soil	8oz jar																		
32	SS-92																						
33	SS-93																						
34	SS-94																						
35	SS-95																						
36	SS-96																						
37	SS-97																						
38	SS-98																						
39	SS-99																						
40	SS-100																						
41	SS-101																						
42	SS-102																						
43	SS-103																						
44	SS-104																						
45	SS-105																						
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time		Total # of containers		Chain of Custody seals		Seals intact?		Received good condition/cold		Turn around time:		Notes					
<u>[Signature]</u>		5/13/21 1000		<u>[Signature]</u>		5/13/21 1000		15		Y/N/N/A		Y/N/N/A		Y		5		Notes					
Relinquished by: (signature)		Date / Time		Received by: (signature)		Date / Time																	
<u>[Signature]</u>		5/14/21 843		<u>[Signature]</u>		5/14/21 843																	

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_



# SunStar Laboratories, Inc.

## Chain of Custody Record

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE  
 25712 Commercentre Drive, Lake Forest, CA 92630  
 949-297-5020

Client: Partners Engineering & Science, Inc  
 Address: 107 2nd Avenue, Ste 107, Oakland, CA  
 Phone: 714-449266 Fax: \_\_\_\_\_  
 Project Manager: J. Masarik

Date: 5/12/21 Page: 8 of 8  
 Project Name: \_\_\_\_\_  
 Collector: M. Helwig N. Harrison Client Project #: 21-308862.2  
 Batch #: T211632 EDF #: \_\_\_\_\_

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8081 OCPs (composite)	6010 Arsenic Blend	18	31	Comments/Preservative	Total # of containers
1618	SS-106	5/12/21		Soil	Soil															3:1 Composite of SS-105 thru SS-107 for 8081 OCPs	18
1714	SS-107																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
1808	SS-108																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
1909	SS-109																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2010	SS-110																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2111	SS-111																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2212	SS-112																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2313	SS-113																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2414	SS-114																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2515	SS-115																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2616	SS-116																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2717	SS-117																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2818	SS-118																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
2919	SS-119																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
3020	SS-120																			4:1 Composite of SS-107 thru SS-111 for 8081 OCPs	31
Relinquished by: (signature)		Date / Time	Received by: (signature)	Date / Time	Chain of Custody seals		Seals intact?		Received good condition/cool		Turn around time:		Notes								
<i>[Signature]</i>		5/10/21	<i>[Signature]</i>	5/13/21	N/A		N/A		N/A		5		N/A								
Relinquished by: (signature)		Date / Time	Received by: (signature)	Date / Time	Chain of Custody seals		Seals intact?		Received good condition/cool		Turn around time:		Notes								
<i>[Signature]</i>		5-14-21	<i>[Signature]</i>	5-14-21	N/A		N/A		N/A		5		N/A								

Sample disposal instructions: Disposal @ \$2.00 each \_\_\_\_\_ Return to client \_\_\_\_\_ Pickup \_\_\_\_\_

## SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T211632

Client Name: Partner Project: APN 191-220-59+191-60

Delivered by:  Client  SunStar Courier  GLS  FedEx  Other

If Courier, Received by: \_\_\_\_\_ Date/Time Courier Received: \_\_\_\_\_

Lab Received by: Dave Date/Time Lab Received: 5:14:21 843

Total number of coolers received: 3 Thermometer ID: SC-GUN Calibration due: 8/17/21

Temperature:	Cooler #1	6.1	°C +/- the CF (-0.2°C) =	5.9	°C corrected temperature
Temperature:	Cooler #2	3.9	°C +/- the CF (-0.2°C) =	3.7	°C corrected temperature
Temperature:	Cooler #3	6.0	°C +/- the CF (-0.2°C) =	5.8	°C corrected temperature

**Temperature criteria = ≤ 6°C (no frozen containers)** Within criteria?  Yes  No  N/A

**If NO:**

Samples received on ice?  Yes  No → **Complete Non-Conformance Sheet**

If on ice, samples received same day collected?  Yes → Acceptable  No → **Complete Non-Conformance Sheet**

- Custody seals intact on cooler/sample  Yes  No\*  N/A
- Sample containers intact  Yes  No\*
- Sample labels match Chain of Custody IDs  Yes  No\*
- Total number of containers received match COC  Yes  No\*
- Proper containers received for analyses requested on COC  Yes  No\*
- Proper preservative indicated on COC/containers for analyses requested  Yes  No\*  N/A
- Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times  Yes  No\*

\* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date: DS 5:14:21

**Comments:**  
 \_\_\_\_\_  
 \_\_\_\_\_



**WORK ORDER**

**T211631**

**Client:** Partner Engineering & Science, Inc.--Oakland      **Project Manager:** Mike Jaroudi  
**Project:** APN 191-220-14, 191-220-59 + 191-220-60      **Project Number:** 21-308862.2

**Report To:**

Partner Engineering & Science, Inc.--Oakland  
 Joe Mangine  
 1017 22nd Ave. Suite 107  
 Oakland, CA 94606

Date Due: 05/21/21 17:00 (5 day TAT)  
 Received By: Dave Berner      Date Received: 05/14/21 08:43  
 Logged In By: Jennifer Berger      Date Logged In: 05/14/21 10:18

Samples Received at: **5.9°C**  
 Custody Seals    Yes    Received On Ice    Yes  
 Containers Intact    Yes  
 COC/Labels Agree    Yes  
 Preservation Confir    No

Analysis	Due	TAT	Expires	Comments
<b>T211631-01 SS-1 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-02 SS-2 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 6010 Individual Metals</b>	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-03 SS-3 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-04 SS-4 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-05 SS-5 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-06 SS-6 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-07 SS-7 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 6010 Individual Metals</b>	05/21/21 15:00	5	11/08/21 00:00	As & Pb only

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-08 SS-8 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-09 SS-9 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-10 SS-10 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-11 SS-11 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-12 SS-12 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-13 SS-13 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-14 SS-14 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-15 SS-15 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-16 SS-16 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-17 SS-17 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-18 SS-18 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-19 SS-19 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-20 SS-20 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-21 SS-21 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-22 SS-22 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-23 SS-23 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-24 SS-24 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-25 SS-25 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-26 SS-26 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-27 SS-27 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-28 SS-28 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-29 SS-29 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-30 SS-30 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-31 SS-31 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-32 SS-32 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-33 SS-33 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-34 SS-34 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-35 SS-35 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-36 SS-36 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-37 SS-37 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-38 SS-38 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-39 SS-39 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-40 SS-40 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-41 SS-41 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-42 SS-42 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-43 SS-43 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-44 SS-44 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-45 SS-45 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-46 SS-46 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-47 SS-47 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-48 SS-48 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-49 SS-49 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-50 SS-50 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-51 SS-51 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-52 SS-52 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-53 SS-53 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-54 SS-54 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-55 SS-55 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-56 SS-56 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-57 SS-57 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-58 SS-58 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-59 SS-59 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211631-60 SS-60 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211631-61 Composite 4:1 SS-1 - SS-4 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-1,SS-2,SS-3,SS-4 # 1,2,3,4</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211631-62 Composite 4:1 SS-5 - SS-8 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-5,SS-6,SS-7,SS-8 # 5,6,7,8</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-63 Composite 4:1 SS-9 - SS-12 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-9,SS-10,SS-11,SS-12 # 9,10,11,12</b>
<b>T211631-64 Composite 4:1 SS-13 - SS-16 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-13,SS-14,SS-15,SS-16 # 13,14,15,16</b>
<b>T211631-65 Composite 4:1 SS-17 - SS-20 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-17,SS-18,SS-19,SS-20 # 17,18,19,20</b>
<b>T211631-66 Composite 4:1 SS-21 - SS-24 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-21,SS-22,SS-23,SS-24 # 21,22,23,24</b>
<b>T211631-67 Composite 4:1 SS-25 - SS-28 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-25,SS-26,SS-27,SS-28 # 25,26,27,28</b>
<b>T211631-68 Composite 4:1 SS-29 - SS-32 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-29,SS-30,SS-31,SS-32 # 29,30,31,32</b>
<b>T211631-69 Composite 4:1 SS-33- SS-36 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-33,SS-34,SS-35,SS-36 # 33,34,35,36</b>
<b>T211631-70 Composite 4:1 SS-37- SS-40 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-37,SS-38,SS-39,SS-40 # 37,38,39,40</b>
<b>T211631-71 Composite 4:1 SS-41- SS-44 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-41,SS-42,SS-43,SS-44 # 41,42,43,44</b>
<b>T211631-72 Composite 4:1 SS-45- SS-48 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-45,SS-46,SS-47,SS-48 # 45,46,47,48</b>
<b>T211631-73 Composite 4:1 SS-49- SS-52 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 8081 Pesticides</b>	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-49,SS-50,SS-51,SS-52 # 49,50,51,52</b>

**WORK ORDER**

**T211631**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211631-74 Composite 4:1 SS-53- SS-56 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-53,SS-54,SS-55,SS-56 #</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	<b>53,54.55,56</b>
<b>T211631-75 Composite 4:1 SS-57- SS-60 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-57,SS-58,SS-59,SS-60 #</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	<b>57,58.59,60</b>

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_



**WORK ORDER**

**T211632**

**Client:** Partner Engineering & Science, Inc.--Oakland

**Project Manager:** Mike Jaroudi

**Project:** APN 191-220-14, 191-220-59 + 191-220-60

**Project Number:** 21-308862.2

**Report To:**

Partner Engineering & Science, Inc.--Oakland  
 Joe Mangine  
 1017 22nd Ave. Suite 107  
 Oakland, CA 94606

Date Due: 05/21/21 17:00 (5 day TAT)

Received By: Dave Berner

Date Received: 05/14/21 08:43

Logged In By: Jennifer Berger

Date Logged In: 05/14/21 10:49

Samples Received at: **5.8°C**  
 Custody Seals Yes Received On Ice Yes  
 Containers Intact Yes  
 COC/Labels Agree Yes  
 Preservation Confirmed No

Analysis	Due	TAT	Expires	Comments
<b>T211632-01 SS-61 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 6010 Individual Metals</b>	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-02 SS-62 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-03 SS-63 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-04 SS-64 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-05 SS-65 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; 6010 Individual Metals</b>	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-06 SS-66 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-07 SS-67 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
T211632-08 SS-68 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-09 SS-69 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & 6010 Individual Metals 05/21/21 15:00 5 11/08/21 00:00 As & Pb only				
T211632-10 SS-70 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-11 SS-71 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & 6010 Individual Metals 05/21/21 15:00 5 11/08/21 00:00 As & Pb only				
T211632-12 SS-72 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-13 SS-73 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-14 SS-74 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-15 SS-75 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-16 SS-76 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				
T211632-17 SS-77 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & 6010 Individual Metals 05/21/21 15:00 5 11/08/21 00:00 As & Pb only				
T211632-18 SS-78 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US & [NO ANALYSES])				

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211632-19 SS-79 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-20 SS-80 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-21 SS-81 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-22 SS-82 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-23 SS-83 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-24 SS-84 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-25 SS-85 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-26 SS-86 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-27 SS-87 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-28 SS-88 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				
<b>T211632-29 SS-89 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp;</b>				
[NO ANALYSES]				

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211632-30 SS-90 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-31 SS-91 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-32 SS-92 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-33 SS-93 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-34 SS-94 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-35 SS-95 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-36 SS-96 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-37 SS-97 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
6010 Individual Metals	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-38 SS-98 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-39 SS-99 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				
<b>T211632-40 SS-100 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211632-41 SS-101 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-42 SS-102 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & 6010 Individual Metals				
	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-43 SS-103 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-44 SS-104 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-45 SS-105 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & 6010 Individual Metals				
	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-46 SS-106 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-47 SS-107 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-48 SS-108 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-49 SS-109 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & 6010 Individual Metals				
	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-50 SS-110 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-51 SS-111 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US</b>				
<b>&amp; [NO ANALYSES]</b>				

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211632-52 SS-112 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-53 SS-113 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & 6010 Individual Metals				
	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-54 SS-114 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-55 SS-115 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-56 SS-116 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-57 SS-117 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-58 SS-118 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & 6010 Individual Metals				
	05/21/21 15:00	5	11/08/21 00:00	As & Pb only
<b>T211632-59 SS-119 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-60 SS-120 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time</b>				
(US & [NO ANALYSES])				
<b>T211632-61 Composite 2:1 SS-61 - SS-62 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
<b>8081 Pesticides</b>				
	05/21/21 15:00	5	05/26/21 00:00	Composite samples SS-61,SS-62 # 1,2
<b>T211632-62 Composite 4:1 SS-63 - SS-66 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
<b>8081 Pesticides</b>				
	05/21/21 15:00	5	05/26/21 00:00	Composite samples SS-63,SS-64,SS-65,SS-66 # 3,4,5,6

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211632-63 Composite 4:1 SS-67 - SS-70 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-67,SS-68,SS-69,SS-70 # 7,8,9,10</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-64 Composite 5:1 SS-71- SS-75 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-71,SS-72,SS-73,SS-74,SS-75 # 11,12,13,14,15</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-65 Composite 5:1 SS-76- SS-80 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-76,SS-77,SS-78,SS-79,SS-80 # 16,17,18,19,20</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-66 Composite 4:1 SS-81- SS-84 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-81,SS-82,SS-83,SS-84 # 21,22,23,24</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-67 Composite 4:1 SS-85- SS-88 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-85,SS-86,SS-87,SS-88 # 25,26,27,28</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-68 Composite 4:1 SS-89- SS-92 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-89,SS-90,SS-91,SS-92 # 29,30,31,32</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-69 Composite 4:1 SS-93- SS-96 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-93,SS-94,SS-95,SS-96 # 33,34,35,36</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-70 Composite 4:1 SS-97- SS-100 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-97,SS-98,SS-99,SS-100 # 37,38,39,40</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-71 Composite 4:1 SS-101- SS-104 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-101,SS-102,SS-103,SS-104 # 41,42,43,44</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-72 Composite 3:1 SS-105- SS-107 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-105,SS-106,SS-107 # 45,46,47</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	
<b>T211632-73 Composite 4:1 SS-108- SS-111 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				<b>Composite samples SS-108,SS-109,SS-110,SS-111 # 48,49,50,51</b>
8081 Pesticides	05/21/21 15:00	5	05/26/21 00:00	

**WORK ORDER**

**T211632**

<b>Client:</b> Partner Engineering & Science, Inc.--Oakland	<b>Project Manager:</b> Mike Jaroudi
<b>Project:</b> APN 191-220-14, 191-220-59 + 191-220-60	<b>Project Number:</b> 21-308862.2

Analysis	Due	TAT	Expires	Comments
<b>T211632-74 Composite 4:1 SS-112 - SS-115 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
<b>8081 Pesticides</b>				
	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-112,SS-113,SS-114,SS-115 # 52,53,54,55</b>
<b>T211632-75 Composite 5:1 SS-116 - SS-120 [Soil] Sampled 05/12/21 00:00 (GMT-08:00) Pacific Time (US &amp;</b>				
<b>8081 Pesticides</b>				
	05/21/21 15:00	5	05/26/21 00:00	<b>Composite samples SS-116,SS-117,SS-118,SS-119,SS-120 # 56,57,58,59,60</b>



ATTACHMENT E. CENTRAL LATHROP SPECIFIC PLAN (CLSP) PHASE 2 SPECIFIC PLAN UPDATE (2023).

**Central Lathrop Specific Plan**  
**Phase 2 Amendment**  
*Lathrop, California*

May 2023

# Table of Contents

<b>Chapter One: Introduction .....</b>	<b>1-5</b>
Overview and Applicability of the CLSP Phase 2 Amendment .....	1-5
Purpose .....	1-6
Planning Vision.....	1-6
Goals of the Specific Plan.....	1-16
Context.....	1-17
Legal Authority .....	1-20
Relationship to Other City Policies, Programs, and Documents .....	1-20
Organization of the Specific Plan .....	1-21
<b>Chapter Two: Land Use.....</b>	<b>2-1</b>
Introduction .....	2-1
Existing and Interim Land Uses .....	2-1
Land Use Plan.....	2-1
Landscape Buffer.....	2-2
Land Use Designations .....	2-5
Calculation of Land Use Intensities and Allowable Square Footages.....	2-6
Land Use and Site Layout Flexibility .....	2-6
Land Use Regulations and Development Standards.....	2-7
<b>Chapter Three: Circulation and Transportation.....</b>	<b>3-1</b>
Introduction .....	3-1
Circulation and Transportation Goals.....	3-1
Existing Conditions .....	3-1
Proposed Transportation Improvements.....	3-7
CLSP-2 Amendment Plan Area Transportation Network.....	3-7
CLSP-2 Amendment Plan Area Truck Routes .....	3-8
Utility Corridors .....	3-15
Bicycle and Pedestrian Network .....	3-15
<b>Chapter Four: Natural Resources Management.....</b>	<b>4-1</b>
Introduction .....	4-1
Open Space and Parks.....	4-1
Williamson Act Lands .....	4-1
Right to Farm.....	4-1
Biological Resources.....	4-2
Habitat Conservation Plan .....	4-3
Historic and Cultural Resources.....	4-3
<b>Chapter Five: Community Services and Facilities.....</b>	<b>5-1</b>
Introduction .....	5-1
Parks and Recreation .....	5-1
CLSP-2 Open Space .....	5-1
CLSP-2 Open Space Interface .....	5-1
Police and Animal Control Services.....	5-2
Fire and Emergency Services .....	5-2
Solid Waste.....	5-3

<b>Chapter Six: Utilities and Drainage Infrastructure.....</b>	<b>6-1</b>
Introduction .....	6-1
Potable Water .....	6-1
Wastewater.....	6-5
Recycled Water .....	6-9
Flood Protection and Storm Water Quality .....	6-11
Public Utility Easements and Utility Corridors.....	6-19
Energy and Telecommunications .....	6-19
<b>Chapter Seven: Design Guidelines.....</b>	<b>7-1</b>
Introduction .....	7-1
Purpose .....	7-1
Land Use .....	7-1
CLSP-2 Amendment Principles, Standards and Guidelines .....	7-2
Site Design.....	7-2
Architecture.....	7-12
<b>Chapter Eight: Implementation .....</b>	<b>8-1</b>
Introduction .....	8-1
Specific Plan Implementation.....	8-1
Right to Farm Provisions.....	8-1
Development Agreements .....	8-2
City Review Process .....	8-2
Habitat Conservation Plan.....	8-3
Amendments to CLSP-2.....	8-4
Overview of Development Approval Process .....	8-5
Site Plan Review Conditional Use Permits, Variances, and other permits for individual development projects .....	8-5
Phasing .....	8-6
The CLSP Phasing Program .....	8-6
Infrastructure Administration.....	8-6
Capital Improvement and Operation/ Maintenance Responsibilities .....	8-9
Interpretation and Amendment of Specific Plan.....	8-9
Specific Plan Consistency and Enforcement .....	8-11
<b>Chapter Nine: Financing.....</b>	<b>9-1</b>
Introduction .....	9-1
Financing Plan.....	9-1
Updates of Financing Plan .....	9-2
Financing/Fiscal Measures .....	9-2
Reimbursement Agreements .....	9-5

**List of Tables**

Table 1.1: Relationship between the 2004 CLSP and CLSP-2 Amendment.....1-6  
 Table 1.2: Goals from the 2022 Lathrop General Plan .....1-8  
 Table 2.1: CLSP-2 Amendment Land Use Summary.....2-5  
 Table 6.1: Estimated Water Demand.....6-2  
 Table 6.2: Estimated Sewer Demand.....6-6  
 Table 6.3: Watershed Detention Facilities and Pump Station Sizes ..... 6-13  
 Table 8.1: Capital Improvement and Operation/Maintenance Responsibilities.....8-9

**List of Figures**

Figure 1.1- Regional Map ..... 1-14  
 Figure 1.2- Vicinity Map..... 1-15  
 Figure 1.3- Existing Ownership Map..... 1-18  
 Figure 1.4- Existing Conditions Map..... 1-19  
 Figure 2.1- Land Use Map .....2-3  
 Figure 2.2- Landscape Buffer .....2-4  
 Figure 3.1- Existing Circulation Plan.....3-4  
 Figure 3.2- Existing Bus Service Plan.....3-5  
 Figure 3.3- Existing Truck Route Plan.....3-6  
 Figure 3.4- Vehicular Circulation Plan.....3-9  
 Figure 3.5- Street Sections Key Map..... 3-10  
 Figure 3.6- Street Sections..... 3-11  
 Figure 3.7- Street Sections..... 3-12  
 Figure 3.8- Street Sections..... 3-13  
 Figure 3.9- Street Sections..... 3-14  
 Figure 3.10- Pedestrian and Bicycle Circulation Plan..... 3-16  
 Figure 3.11- Proposed Truck Route Plan..... 3-17  
 Figure 6.1- Potable Water Pipe Network .....6-4  
 Figure 6.2- Wastewater Network .....6-7  
 Figure 6.3- Offsite Wastewater Force Main Improvements .....6-8  
 Figure 6.4- Recycled Water Pipe Network..... 6-10  
 Figure 6.5- Existing Watersheds ..... 6-16  
 Figure 6.6- Proposed Watersheds..... 6-17  
 Figure 6.7- Stormwater Network..... 6-18  
 Figure 6.8- Existing Power Lines..... 6-20  
 Figure 7.1- Gateway Sign Locations..... 7-17  
 Figure 8.1- Phasing Map.....8-8

## Chapter One: Introduction

### ***Overview and Applicability of the CLSP Phase 2 Amendment***

The City of Lathrop adopted the Central Lathrop Specific Plan (CLSP) on November 9, 2004. The 2004 CLSP provided for the development of approximately 1,521 acres located south of the northern city limit line, west of Interstate-5, north of the Mossdale Village planning area, and east of the San Joaquin River as illustrated in Figure 1.1 and 1.2 (CLSP Plan Area).

The CLSP Plan Area consist of two primary development phases. Phase 1 of the CLSP covers approximately 797 acres in the southern portion (Phase 1 Plan Area), and Phase 2 applies to the 724-acre northern portion (Phase 2 Plan Area). Dos Reis Road serves as the dividing line between the two phases.

The City of Lathrop General Plan, in effect when the 2004 CLSP was adopted, provided for the development of a residential mixed use community in both Phases 1 and 2. The City of Lathrop recently adopted an update to the Lathrop General Plan on September 19, 2022. The 2022 Lathrop General Plan changed the prior General Plan residential, parks, schools, and commercial land use designations in the CLSP Phase 2 Plan Area to Limited Industrial, while maintaining the Open Space and Linear Park designation along the Mossdale Tract levee. The 2022 General Plan Update did not change the adopted land use designations in Phase 1 Area which allowed the development of residential neighborhoods, commercial areas, and public facilities including a high school, a community center and parks.

Development has occurred in the Phase 1 area, but no development has occurred within the Phase 2 area.

The Central Lathrop Specific Plan Phase 2 Amendment (“CLSP-2 Amendment”) includes updates and modifications only for the Phase 2 Plan Area portion of the Central Lathrop Specific Plan comprising the 724-acre area north of Dos Reis Road. **The CLSP-2 Amendment does not, in any way, alter, amend, or otherwise change the vested entitlements for the CLSP Phase 1 area, which is the 797-acre area south of Dos Reis Road. The original 2004 CLSP and the associated entitlements continue to govern the residential mixed use development in the CLSP Phase 1 Plan Area.**

The CLSP-2 Amendment revises all policies, regulations, land use concepts, and development standards with respect to Phase 2 and supersedes the 2004 CLSP for the area north of Dos Reis Road.

Table 1.1 identifies the chapters of the CLSP-2 Amendment and the corresponding chapters they supersede in the original 2004 CLSP.

The City of Lathrop is the sponsor of the CLSP-2 Amendment in order to amend the 2004 CLSP for the Phase 2 Plan Area so that the CLSP-2 Amendment is consistent with the recently adopted 2022 Lathrop General Plan. The 2004 CLSP designated residential, parks, schools, and commercial uses within the CLSP Phase 2 Plan Area. The CLSP-2 Amendment changes the residential, parks, schools, and commercial land uses within the Phase 2 Plan Area to Limited Industrial and retains the Open Space designation consistent with the 2022 Lathrop General Plan. The CLSP-2 amendment will implement the 2022 General Plan policies and establish clear direction for the development of the Plan Area. This land use change is consistent with the City’s efforts to support the Mossdale Tract’s provision of 200-year urban level of flood protection.

*Table 1.1: Relationship between the 2004 CLSP and CLSP-2 Amendment*

<b>Chapter in 2004 CLSP (Superseded for the Phase 2 area)</b>	<b>Chapters in CLSP-2 Amendment for Phase 2 area</b>
Chapter One: Introduction	Chapter One, Introduction
Chapter Two: Land Use	Chapter Two, Land Use
Chapter Three: Circulation and Transportation	Chapter Three, Circulation and Transportation
Chapter Four: Management of Natural Resources	Chapter Four, Natural Resources Management
Chapter Five: Community Services and Facilities	Chapter Five, Community Services and Facilities
Chapter Six: Utilities and Drainage Infrastructure	Chapter Six, Utilities and Drainage Infrastructure
Chapter Seven: Community Design	Chapter Seven, Design Guidelines
Chapter Eight: Implementation	Chapter Eight: Implementation
Chapter Nine: Financing	Chapter Nine: Financing

### ***Purpose***

The purpose of the CLSP-2 Amendment is to create a comprehensive planning framework that guides the development of the 724 acres within the Phase 2 Plan Area in a manner consistent with the 2022 Lathrop General Plan. The CLSP-2 Amendment is consistent with and based upon the 2022 Lathrop General Plan long-term vision for the Central Lathrop Specific Plan area.

The CLSP-2 Amendment contains policies, action items and exhibits regarding Phase 2 land use, circulation and transportation, management of natural resources, infrastructure, design guidelines, implementation, and financing.

### ***Planning Vision***

The Stockton-Tracy-Lathrop-Manteca region has experienced record growth that is anticipated

to continue. Of the cities located in San Joaquin County, Lathrop has become one of the fastest growing cities of its size, and financially stable cities in the State of California. This status is due to its location, availability of housing and jobs, and strategic planning that has provided a vast amount of land designated to create an ideal balance of housing, retail, services, leisure, and jobs creating industries for decades of sustainable growth.

The CLSP-2 Amendment designates land uses for a variety of business opportunities to support the skilled and educated workforce of Lathrop and the local area. Creating a relationship between jobs for the community and housing is paramount. Attracting businesses is essential in reducing the need for residents to commute out of the area, generating revenue for the city, as well as decreasing carbon emissions by reducing

vehicle miles travelled (VMT) of lengthy commutes throughout the County and beyond.

The 2022 Lathrop General Plan supports environmentally sensitive and sustainable employment growth by establishing land for industrial development within the Plan Area. The CLSP-2 Amendment is consistent with the 2022 General Plan in fulfilling the goals listed in Table 1.2 below. In addition the CLSP-2 Amendment complies with the LU-5 Implementation Actions outlined in the 2022 General Plan and listed in Table 1.3 below.



*Table 1.2: Goals from the 2022 Lathrop General Plan*

<b>Land Uses</b>
LU-1: Accommodate a mix of land uses that meet the needs of residents, businesses, and visitors with places to live, work, shop, be entertained and culturally engaged.
LU-2: Promote objectives and development in special planning areas consistent with adopted specific plans, overlay districts, master plans and density bonus provisions.
LU-3: Participate in coordinated local and regional land use planning activities.
LU-4: Coordinate and integrate land use planning and transportation objectives.
LU-5: Ensure that new development is compatible with existing development.  <i>Refer to Table 1.3 for LU-5 Implementation Actions</i>
LU-6: Promote the development of job-generating land uses to support existing and future businesses.
LU-7: Preserve Lathrop’s agricultural heritage by protecting and maintaining significant areas of agricultural lands around the city, and by reducing land use conflicts with agricultural operations.
<b>Circulation</b>
CIR-1: Develop and maintain a roadway system that accommodates all users.
CIR-2: Create a system of pedestrian, bicycle, and transit facilities that enables non-automotive accessibility and increases the health and livability of the community.
CIR-3: Support the movement of goods through trucking, rail, and other forms of freight service while maintaining quality of life for city residents.
CIR-4: Plan for the future of transportation to ensure accessibility for all, reduce the environmental impacts of transportation, and improve the quality of life.
<b>Economic Development</b>
ED-1: Retain and expand existing businesses.
ED-2: Broaden the local economic base.
ED-3: Provide diverse workforce housing options.
ED-4: Enhance community quality of life.

<b>Public Facilities and Services</b>
PFS-1: Provide effective, adequate, cost-efficient, and high-quality community services and facilities for residents, businesses, institutions, and visitors in Lathrop.
PFS-2: Provide existing and projected development with reliable, adequate access to clean, safe and potable water.
PFS-3: Provide the community with a wastewater system that is efficient, safe, cost-effective, and able to meet the needs of existing and future development.
PFS-4: Provide the community with an efficient, attractive, and environmentally sound stormwater system to accommodate runoff from existing and new development and prevent property damage due to flooding.
PFS-5: Ensure the community has access to adequate energy services, provided through economically and environmentally sustainable means.
PFS-6: Ensure state-of-the-art technology and telecommunications services for households, businesses, and the community is available throughout the city.
PFS-7: Provide the community with high-quality public safety services, facilities, and technology that protects against illicit activities and crime.
PFS-8: Coordinate with school districts to provide the community with educational facilities and opportunities that support the continued lifelong learning of all residents.
PFS-9: Provide the community with environmentally responsible waste disposal and recycling services that minimize the generation of disposal of waste.
PFS-10: Support the use of recycled water to meet water demands.
<b>Public Safety</b>
PS-1: Prepare the community for natural hazards related to landslides, geologic instability, and seismic activity to minimize loss of life, injury and property damage, and disruption of vital services.
PS-2: Protect the safety of life and property and prepare for urban and wildfire emergencies.
PS-3: Protect the community from potential flood hazards to minimize loss of life, injury, and property damage, and disruption of vital services.
PS-4: Protect the community from the potential for hazardous waste and materials contamination.
PS-5: Prepare and equip the community to handle emergency situations, in order to minimize loss of life, injury, property damage, and disruption of vital services.

PS-6: Prepare the community to adapt to climate change, including extreme weather events, in order to minimize risks to life, property, the economy, and the environment.
<b>Recreation and Resources</b>
RR-1: Provide the community with high-quality parks and recreational amenities.
RR-2: Protect and manage natural open space areas to provide scenic beauty and community enjoyment.
RR-3: Preserve and protect prehistoric, historic, archaeological, and paleontological resources, to bolster community identity and protect sensitive resources.
RR-4: Protect and maintain animal and plant species, city trees, waterways, and other supporting biological habitats within Lathrop.
RR-5: Balance the extraction of mineral resources with future development and conservation opportunities.
RR-6: Provide the community with optimal air quality.
RR-7: Protect the health of the bay delta.
RR-8: Promote water conservation throughout the region.
<b>Noise</b>
N-1: Protect residents from the harmful effects of exposure to excessive noise.
N-2: Protect the economic base of the city by preventing the encroachment of incompatible land uses near noise-producing roadways, industries, the railroad, commercial and mixed-use districts, and other sources.
<b>Environmental Justice</b>
EJ-1: Promote land use and development patterns that reduce greenhouse gas emissions, enhance air quality, and reduce climate change impacts in environmental justice communities.
EJ-2: Take measures to reduce pollution exposure and improve air quality in environmental justice communities.
EJ-3: Ensure that public facilities and services are equitably distributed throughout the city of Lathrop and are available to residents of environmental justice communities.
EJ-4: Expand access to healthy food and nutritional choices for all residents in the community.

EJ-5: Promote and ensure healthy living conditions for all residents, particularly those in environmental justice communities.
EJ-6: Promote land use and development patterns that encourage physical activity and improve multimodal access and connectivity to employment, shopping, services, schools, parks and other destinations.
EJ-7: Improve the physical fitness of the City’s residents, particularly those who live in environmental justice communities.
EJ-8: Create accessible and culturally appropriate opportunities for all people regardless of race, color, national origin, or income to engage in the decision-making process.
EJ-9: Prioritize improvements and programs that address the needs of environmental justice communities.

*Table 1.3: LU-5 Land Use Compatibility Implementation Actions from the 2022 Lathrop General Plan*

LU-5.a: Through the development review process, screen development proposals for land use and transportation network compatibility with existing surrounding or abutting development or neighborhoods.
LU-5.b: Through the development review process, analyze land use compatibility and require adequate buffers and/or architectural enhancements to protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks.
LU-5.c: When industrial projects, including warehouse projects, fulfillment centers, and other projects that may generate high volumes of truck trips and/or air quality emissions are proposed within 1,000 feet of existing or planned residential uses or other sensitive receptors, the City shall require the preparation of a Health Risk Assessment (HRA) that meets the standards established by the Office of Environmental Health Hazard Assessment (OEHHA), and the San Joaquin Valley Air Pollution Control District (SJVAPCD). Projects shall not be approved until it can be demonstrated that the project would not result in an exceedance of the established thresholds of significance for public health risks at nearby sensitive receptors.
LU-5.d: When industrial projects, including warehouse projects, fulfillment centers, and other projects that may generate high volumes of truck trips and/or air quality emissions are proposed within 1,000 feet of existing or planned residential uses or other sensitive receptors, the City shall require the implementation of best management practices (BMPs) to reduce pollution exposure to sensitive receptors, particularly diesel particulate matter (DPM). The appropriate BMPs shall be established on a case-by-case basis, and should consider the following tools, methods, and approaches:

- Creating physical, structural, and/or vegetative buffers that adequately prevent or substantially reduce pollutant dispersal between warehouses and any areas where sensitive receptors are likely to be present, such as homes, schools, daycare centers, hospitals, community centers, and parks.
- Providing adequate areas for on-site parking, on-site queuing, and truck check-in that prevent trucks and other vehicles from parking or idling on public streets.
- Placing facility entry and exit points from the public street away from sensitive receptors, e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility. Exceptions can be made for emergency vehicle access (EVA) points.
- Locating warehouse dock doors and other onsite areas with significant truck traffic and noise away from sensitive receptors.
- Screening dock doors and onsite areas with significant truck traffic and noise with physical, structural, and/or vegetative barriers that adequately prevent or substantially reduce pollutant dispersal from the facility towards sensitive receptors.
- Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

LU-5.e: Update the Lathrop Municipal Code to include Good Neighbor Guidelines for Warehouse Distribution Facilities. The new Good Neighbor Guidelines should include:

- a. A definition of the type and size of facility that is subject to the Guidelines;
- b. Standards to minimize exposure to diesel emissions to sensitive receptors that are situated in close proximity to the proposed facility;
- c. Standards and practices that eliminate diesel trucks from unnecessarily traversing through residential neighborhoods;
- d. Standards and practices that eliminate trucks from using residential areas and repairing vehicles on the streets;
- e. Strategies to reduce and/or eliminate diesel idling within the facility’s site;

LU-5.f: Update the Central Lathrop Specific Plan (CLSP) to accomplish the following objectives:

- a. Bring the Specific Plan’s land use map into consistency with the General Plan Land Use Map (Figure LU-1)
- b. Establish a circulation network that keeps future truck trips as far from existing and planned sensitive receptors as feasible; this includes, but is not limited to, the following requirements, which shall be incorporated into the Specific Plan:

- i. Trucks shall be prohibited on Dos Reis Road west and east of Golden Valley Parkway, on Golden Valley Parkway south of Dos Reis Road to Lathrop Road, and on Lathrop Road east of Golden Valley Parkway to Interstate 5 southbound off-ramp.
  - ii. Future truck dependent development projects shall be prohibited from providing driveway access points off of Dos Reis Road, west of Golden Valley Parkway, other than emergency vehicle access (EVA).
  - iii. Truck traffic within the Limited Industrial Area of the Central Lathrop Specific Plan shall be limited to De Lima Road, and any future roadways north of Dos Reis Road, to connect to Manthey Road, Roth Road, and Interstate 5.
- c. Establish site design standards for new industrial projects;
  - d. Identify financing and cost-recovery methods to fund roadway and infrastructure improvements.
  - e. Circulation design standards that promote safe transportation routes that limit impacts to developed areas to the south, and connectivity enhancements to provide better connectivity to I-5.
  - f. Infrastructure improvements to improve roadway operations
  - g. Opportunities to provide employee-serving amenities onsite, such as parks and plazas, outdoor seating areas, fitness facilities, and daycare centers as a means to reduce vehicle trips, while supporting air quality, public health, and sustainability goals.
  - h. Include provisions that all development projects proposed north of Dos Reis Road and south of De Lima Road be required to obtain a Conditional Use Permit (CUP), which shall be subject to discretionary review by the City Council.

LU-5.g: During the interim period following adoption of this General Plan, and the adoption of the updates to the Central Lathrop Specific Plan, identified in Action LU-5f, the City shall enforce the following requirements for all Limited Industrial development projects, including warehouse, distribution, and logistics projects, within the Central Lathrop Specific Plan Area:

- a. Trucks shall be prohibited on Dos Reis Road west and east of Golden Valley Parkway, on Golden Valley Parkway south of Dos Reis Road to Lathrop Road, and on Lathrop Road east of Golden Valley Parkway to Interstate 5 southbound off-ramp.
- b. Future truck dependent development projects shall be prohibited from providing driveway access points off of Dos Reis Road, west of Golden Valley Parkway, other than emergency vehicle access (EVA).
- c. Truck traffic within the Limited Industrial Area of the Central Lathrop Specific Plan shall be limited to De Lima Road, and any future roadways north of Dos Reis Road, to connect to Manthey Road, Roth Road, and Interstate 5.

Figure 1.1- Regional Map

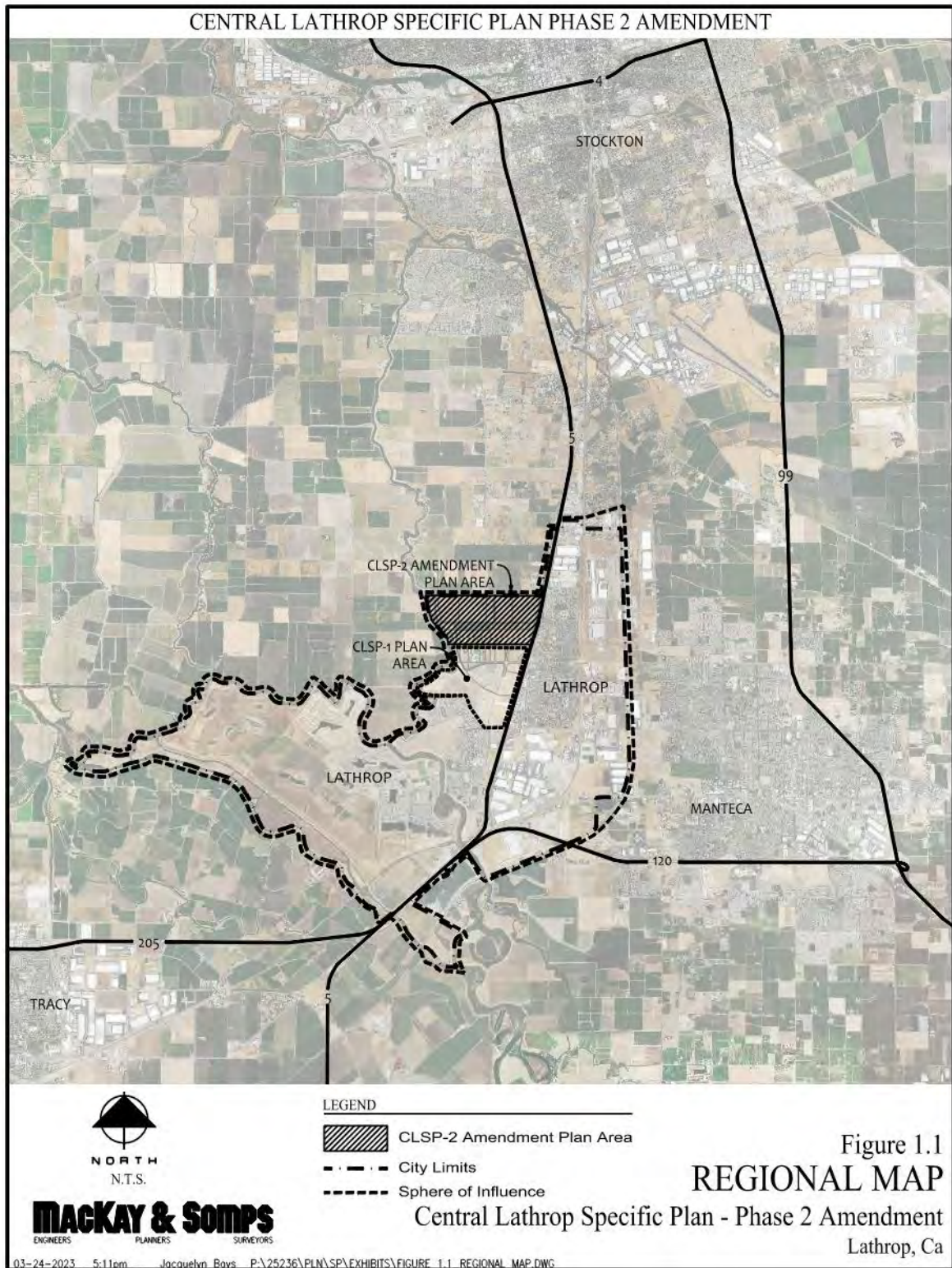
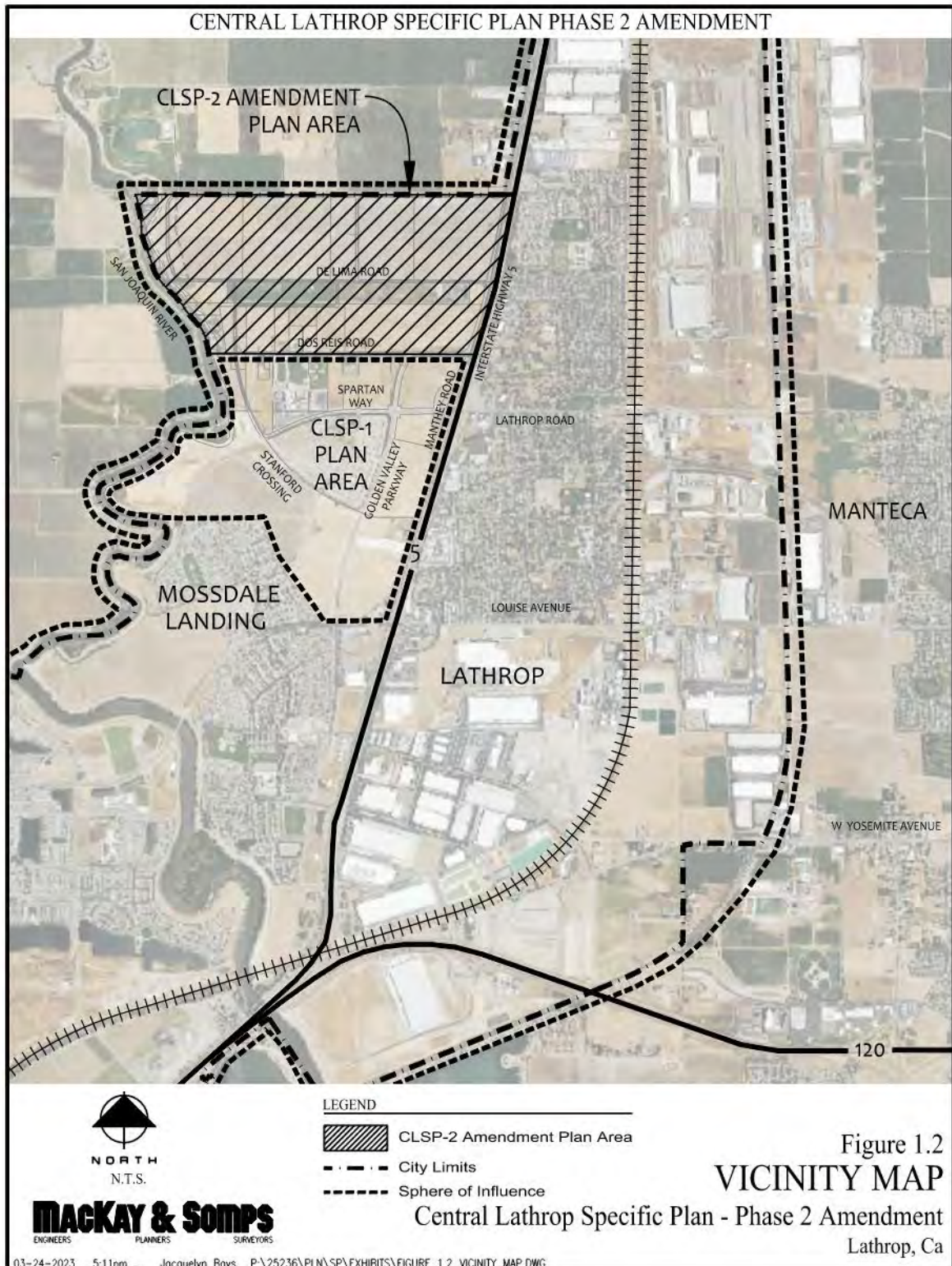


Figure 1.2- Vicinity Map





### ***Goals of the Specific Plan***

The CLSP is intended to provide for the orderly and systematic development of an integrated full-service community in a manner consistent with goals and policies of the City and compatible with site characteristics. The primary goals of the CLSP-2 Amendment are designed to achieve the following:

- Establish a comprehensive land use plan that will guide development of the approximately 724-acre CLSP-2 Amendment Plan Area.

Update the City’s long-term vision for the CLSP-2 Amendment Plan Area in accordance with the 2022 Lathrop General Plan, by incorporating refinements designed to reflect evolving innovation in land use planning concepts.

Establish a regional industrial development area adjacent to the I-5 freeway that makes use of the visibility and prime freeway access provided by the Roth Road Interchange.

Maximize passive recreational opportunities through the creation of a comprehensive linear park and open space system located adjacent to and providing access to the San Joaquin River.

Generate positive fiscal benefits for the City resulting from the regional industrial development.

Increase employment and shopping opportunities for City residents.

Provide job-generating land uses in close proximity to residential uses in order to minimize home-to-work vehicular trip lengths, automobile usage and related air quality impacts.

Provide an integrated, efficient, and safe circulation system for pedestrians, bicyclists, transit and vehicles.

Provide roadway improvements and land use planning that will tie together with existing development.

Establish a logical phasing plan that assures that each phase of development will include all necessary public improvements required to meet City standards.

Add value to the existing and future City of Lathrop community and contribute to the establishment of a strong local economic base through (a) job creation and (b) the economic stimulus that comes from the multi-million-dollar investment required to develop the Central Lathrop Specific Plan and the disposable income of the people who live and work in the Plan Area.

Implement the development program envisioned for the Central Lathrop Specific Plan on property that the Lathrop 2022 General Plan designates for Limited Industrial uses.

To the extent feasible, provide a self-mitigating project, where mitigation measures are incorporated into the CLSP-2 Amendment and future project designs, so as to minimize environmental impacts.

Provide a logical and orderly extension of the City of Lathrop that is compatible with and complements existing and planned land uses within other portions of the City.

Satisfy the City policies, regulations and expectations as defined in the Lathrop General Plan and Municipal Code.

Provide services and infrastructure that meet or exceed City standards and that do not diminish services to existing residents of the City.

Enrich the relationship between the City and the San Joaquin River by incorporating the river’s edge as a critical component of the

Central Lathrop Specific Plan parks and open space program.

These Central Lathrop Specific Plan goals are consistent with the goals of the Lathrop General Plan.

## ***Context***

### *Location*

Lathrop is located within the southwest quadrant of San Joaquin County. The Central Lathrop Specific Plan area is located within the northwest area of the City. See Figure 1.1: Regional Map.

The CLSP-2 Amendment Plan Area encompasses approximately 724 acres located south of the city limit line, north of Dos Reis Rd, west of Interstate 5, and east of the San Joaquin River. See Figure 1.2 for the Vicinity Map.

### *Property Ownership*

The CLSP-2 Amendment encompasses 724 acres divided among 25 existing parcels. Figure 1.3 lists the property owners.

### *Existing Site Conditions and Uses*

The CLSP-2 Amendment Plan Area consists primarily of undeveloped land and agriculture uses, along with the existing Dos Reis Regional Park and boat launch, and various existing rural residences. The existing Dos Reis Regional Park is located adjacent to the San Joaquin River along the west side of the CLSP-2 Amendment Plan Area. The undeveloped land and existing agriculture uses comprise the majority of the remaining land acreage extending from the San Joaquin River, east to Manthey Road and Interstate-5. See Figure 1.4 for Existing Conditions Map.

Dos Reis Park, a county/state facility located along the San Joaquin River at the end of Dos Reis Road, while a part of the CLSP-2 Amendment Plan Area, is intended to remain under county/state ownership and maintenance.

Few trees, aside from the orchard trees, exist beyond those along the riverbed and on rural residential sites. A few rural roads (Manthey Road, De Lima Road, and Dos Reis Road) cross or border the Plan Area to provide access to the river, farmlands, and rural residences. No known major utility easements or facilities are present, except for water lines in Dos Reis Road, De Lima Road, and a portion of Manthey Roads; and a storm drain force main in Dos Reis Road that serves existing develop east of Interstate-5.

Plant habitats are isolated within narrow corridors located along portions of the San Joaquin River. All lands have been modified by human activities. The area is generally flat, with a slight fall from east to west towards the San Joaquin River. The area is protected from flood hazards by the levee paralleling the river. Groundwater is relatively shallow. No parcels are under Williamson Act contracts.

### *Adjacent Uses*

A variety of existing land uses surrounds the CLSP-2 Amendment Plan Area. To the south of Dos Reis Road from west to east is a planned community park and open space trail along the levee; the existing Lathrop High School sports fields and auxiliary parking area, undeveloped land designated as Residential Mixed Use, and undeveloped land designated as Office Commercial. To the west is the San Joaquin River and to the north is San Joaquin County land with existing agriculture and industrial uses. Interstate 5 is east of the Plan Area.

### *Jurisdictional Context*

Since the City approved the 2004 CLSP, the CLSP Plan Area has been annexed into the City of Lathrop. The area or portions thereof, are within the jurisdiction of the Manteca Unified School District, Reclamation District 17 (RD-17), and the Lathrop Manteca Fire District (LMFD). No changes to the boundaries of these districts are proposed.

Figure 1.3- Existing Ownership Map

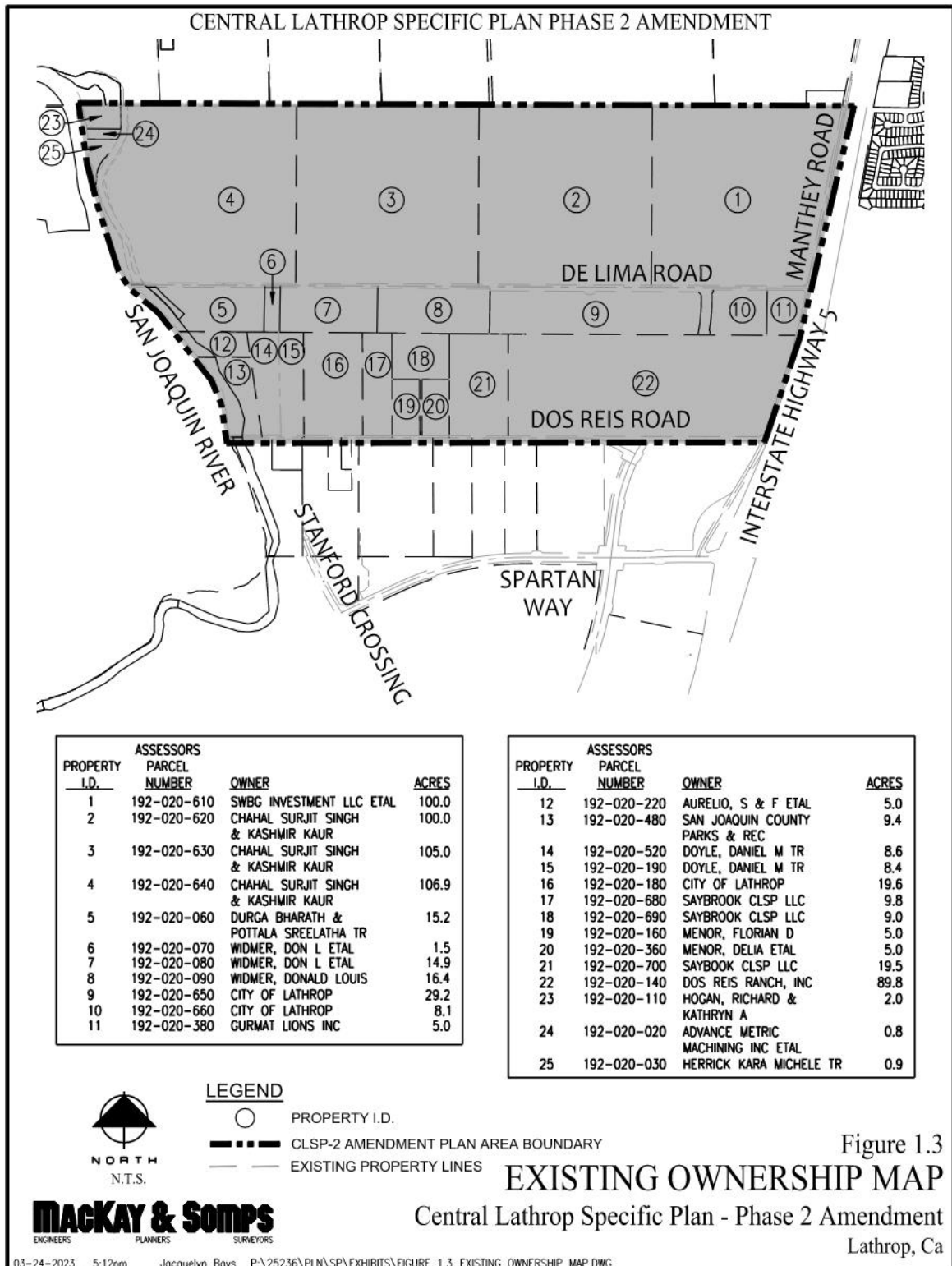
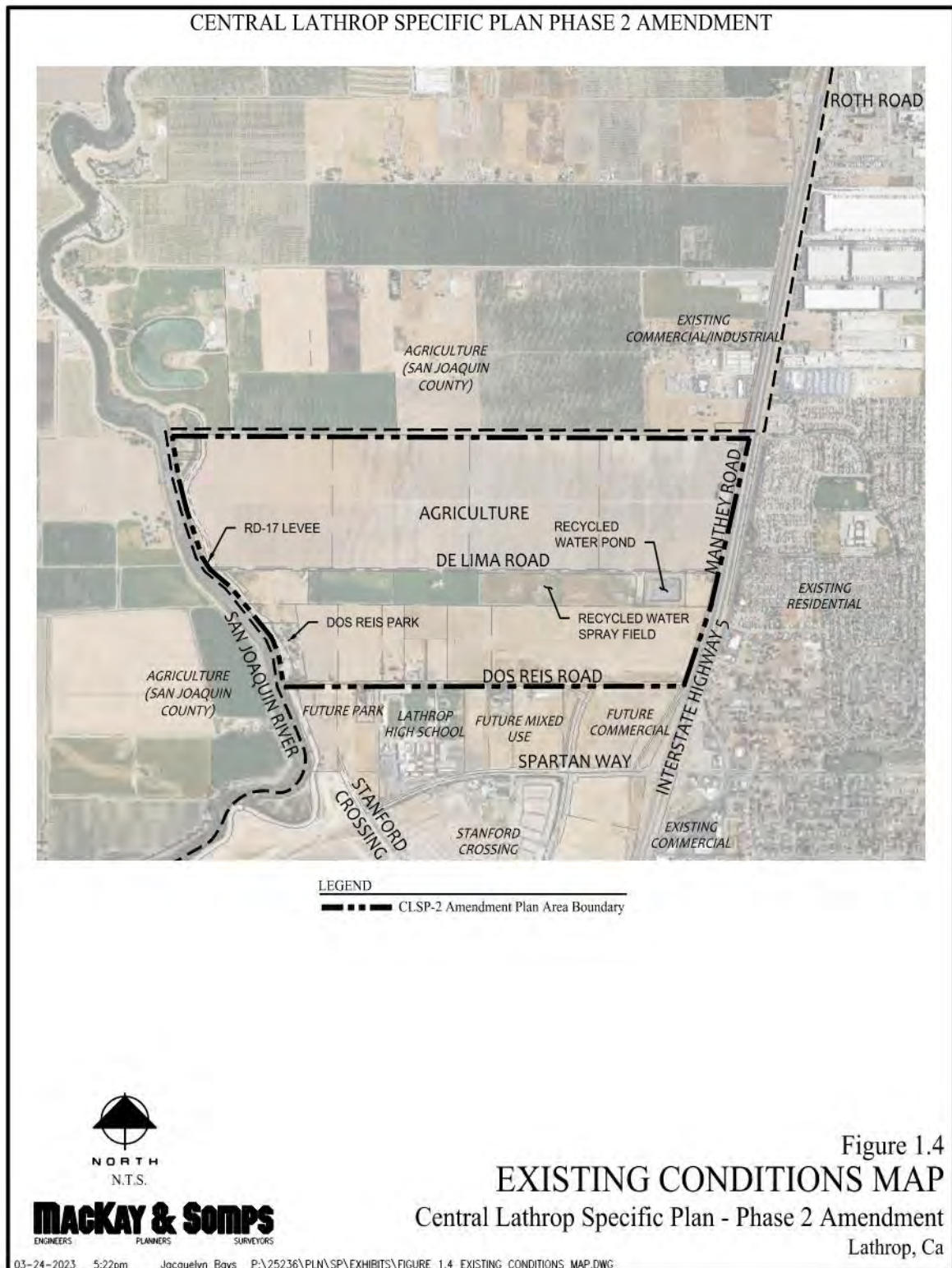


Figure 1.4- Existing Conditions Map



### ***Legal Authority***

The City of Lathrop, as a general law city, will adopt this Specific Plan Amendment, and other project related documents by resolution in accordance with the provisions of Article 8, Sections 65450 through 65457 of the California Government Code. These provisions require that a specific plan be consistent with the City’s adopted general plan. All other subsequent entitlements and approvals must also be consistent with the Lathrop General Plan.

State law also requires that all subsequent subdivisions and developments (including public works projects) within the Phase 2 Plan Area, as well as all zoning regulations applicable to the Phase 2 Plan Area, must be consistent with this CLSP-2 Amendment.

### ***Relationship to the Lathrop General Plan***

The General Plan establishes the goals, policies, land uses, and standards for development within the City. The following related plans, incorporated by reference, provide additional detailed direction for future development of the CLSP-2 Amendment Plan Area.

### ***Wastewater, Water and Recycled Water Master Plans***

Wastewater (collection and treatment), water (supply and distribution), and recycled water (wastewater disposal) master plans were adopted by the City. These plans identify improvements needed to serve current and future land uses at build out and provide a basis for the orderly expansion of potable, waste, and recycled water facilities. In conjunction with other plans, these documents establish phasing and costs.

### ***Bicycle Transportation Master Plan***

The City of Lathrop’s Bicycle Transportation Master Plan establishes goals, policies, routes and standards for bicycle transportation and facilities within the City.

### ***Relationship to Other City Policies, Programs, and Documents***

The supporting documents described below establish the foundation and/or provide direction for the implementation of this CLSP-2 Amendment. These documents will be utilized in conjunction with the CLSP-2 Amendment to ensure the implementation of the General Plan’s goals and policies.

### ***Capital Facilities Fee Program***

The City’s Capital Facilities Fee program identifies the capital improvements needed for development. This document establishes a variety of financing vehicles and fees to pay for public infrastructure and community facilities to serve the new development areas.

### ***Municipal Code***

Special zoning districts have been created for the CLSP Plan Area. These special zoning districts end in “CL” to designate these land use categories as unique to the Central Lathrop Specific Plan area. The amended zoning categories for the Phase 2 Plan Area are described in detail later in this CLSP-2 Amendment and are incorporated into the Lathrop Municipal Code.

### ***Development Agreement***

Development Agreements to be potentially entered into between the City and landowners within the Plan Area can vest, or “lock in” development rights. Development agreements can establish the responsibilities of landowners with respect to the construction and financing of public infrastructure, the dedication of land, and other development-related obligations.

### ***Environmental Impact Report***

Refer to the Implementation chapter for details regarding the relationship between the CLSP-2 Amendment and the EIRs prepared with the original 2004 CLSP and the 2022 General Plan.

### ***Organization of the Specific Plan***

The CLSP-2 Amendment is organized as follows:

Chapter One: Introduction - discusses the purpose, planning context, primary goals, and scope of the Specific Plan Amendment.

Chapter Two: Land Use - describes the way in which the land uses that comprise the CLSP-2 Amendment Plan Area are organized and includes a discussion of the general character of such uses, their location within the Plan Area, the intensities of use, and the goals associated with each of the designated land uses.

Chapter Three: Circulation and Transportation - explains the CLSP-2 Amendment roadway network in the context of the local, city, and regional transportation and circulation patterns, and the system of pedestrian and bicycle paths.

Chapter Four: Natural Resources Management - describes the ways in which the environmental features of the plan area are integrated into the CLSP-2 Amendment and the program to protect these features, as well as to allow them to be enjoyed by residents and non-residents alike.

Chapter Five: Community Services and Facilities - describes the needs for community services and facilities that will result from the development of the CLSP-2 Amendment and the way in which these needs will be addressed.

Chapter Six: Utilities and Drainage Infrastructure - discusses the various utility and drainage improvements required to serve the Phase 2 Plan Area.

Chapter Seven: Design Guidelines - provides the site planning, including landscape and open space, and architectural standards for each land use, further ensuring a high-quality and unique development.

Chapter Eight: Implementation - describes the way in which the CLSP-2 Amendment will be

executed, including development phasing strategies and the permitting process for individual development proposals.

Chapter Nine: Financing - describes anticipated project construction and maintenance needs and financing mechanisms, and the key financing options that are available to fund these costs.

## Chapter Two: Land Use

### ***Introduction***

The Land Use and Development Plan is the primary implementing component of the CLSP-2 Amendment. This chapter summarizes the different land uses proposed, refines land use types that are identified in the 2022 General Plan and lists the development standards. This chapter, including the Land Use Plan, describes the land use designations and zoning. The 2022 General Plan Land Use Map and the CLSP-2 Amendment Land Use Plan govern the land uses in the CLSP Phase 2 Plan Area.

### ***Existing and Interim Land Uses***

Existing agricultural uses, recycled water storage ponds, agricultural irrigated with recycled water and several rural residences are located within the CLSP-2 Amendment Plan Area. These existing uses will remain until the property is developed and therefore referred to in this document as Interim Uses.

The existing uses within the CLSP Phase 1 Plan Area include various residential neighborhoods commonly referred to as Stanford Crossing, a high school, a community center, teen center/library, several public neighborhood parks, and some commercial development. Some agricultural uses and rural residences remain will remain until developed in the future in accordance with the Lathrop General Plan.

The CLSP-2 Amendment development standards for the Phase 2 Plan Area are consistent with the development standards in the City of Lathrop's Zoning Ordinance. Separate Design Guidelines apply as set forth in Chapter Seven.

The Land Use Plan was influenced by a variety of factors including physical site constraints and adjacent land uses as discussed in Chapter One.

This CLSP-2 Amendment may evolve over time, taking into consideration market change and community desires and needs. As property owners and builders develop their properties, they will be required to follow the Site Plan Review process and, if applicable, obtain a Conditional Use Permit. The development plans for each property will be designed based on the policies and standards contained in this Specific Plan Amendment.

Overall, the CLSP-2 Amendment designates 618.2 acres of Limited Industrial uses, 11.2 acres of Parks, and 29.3 acres of Open Space in Phase 2.

### ***Land Use Plan***

The CLSP-2 Amendment is designed to create a range of employment uses along with some recreational uses along the San Joaquin River levee system for City residents and employees. The CLSP-2 Amendment Plan Area encompasses approximately 724 acres. Refer to Figure 2.1. The overall Phase 2 Plan Area land uses, acreages, and intensities of use are summarized in Table 2.1; this summary represents the build-out of the CLSP-2 Amendment Plan Area.

The Land Use Map (Figure 2.1) illustrates the land uses within the CLSP-2 Amendment Plan Area. Table 2.1 provides a summary of these land uses. The acreage and allowable square footages for each land use category may vary slightly from these acreages shown depending on more accurate survey data and the final alignment

of roadways and required open space; however, the total acreages and building square footage establish an approximate carrying capacity for the Plan Area.

### ***Landscape Buffer***

A landscape buffer shall be provided along the north side of Dos Reis Road as illustrated in Figure 2.2 with two (2) different design themes. At locations where existing or proposed Land Use on the south side of Dos Reis Road includes sensitive receptors, the landscape buffer shall include a 30-foot-wide landscape corridor within the public right-of-way including 22' of landscaping and a 8' paved sidewalk as well as an additional buffer on the adjacent private development parcels. At other locations on Dos Reis Road where Commercial or Industrial use is proposed to the south, the landscape buffer shall include a 26-foot-wide landscape corridor within the public right-of-way including 18 feet of landscaping and an 8 foot paved sidewalk as well as an additional buffer on the adjacent private development parcels. The additional buffer on the adjacent private development parcels in both scenarios shall be determined during the Site Plan Review process for each specific development project.



Figure 2.1- Land Use Map

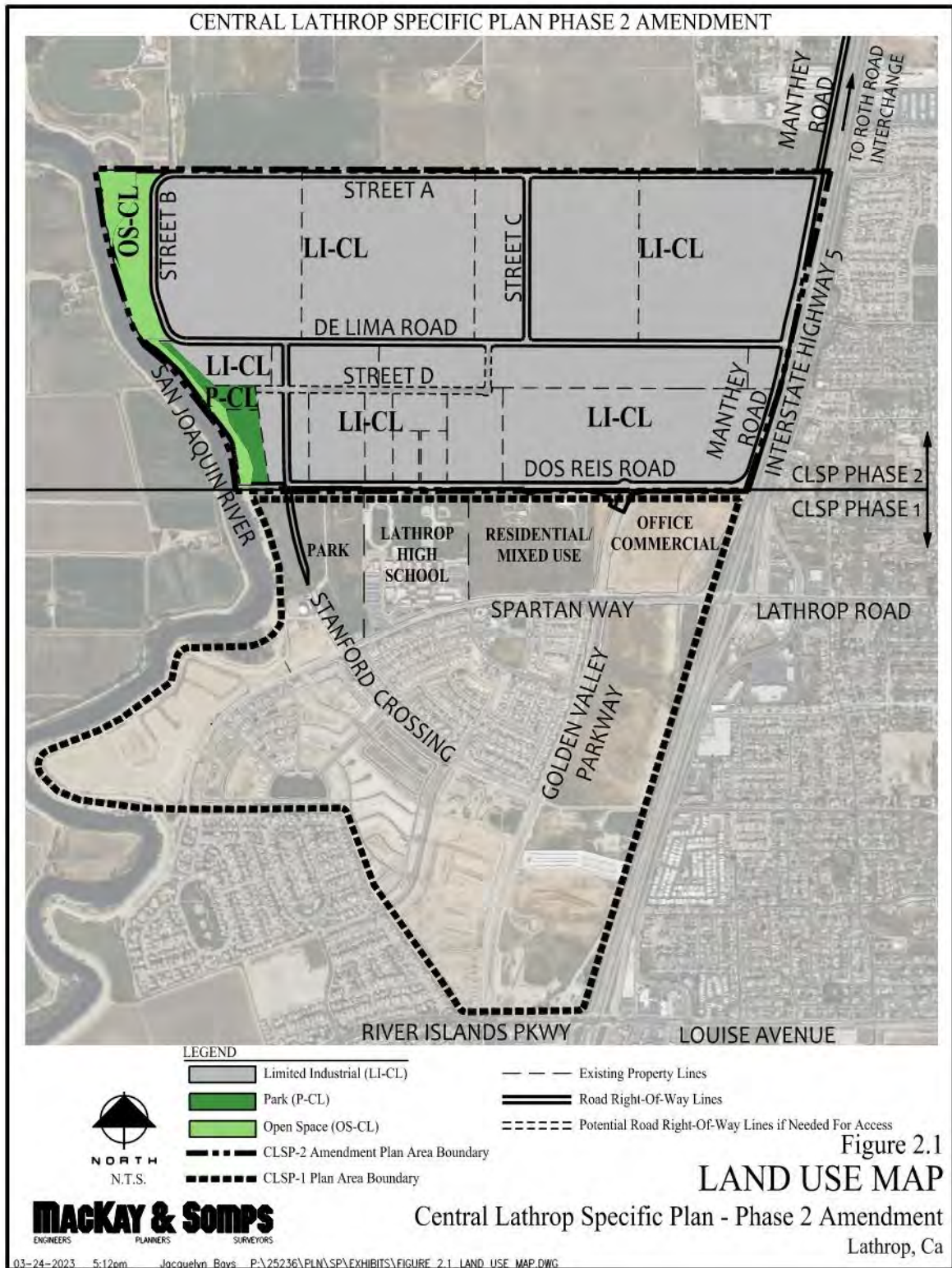


Figure 2.2- Landscape Buffer

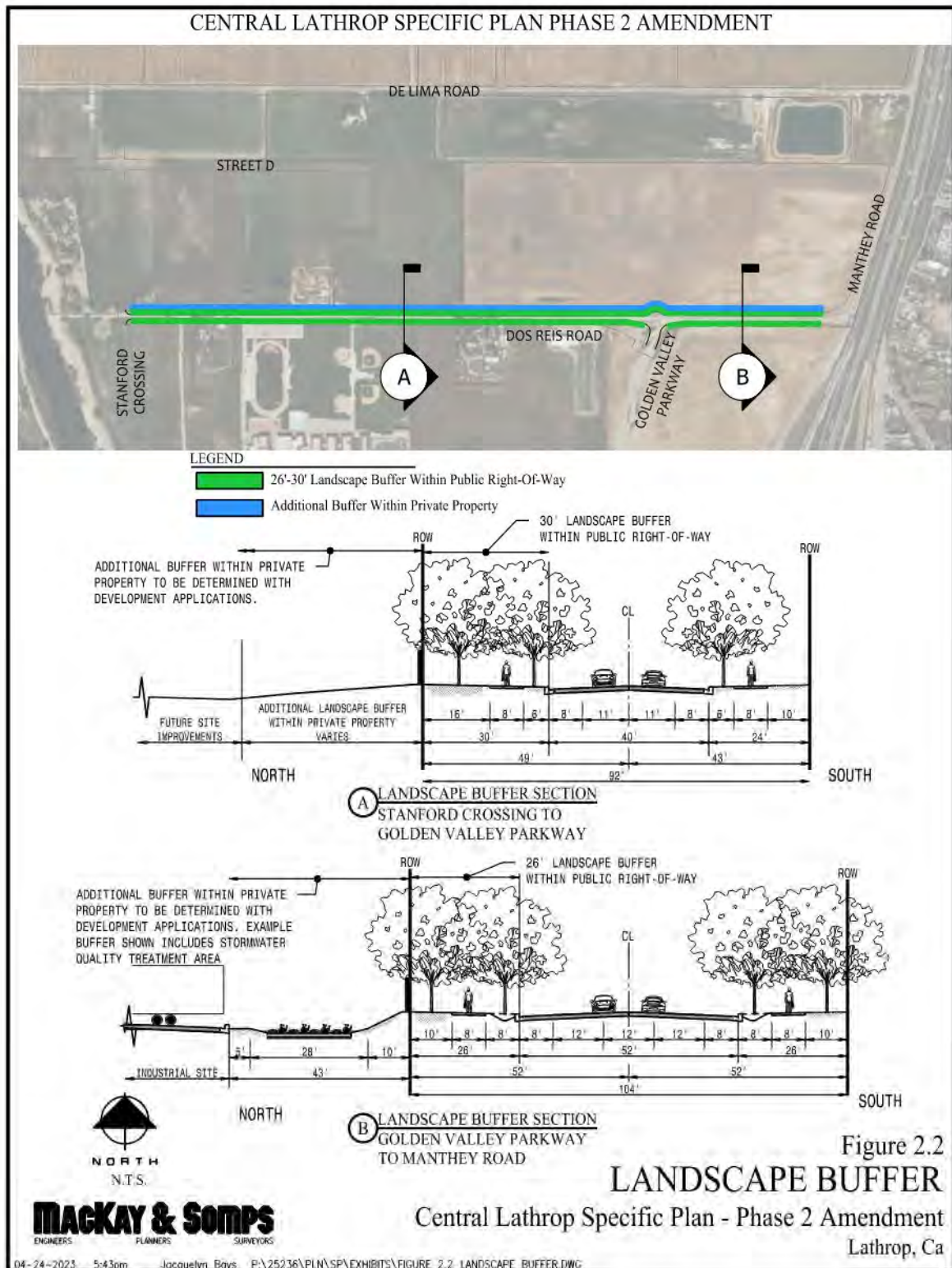


Table 2.1: CLSP-2 Amendment Land Use Summary

Designation	Land Use	Area (acres)	Maximum Building Square Footage at Max FAR of 1.0 (SF)	Potential Building Square Footage at Target FAR of 0.75 (SF)
LI-CL	Limited Industrial [1]	618.2	26,928,792	20,196,594
OS-CL	Open Space	29.3	1,276,308	957,231
P-CL	Park	11.2	487,872	365,904
	Major Road Right-of-Way	65.3	2,844,468	2,133,351
	Total	724.0	31,537,440	23,653,080

[1] Allowable FAR. of 1.0 per the 2022 General Plan

[2] Target FAR of 0.75

The above table represents the proposed development acreages by land use. Calculated acres are based upon the overlay of the land uses onto a property boundary map compiled from record dimensions only (not a field survey). Actual acres may vary slightly, but will be confirmed with each development application.

**Land Use Designations**

The following sections define and discuss the land use designations that occur within the Plan Area. The Central Lathrop combining district (CL) is applied to all properties located within the CLSP-2 Amendment Plan Area. The designation of CL after any zoning district indicates that the zoning district so combined is modified by the regulations included in the CLSP-2 Amendment and those districts included in Chapter 17.62 of the Lathrop Municipal Code.

Permitted uses, conditionally permitted uses, and development criteria can be found in the same chapter of the Code. Of particular note is that the 2022 General Plan requires a Conditional Use Permit (CUP) for all development between Dos Reis Road and De Lima Road.

The Plan Area consists of three land use designations including Limited Industrial, Park, and Open Space. A well thought out circulation pattern allows for vehicular, bicycle and pedestrian connections between the uses.

*Limited Industrial*

The Limited Industrial (LI) use applies to most of the Plan Area. The Limited Industrial use spans from the northern project boundary along Lathrop’s city limits, southern boundary along Dos Reis Road, and eastern boundary along Interstate Highway 5 as shown in Figure 2.1. It is anticipated that uses such as warehousing and manufacturing that do not require a high degree of visibility and are truck dependent, will be located in areas of the Plan Area that minimize the potential for air quality and noise impacts to sensitive receptors outside the Plan Area. The CLSP-2 Amendment Plan Area is envisioned to accommodate a wide range of jobs generating uses, including business parks; clean light industrial; research and development (R&D); science, technology, engineering, and math (STEM); tech/biotech manufacturing; high-tech services that incorporate some combination of assembly; warehousing, and/or sales; hospitals, labs and other health care-related uses, and distribution centers. Refer to the City of Lathrop’s Zoning Ordinance for the full range of

permitted and conditionally permitted uses under this land use category. A maximum allowable Floor Area Ratio (FAR) of 1.0 is permitted consistent with the 2022 General Plan.

### *Open Space*

The CLSP-2 Amendment designates Open Space (OS) uses along the San Joaquin River and this designation spans the length of the Plan Area. This area is designed to provide an open space corridor consistent with the Lathrop General Plan. The open space corridor along the San Joaquin River is intended as a local community wide facility with the possibility of regional linkage. This Open Space Corridor would also connect the CLSP-2 Amendment Plan Area with developing and existing segments of this open space corridor to the south within CLSP Phase 1 and the Mossdale Village developments. Though not required or mandated, this CLSP-2 Amendment accommodates the construction and use of outdoor recreation facilities such as recreation fields, fitness equipment and courses, or other such uses intended for the physical recreation and well-being of the community and/or the employee users. Refer to the CLSP-2 Amendment Zoning Ordinance for the full range of permitted uses in this land use category.

### *Park*

The CLSP-2 Amendment retains the Dos Reis County Park designation, a County park within City limits. An additional Park area is proposed to connect the park to the future open space corridor described above.

Because the build-out of the CLSP-2 Amendment Plan Area is anticipated to occur over an extended period of years, these Interim Uses may remain present for many years.

Interim Agricultural uses are subject to Agricultural Development Standards and Use Regulations set forth in the Lathrop Zoning Ordinance. Refer to Chapter 17.116 of the Lathrop Zoning Ordinance for specific

information regarding Nonconforming Uses and Structures.

Right-to-Farm provisions are discussed in Chapter Four of this document.

### ***Calculation of Land Use Intensities and Allowable Square Footages***

Future project-specific development applications will be based on the maximum allowable net square footage for a particular parcel or parcels. The maximum allowable square footage for a particular parcel will be calculated by multiplying the surveyed net developable area (in acres) comprising the subject parcel by the allowable Floor Area Ratio (FAR) for the associated land use designation. The acreage used in this calculation may vary slightly from the acreage shown in the Land Use Map and Table 2.1 and will be determined by more accurate survey and boundary data and the final street alignments and right of way width.

The CLSP-2 Amendment contemplates Limited Industrial development at an average rather than a maximum Floor Area Ratio (FAR) as specified in Table 2.1. Specific development sites will likely develop at a target FAR of 0.75 or lower depending on parking demand, landscaping and open space, stormwater management, and other site requirements.

### ***Land Use and Site Layout Flexibility***

The Land Use Map (Figure 2.1) illustrates the general locations and distribution of land uses in the Plan Area as described earlier in this chapter. This Land Use Plan is diagrammatic and does not necessarily represent final road alignments, land use configurations or acreages.

The CLSP-2 Amendment land uses may be further refined in conjunction with the processing of future parcel maps and site plan applications, without requiring a Specific Plan Amendment as further discussed below. Given that the Land Use Map is conceptual in nature,

the CLSP-2 Amendment provides flexibility with respect to the location, design, and detailed implementation of the Land Use Plan during the City’s reviews of future detailed applications. Land Use and Site Design flexibility may include, but is not limited to, the following:

- Relocating collector roads and/or intersections to correspond to existing property lines,
- Relocating collector roads and/or intersections to accommodate a specific development program, building product types, or parcel layout arrangement,
- Relocating collector roads to allow for more efficient use of parcelization for building and parking areas on-site,
- Minor deviations in land use intensity (Floor Area Ratio) and development standards for particular projects, with the concurrence of reviewing agencies, as determined by CDD and if compatible and consistent with the purpose and intent of the Specific Plan
- Allowance for use types not specified in Lathrop’s Zoning Ordinance, which are compatible and consistent with the purpose and intent of the land use designation and zoning classification (to be approved by the Community Development Director)
- Adjustments to travel lanes as supported by traffic studies.
- Acceptability of final land use and site layouts will be evaluated based upon the following criteria/findings:
  - Consistency with the prescribed land use development and design standards, in accord with the CLSP-2 Amendment to the Specific Plan,
  - Building, parking, and site design consistency for each land use parcel as

described in the Design Guidelines (Chapter Seven),

- Consistent application of the stated principles set forth in the CLSP-2 Amendment and the City General Plan,
- Potential economic benefits of a particular land use, building type, site feature, configuration of buildings, road alignment, or other deviation from the Specific Plan that would outweigh the benefits of strict adherence to the CLSP-2 Amendment development standards and Zoning Code, and/or
- The employment benefit of a land use, configuration, or other factor within the CLSP-2 Plan Area which deviates from the CLSP-2 Amendment.

Refer to Chapter 8: Implementation for more information regarding site plan and land use flexibility at the site plan review stage including project review procedures, development agreements, specific plan amendment procedures, enforcement, mitigation monitoring, and other review and approvals required during the implementation of the CLSP-2 Amendment.

### ***Land Use Regulations and Development Standards***

The CLSP-2 Amendment is consistent with the 2022 General Plan land use designations as listed below and consistent with the development standards in the Lathrop Zoning Ordinance and the Warehouse Good Neighbor Guidelines.

#### *Limited Industrial (LI) Development Standards*

The Lathrop Zoning Ordinance specifies the minimum lot area, lot width, setbacks, and other development standards for the Limited Industrial (LI) designation. Limited Industrial developments shall be further subject to the design guidelines in Chapter Seven.

#### *Open Space (OS) Development Standards*

The Lathrop Zoning Ordinance includes development standards for the Open Space (OS) designation. Open Space uses may also be subject to design guidelines contained within Chapter Seven.

*Park Development Standards*

The Zoning Ordinance defines the development standards for the Park designation. Park uses may also be subject to design guidelines contained in Chapter Seven.

## Chapter Three: Circulation and Transportation

### ***Introduction***

This chapter describes the proposed circulation system and transportation improvements included in the CLSP-2 Amendment Plan Area.

The Circulation Plan is designed to allow for efficient circulation to and from the CLSP-2 Amendment Plan Area. The plan provides for multiple modes of transportation including automobile, truck, bus transit, bicycle, and pedestrian. This chapter provides the requirements of Plan Area roadways, bikeways, and walkways as well as public transit. The implementation of the CLSP-2 Amendment will provide additional roadway, bus transit, bicycle, and pedestrian linkages between the Plan Area and the surrounding communities, improving connectivity within this portion of the City.

The Circulation Plan provides connections to existing and future roadways as identified in the City of Lathrop's General Plan Circulation Diagram. These connections provide both regional and local mobility between land uses within and adjacent to the Plan Area. It is the intent of the Circulation Plan to comply with the requirements of the Surface Transportation Assistance Act (STAA). The phasing and financing of the proposed roadway improvements is summarized in Chapter Nine Financing Plan.

### ***Circulation and Transportation Goals***

The transportation system for the CLSP-2 Amendment Plan Area provides a multi-modal network that serves the needs of all the proposed land uses in the Plan Area by establishing an integrated, efficient, and safe circulation system for transit and vehicles; linking roadways and transit routes in the Plan Area to the City's existing transportation network, and providing

an interconnected system of trails, which are pedestrian and bicycle friendly.

### ***Existing Conditions***

#### *On-Site Roadway Network*

Land uses at the time of the CLSP-2 Amendment approval are agricultural and large lot/rural residential parcels. Because of this land use pattern, the existing roadway network is sparse with one north-south roadway (Manthey Road) and two east west- roadways (De Lima Road and Dos Reis Road).

Manthey Road is a paved two-lane roadway that parallels I-5 from the CLSP-2 Amendment Plan Area and continues North towards the Roth Road interchange and beyond. This roadway has no curb and gutter with minimal shoulders. De Lima Road and Dos Reis Road are two-lane roadways that extend west from Manthey Road to the San Joaquin River levee. The roadways have shoulders but no curb and gutter.

See Figure 3.1 for Existing Circulation Plan.

#### *Off-Site Roadway Network (Regional Area)*

There are a number of major regional roadways that are located in close proximity to the CLSP-2 Amendment Plan Area. These roadways include Interstate 5, Interstate 205, State Route 120, and State Route 99. These roadways are outside of the Plan Area but will be utilized by vehicles entering and exiting the CLSP-2 Plan Area.

Interstate 5, one of the major freeways in the state of California, forms the eastern boundary of the CLSP Plan Area. In San Joaquin County, I-5 connects Stockton to Tracy and passes through Lathrop. Given its location, I-5 will serve as one

of the primary routes for traffic entering and exiting the Plan Area.

There are three freeway interchanges adjacent to the Plan Area. The first interchange, Louise Avenue/River Islands Parkway, is located to the south and provides access to the CLSP Plan Area, Mossdale Village and River Islands. The second interchange, Lathrop Road/Spartan Way, is located in the middle of the overall CLSP and provides direct access to the Plan Area. The third interchange, Roth Road, is located north of the CLSP-2 Amendment Plan Area, and will be the primary point of access for trucks to the Plan Area. A study of the Roth Road corridor from Manthey Road to State Route 99 is being conducted by San Joaquin County, through the San Joaquin Council of Governments (SJCOG) at the time this CLSP-2 Amendment is being written. It is anticipated that the ramps will be widened, and traffic signals will be installed in the future.

Interstate 205 lies to the south of the City of Lathrop and provides a connection to the City of Tracy and the San Francisco Bay Area.

State Route 120 is another major regional roadway in San Joaquin County and provides a connection from I-5 and I-205 to State Route 99, south and east of the Plan Area. SR 120 will serve as a likely access route for trips accessing the Plan Area from Manteca. The I-5/SR 120 interchange located South of the Plan Area provides a connection between these two roadways through a system of ramps.

State Route 99 is a regional roadway in the regional area. This roadway serves as one of the major north-south routes in San Joaquin County and provides a connection between the City of Stockton in the north and Manteca in the south. SR 99 continues south through Stanislaus County and parallels I-5 throughout much of California.

#### *Existing Bicycle and Pedestrian Network*

There are essentially no existing bicycle or pedestrian facilities in the CLSP-2 Amendment Plan Area. However, there are pedestrian and bicycle facilities in the CLSP Phase 1 area and in the adjacent specific plan areas including Mossdale Village and River Islands that will be connected to the planned facilities within the CLSP-2 Amendment Plan Area at Golden Valley Parkway and Stanford Crossing as displayed on Figure 3.10 Pedestrian and Bicycle Circulation Plan.

#### *Existing Transit Network*

The City of Lathrop does not operate any local serving transit routes. However, there are transit routes that operate in the regional area. These routes include fixed-route regional bus service and flexible fixed route bus service. The San Joaquin Regional Transit District (SJRTD) operates the bus routes while Altamont Commuter Express operates the commuter rail service. These transit services are described in detail below.

#### *SJRTD Fixed-Route Service*

The SJRTD operates two fixed-route bus lines (Route 290 and 97) that serve the City of Lathrop. Route 97 connects Manteca Transit Center to Tracy Transit Center through Lathrop via Louise Avenue and Interstate 5. Route 97.Route 90 connects Lathrop to Stockton and Tracy via Interstate 5. The route map for Route 90 and 97 are shown on Figure 3.2. These routes include several existing bus stops within Lathrop's City limits. An additional proposed bus stop is suggested at Manthey Road just south of De Lima Road to serve commuters to the CLSP-2 area. This suggested stops are shown on Figure 3.4.

#### *SJRTD Flexible Fixed-Route Service*

SJRTD also operates Route 90, which is a flexible fixed-route line. A flexible fixed-route bus operation follows a general route but can deviate within limited areas to pick-up or drop-off passengers. This line links the City of Lathrop



with Stockton and Tracy via a route that provides access into the City of Lathrop by Lathrop Road and Louise Avenue.

#### *SJRTD Commuter Bus Service*

The SJRTD operates a number of commuter bus lines which connect cities in San Joaquin County with major employment locations in the San Francisco Bay Area including Pleasanton, Dublin, Livermore, Mountain View, Palo Alto, and Sunnyvale. The existing Commuter Bus service in Lathrop connects Lathrop to the Dublin/Pleasanton BART station and also Sunnyvale. Commuters access the bus service at the Lathrop Park and Ride Lot south of the Plan Area, which is located between Lathrop Road and Louise Avenue on 5th Street.

#### *Altamont Commuter Express Rail Service (ACE) & Valley Link*

Altamont Commuter Express Rail Service  
Altamont Commuter Express (ACE) is a passenger rail service connecting Stockton to San Jose. The closest ACE station to the Plan Area is located on the border of the City of Lathrop and the City of Manteca to the north of SR 120.

Valley Link is a new 42 -mile, 7-station passenger rail project connecting BART's rapid transit system in the Bay Area's Tri-Valley and the ACE Commuter Express (ACE). Future Valley Link/ACE Stations are anticipated at two locations within City limits. One proposed location near the River Islands development North of Highway 5 along the Union Pacific Railroad. A second location is proposed in North Lathrop at Lathrop Road along the Union Pacific Railroad and McKinley Avenue.

#### *Existing Truck Routes*

Existing truck routes within the vicinity of the Plan Area, including STAA truck routes and non-STAA truck routes are shown on Figure 3.3.

Figure 3.1- Existing Circulation Plan

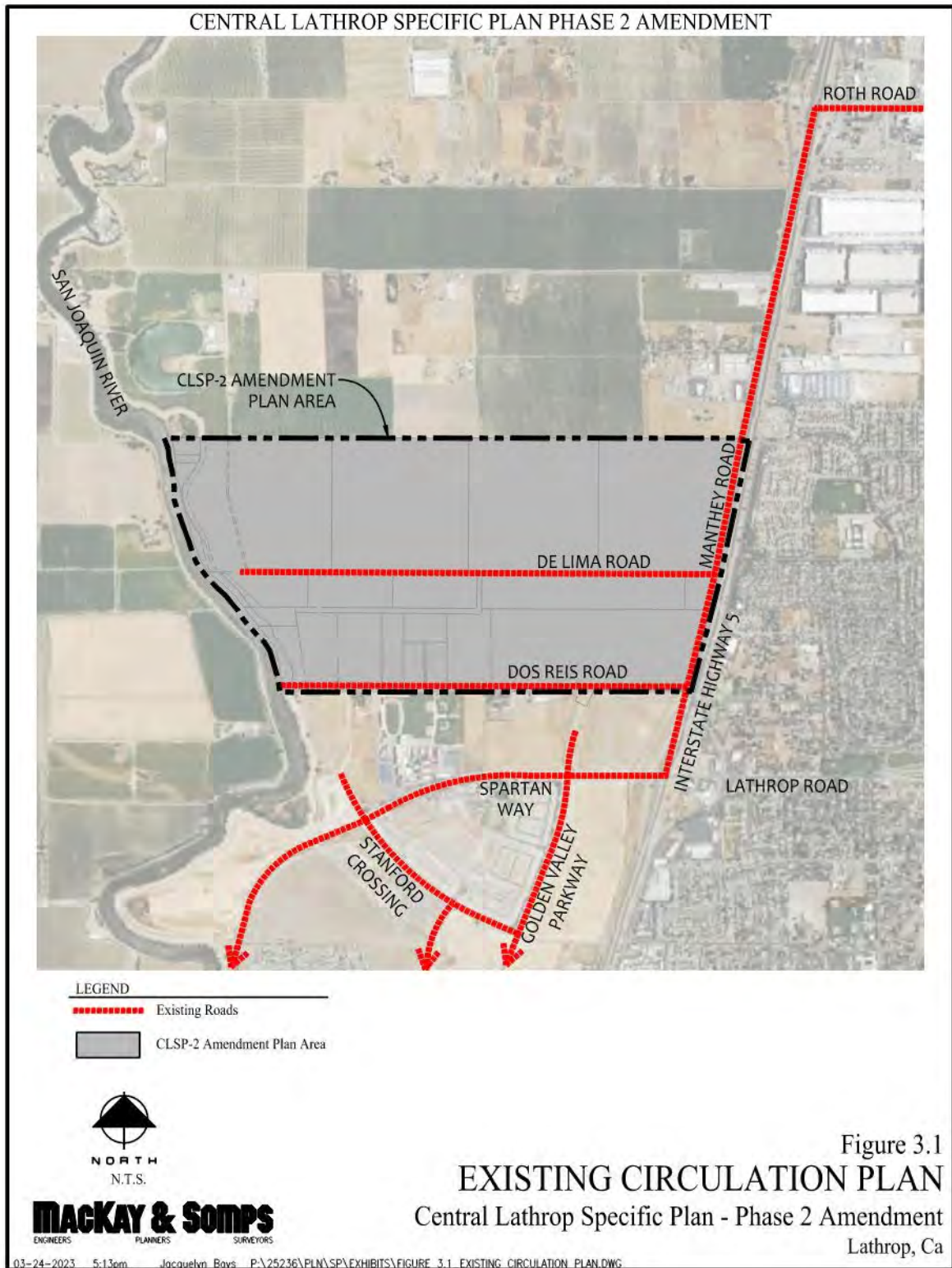


Figure 3.2- Existing Bus Service Plan

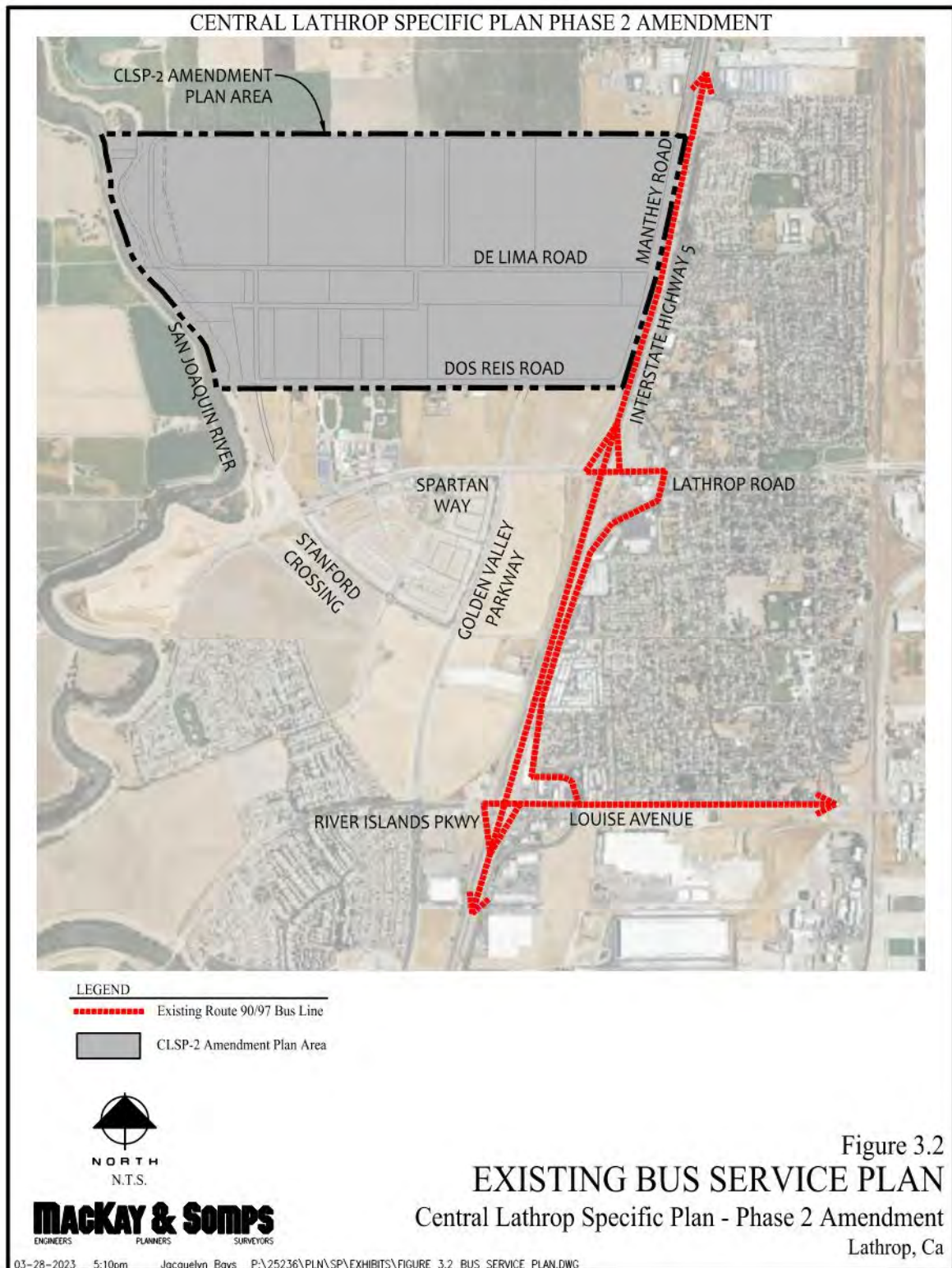
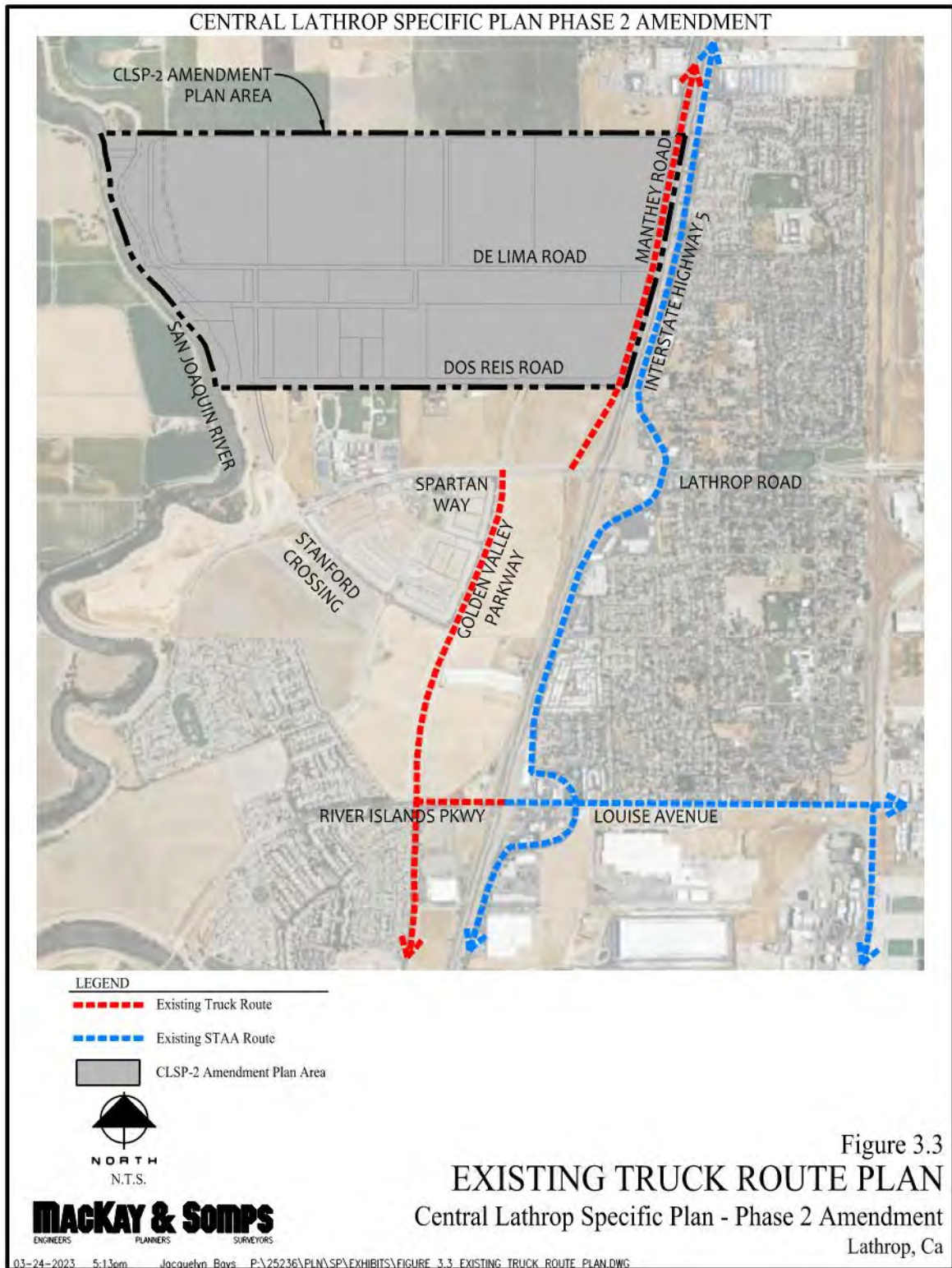


Figure 3.3- Existing Truck Route Plan



### ***Proposed Transportation Improvements***

With the anticipated growth in the City of Lathrop and San Joaquin County, both jurisdictions have identified transportation improvement projects in the CLSP-2 Amendment Plan Area and the regional area along with various funding sources.

#### *City of Lathrop*

The 2022 General Plan and the various Lathrop specific plans identify near-term and long-term transportation improvements. The City of Lathrop Traffic Monitoring Program (TMP) helps to identify when the near-term projects are required to be constructed based on a level of services analysis. Local funding sources for select transportation improvements include the City of Lathrop Capital Facilities Fee (CFF) Program. Fees collected through the CFF Program can be used to fund or reimburse the construction of new and improved roadways such as:

- Golden Valley Parkway
- Lathrop Road/I-5 interchange
- Louise Avenue/I-5 interchange
- Roth Road/I-5 interchange

#### *Regional Transportation Plan (RTP)*

San Joaquin County, through the San Joaquin Council of Governments (SJCOG), periodically updates the Regional Transportation Plan, which outlines countywide transportation expenditures based on funding from sources such as the Federal Government, the State of California, and locally collected funds. These funds typically are allocated to mainline freeway improvements in the region.

#### *Measure K*

Measure K sales tax funds additional roadway improvements. The Measure K Strategic Plan provides for the expenditure of these funds.

### ***CLSP-2 Amendment Plan Area Transportation Network***

The CLSP-2 Amendment outlines a well-structured network of roadways, bikeways and walkways to serve the CLSP-2 Amendment Plan Area. The circulation system will provide convenient and safe access to all areas within the Plan Area, as illustrated in Figure 3.4, Vehicular Circulation Plan. A well-connected hierarchy of travel modes will provide for the efficient flow of vehicular traffic, but also encourage and facilitate walking, biking, public transit, and other alternatives to single-occupancy vehicles.

The CLSP-2 Amendment includes connections to the off-street bicycle and pedestrian paths within the CLSP Phase 1 Plan Area. Class I (off-street) bike routes along Golden Valley Parkway are proposed to be extended into the CLSP-2 Amendment Plan Area and transition into Class II bike lanes throughout the local industrial streets. Class I (off-street) and Class II (on-street) bike routes along Stanford Crossing are proposed to be extended into the CLSP-2 Amendment Plan Area. To encourage pedestrian trips within the CLSP-2 Amendment Plan Area and to surrounding areas, all arterial and local streets include sidewalks.

The Traffic Impact Analysis prepared with the 2022 General Plan provides the basis for the number of lanes required based on a level of services analysis.

#### *Roadways*

The CLSP-2 Amendment Plan Area includes several new roadways within an interconnected roadway system. These new roadways, along with improvements to existing roadways, provide the necessary access for the Plan Area. The roadway network is shown on the Vehicular Circulation Plan (Figure 3.4), while the locations of each individual street section are identified on the Street Sections Key Map (Figure 3.5).

The proposed CLSP-2 Amendment roadway system is based on a pattern of streets that provides safe and efficient access for vehicles, bicycles and pedestrians. The roadway system includes an extension of Golden Valley Parkway and Stanford Crossing, widening of Dos Reis Road, De Lima Road, and Manthey Road, and the construction of several new local industrial roads consistent with the 2022 Lathrop General Plan. The addition of traffic signals may be required at various intersections as determined for future specific project developments in the CLSP-2 Amendment Plan Area.

Generally, the proposed Phasing and Capital Improvement Program will fund and construct full roadway improvements curb-to-curb and required street lighting for roadways from intersection to intersection as specific development proposals in the CLSP-2 Amendment Plan Area trigger the need for these roadway segment improvements. The approach to and the timing of roadway improvements should be logical and comprehensive as to accommodate development phases and demands, while avoiding piecemeal improvements within the CLSP-2 Amendment Plan Area.

Functional classification systems divide roadways into a hierarchy based on their ability to serve traffic and provide access to development.

*Arterials* – These roadways are intended to serve as the major routes of travel. Arterials are designed to link facilities such as freeways and expressways (which prioritize the movement of through vehicles) with lower hierarchy roadways, which provide direct access to parcels. Arterials can provide some level of direct access with limitations. These limitations can include restrictions on spacing and turn movements into and out of driveway locations. Arterials can also serve as bicycle and pedestrian routes.

*Collectors* – These roadways serve as intermediate links between arterials and local roads. Traffic is collected from local roads and distributed onto

the arterial system. Collector roadways also provide direct access to parcels. Collector roadways can be classified as both major collectors and minor collectors. Collectors in the Plan Area generally have two lanes with a center turn lane/median, though additional lanes may be provided at intersections to provide sufficient intersection capacity.

*Local Roads* – Local roads provide direct access to parcels and connect to collectors. Traffic volumes on these roads are low and through traffic is discouraged.

### ***CLSP-2 Amendment Plan Area Truck Routes***

The 2022 General Plan prohibits Golden Valley Parkway and Dos Reis Road within the CLSP-2 Amendment Plan Area from being designated as truck routes. Manthey Road is the designated truck route connecting the CLSP-2 Amendment Plan Area to the Roth Road interchange north of the CLSP-2 Amendment Plan Area. In addition, the local industrial streets within the CLSP-2 Amendment Plan Area are proposed to be designated as truck routes as illustrated in Figure 3.11. Truck access is prohibited on Dos Reis Road and Manthey Road south of Dos Reis. Refer to the Lathrop Municipal Code Chapter 10.16 Truck Routes and Commercial Vehicles for details regarding designated truck routes.

Figure 3.4- Vehicular Circulation Plan



Figure 3.5- Street Sections Key Map

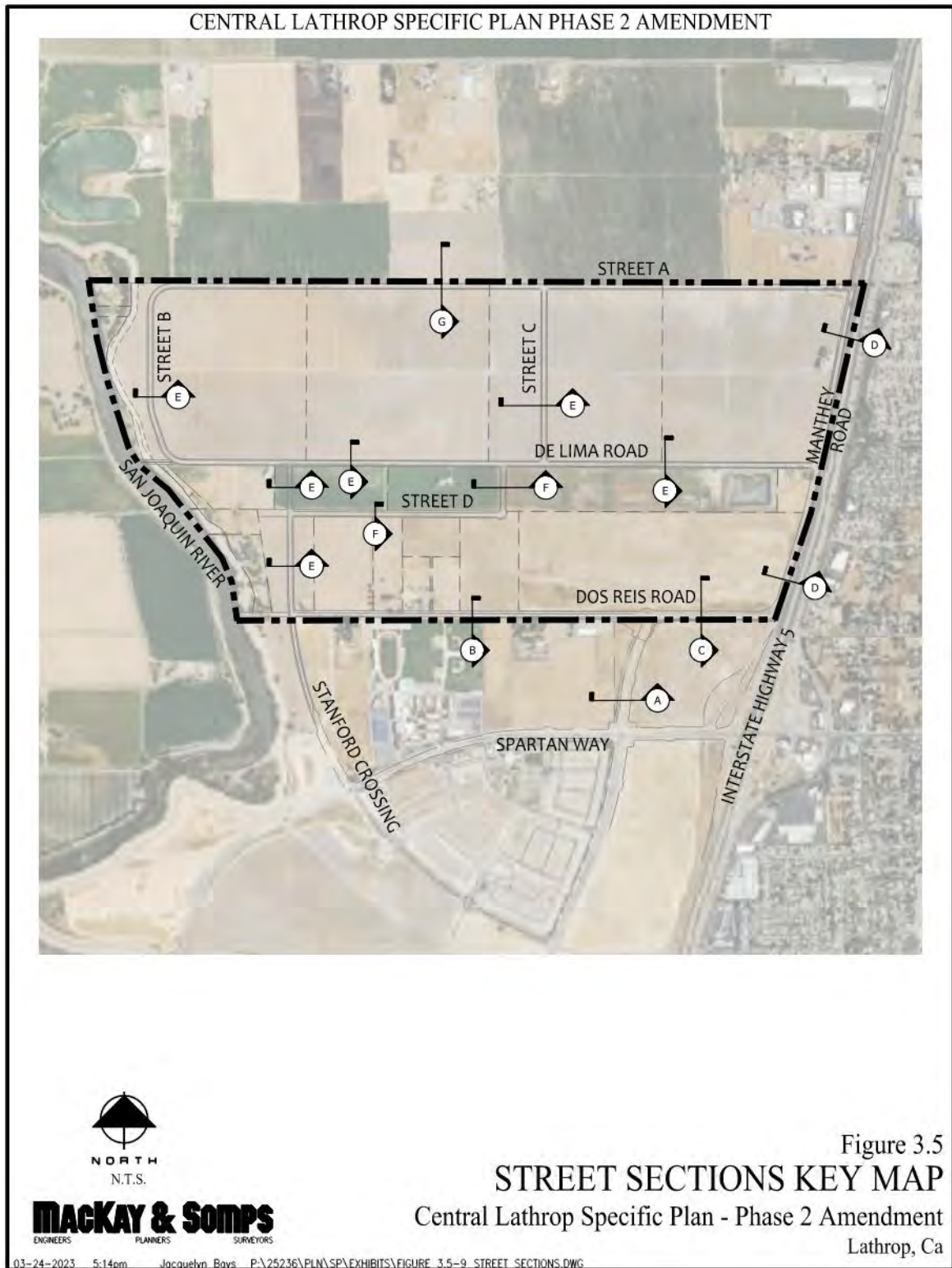




Figure 3.6- Street Sections

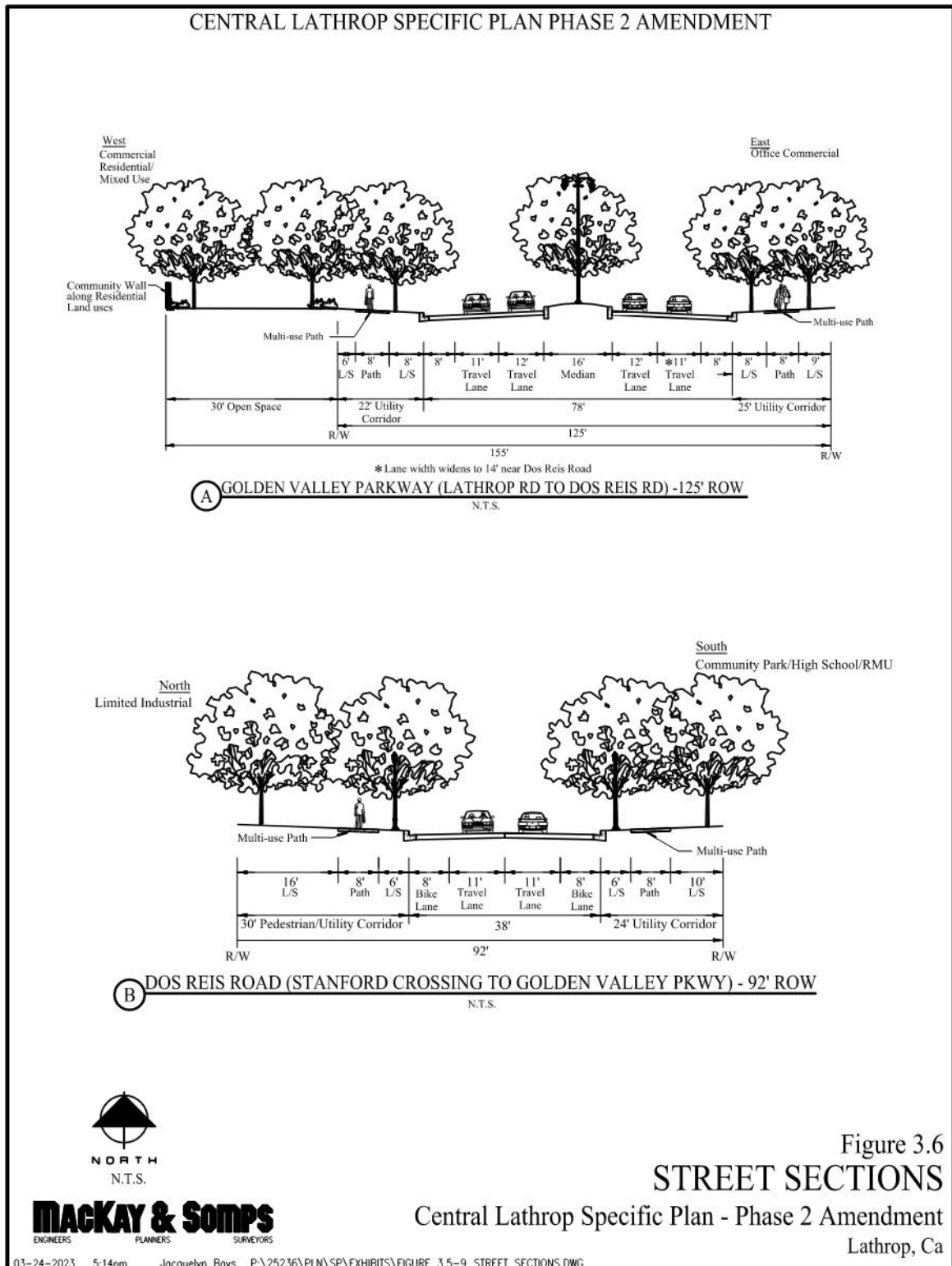


Figure 3.7- Street Sections

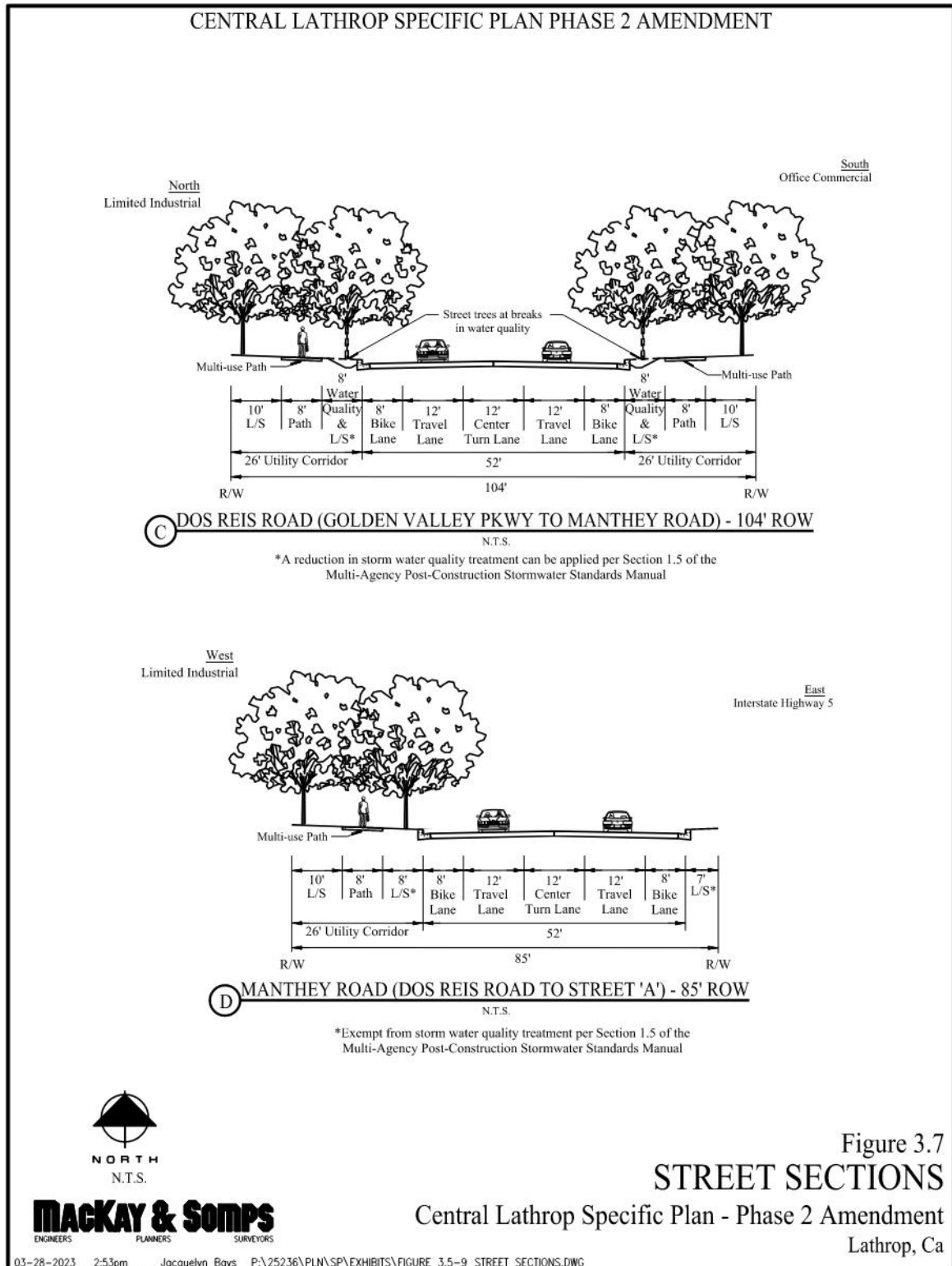


Figure 3.8- Street Sections

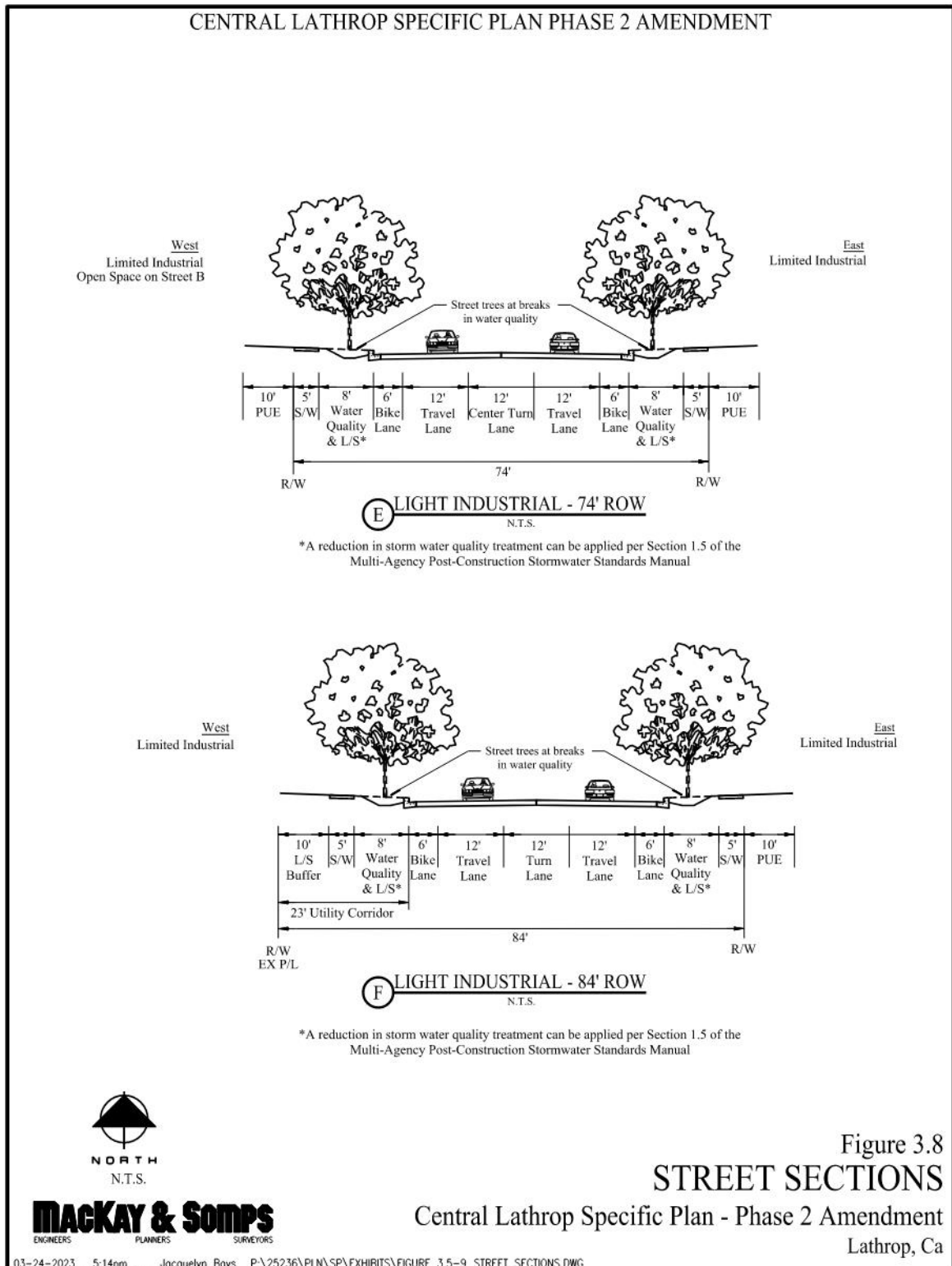
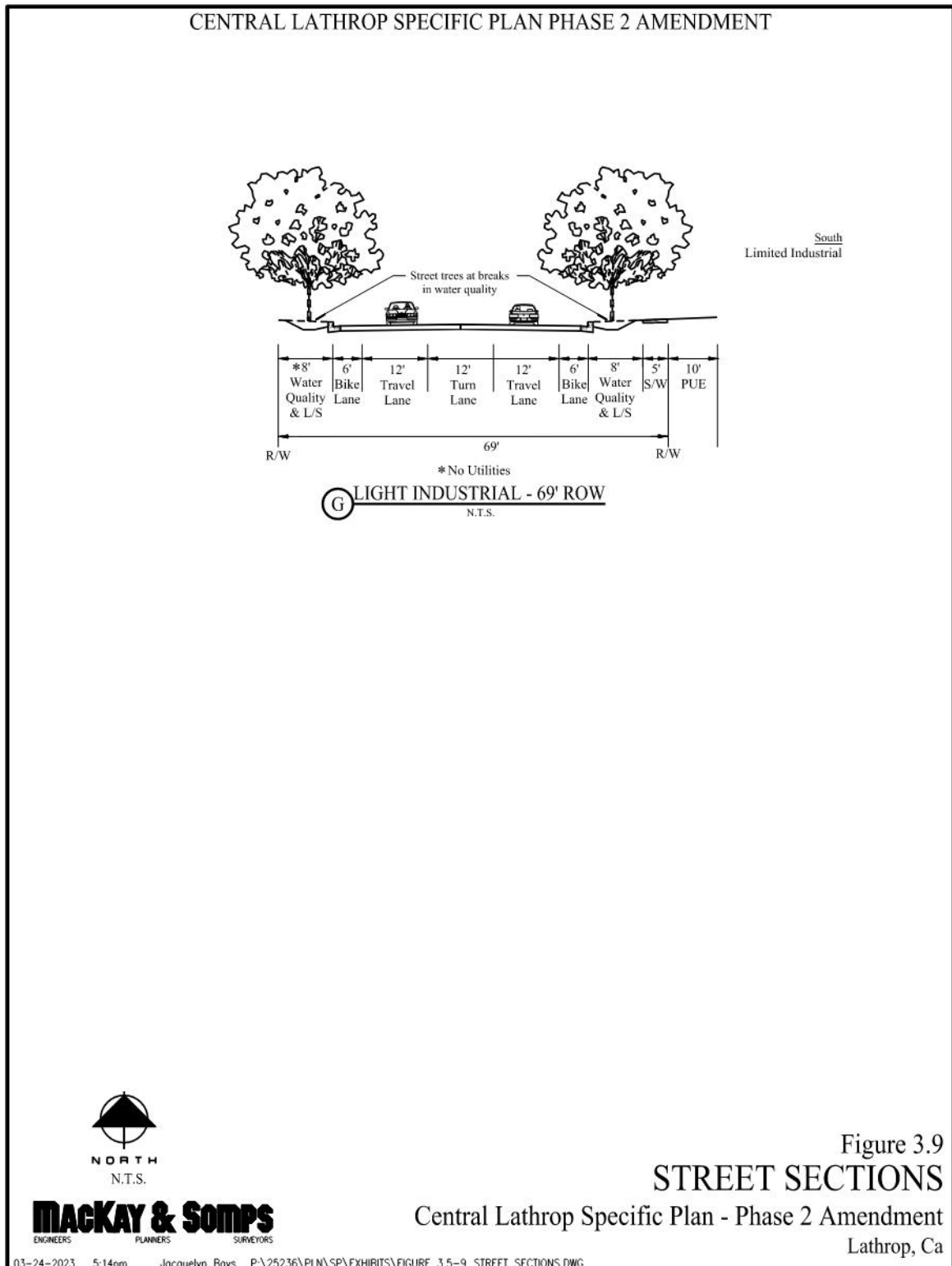


Figure 3.9- Street Sections



### ***Utility Corridors***

As shown on the CLSP-2 Amendment Roadway Vehicular Circulation Network and street sections, many of the streets within the CLSP-2 Amendment Plan Area include utility corridors within the public right-of-way. The purpose of utility corridors is to provide a location for the installation of joint trench utilities (power, gas, telephone, cable T.V. and other similar dry utilities).

The mainline joint trench will be installed beneath the multi-use path or sidewalk. The area between the curb and the multi-use path/sidewalk is envisioned to be used for the placement of underground vaults and structures such as splice boxes, transformers and other similar equipment. In instances where these structures cannot be constructed underground, the portion of the utility corridor located behind the multi-use path/sidewalk to the right of way line is envisioned to be used for above ground cabinets, where they can be placed away from the travel way and where landscaping can be used for visual screening. If there is not adequate space for above ground cabinets in the utility corridor behind the multi-use trail/sidewalk, then a public utility easement may be added for this purpose.

Utilities that are typically owned and maintained by the City (such as sewer, water, recycled water and drainage systems) are intended to be placed under the paved roadway sections. However, in some instances, the City Engineer may approve the use of utility corridors for the placement of these utilities. This situation might occur if there is not adequate room to meet separation requirements between the utilities within the paved section. It may also occur if phasing of construction requires early placement of pipelines (before roadway improvements) and the risk of subsequent damage to the pipeline during road construction justifies.

### ***Bicycle and Pedestrian Network***

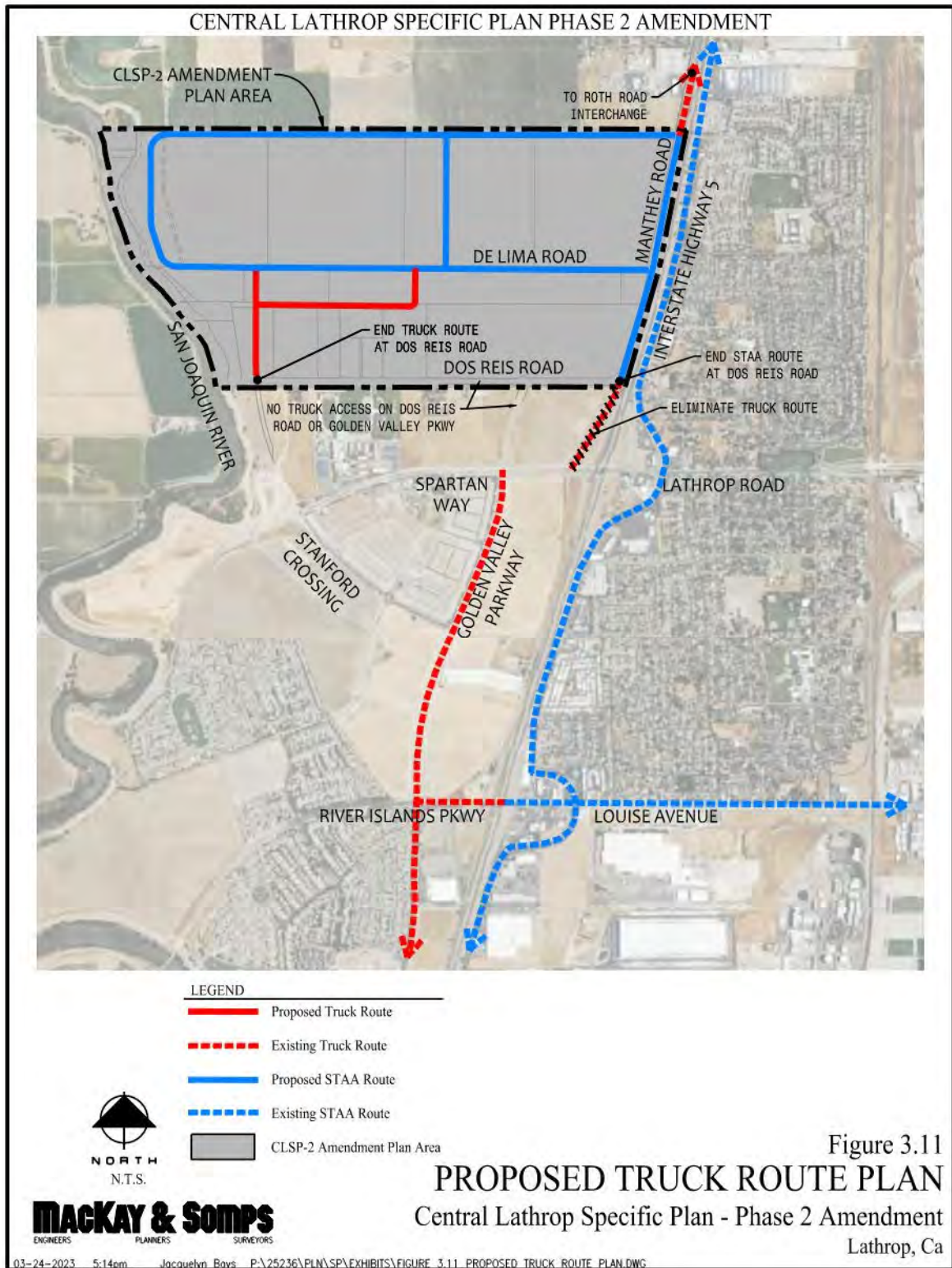
The CLSP-2 Amendment Plan Area provides a comprehensive and extensive system of integrated bicycle and pedestrian paths and sidewalks. This system connects residential neighborhoods, public facilities, open spaces, and commercial areas with the limited industrial use. Major elements of this network include both off-street and on-street facilities. Refer to Figure 3.10 for the Pedestrian and Bicycle Circulation Plan. Improvements such as driveways shall be designed to maintain a safe environment for pedestrians and bicycles and to avoid conflicts with truck traffic.

The off-street facilities include eight-foot-wide paved multi-use paths located adjacent to arterials and some of the collector roadways. A multi-use trail adjacent to the San Joaquin River levee if approved by the City of Lathrop and Reclamation District- 17. Other off-street facilities include dedicated sidewalks.

Figure 3.10- Pedestrian and Bicycle Circulation Plan



Figure 3.11- Proposed Truck Route Plan



## Chapter Four: Natural Resources Management

### ***Introduction***

This chapter addresses the natural resource opportunities of the CLSP-2 Amendment Plan Area and how they are integrated and managed for their preservation and benefit of the community. Additionally, this chapter identifies and discusses how other facilities may be integrated into the CLSP-2 to provide for the provision of new natural resource systems.

### ***Open Space and Parks***

The CLSP-2 Amendment makes extensive use of dedicated open space to create an integrated and interconnected resource management system. The preservation and management of existing natural resources within and adjacent to the CLSP Plan Area and the establishment of new natural resource systems are a principal feature of the CLSP-2. Open space can be both privately owned and maintained or publicly owned and maintained. The Open Space and Parks proposed as a part of this specific plan are continuation of the efforts begun with the original CLSP to expand open space and park systems within City limits.

Open Space features include the San Joaquin River and those areas associated with the levee—its side slopes, its top, and the area within close proximity of the outer (land side) levee toe; open space corridors that may contain linear detention basins; and other areas where either natural resources or community design warrants an open space use. Open space areas are typically characterized by the inclusion of internal trail systems.

With the establishment of the linear open space corridor along the river, sensitive riparian

vegetation and habitat will be preserved and protected, except as determined by RD-17 for levee safety or maintenance reasons. Public access to and along the top of the levee may be provided if approved by the City of Lathrop and RD-17, affording the community views of the river and its environs, as well as greater views of the valley.

A linear park also provides open space area within the CLSP-2 Amendment Plan Area. The linear park offers opportunities for passive activities and contributes towards community identity. The park expands upon Dos Reis Park.

Refer to Chapter Five: Community Services and Facilities for more information on parks.

### ***Williamson Act Lands***

No parcels within CLSP-2 are under Williamson Act contracts. Parcels that were previously under contract at the time the 2004 CLSP was prepared filed Notices of Non-Renewal and are no longer under the contracts.

### ***Right to Farm***

The City of Lathrop has adopted an Agricultural Land Preservation Ordinance, also known as a “right to farm” ordinance, to protect the activities, operations, and facilities associated with agricultural production from encroaching urban uses and conflict. The CLSP EIR identifies mitigation to alleviate potential impacts of development within the CLSP-2 Amendment Plan Area upon functioning agricultural activities. Mitigation is comprised of setback buffers between development and farming activities.



To reduce potential public pressure to restrict agricultural operations that future residents may consider a nuisance, the City requires that a disclosure statement be provided to new homebuyers notifying them of preexisting agricultural land uses within the surrounding area.

### ***Biological Resources***

The CLSP-2 Amendment Plan Area is comprised mostly of intensively managed and irrigated agricultural fields with a few large lot homesteads. As a result, natural habitats within the CLSP-2 Amendment Plan Area are restricted to narrow patches of riparian vegetation along the San Joaquin River, marshy vegetation in some agricultural ditches, and scattered individual or small clumps of valley oak trees.

The CLSP-2 Amendment Plan Area vegetation is dominated by cropland and other developed or previously disturbed habitats. A relatively small amount of native vegetation occurs along the San Joaquin River, which borders the western edge of the CLSP-2 area, and within several of the drainage ditches that traverse the area. Vegetation types present in the CLSP-2 Amendment Plan Area are classified according to the categories designated in the SJMSCP. The CLSP EIR describes these categories. Present vegetation categories are cropland, freshwater emergent wetland, Great Valley cottonwood riparian forest, Great Valley oak riparian forest, Great Valley riparian scrub, ruderal, and park/residential.

Some habitat types in the CLSP-2 area could be considered sensitive by regulatory agencies. These include freshwater emergent wetland, Great Valley cottonwood riparian forest, and Great Valley riparian scrub.

Valley elderberry longhorn beetles require blue elderberry shrubs for reproduction and survival.

Although focused surveys for elderberry shrubs have not been conducted, isolated shrubs and

clumps of shrubs have been observed. Based on the presence of blue elderberry shrubs, valley elderberry longhorn beetle could occur in the CLSP-2 Amendment Plan Area.

Several special status raptor species are expected to occur in the CLSP-2 area, including Swainson's hawk, white-tailed kite, and northern harrier. Agricultural fields provide suitable foraging habitats for all of these special-status raptors and the oak and riparian forest communities provide nesting opportunities for tree nesting species.

Riparian brush rabbits have been located in the CLSP-2 Amendment Plan Area. Although riparian brush rabbits occur in the CLSP-2 Amendment Plan Area, the small patches of suitable habitat are unlikely to support a long-term viable population of the species.

The predominance of agricultural lands limits the overall wildlife habitat value of the CLSP-2 Amendment Plan Area and supports a relatively low diversity of wildlife species. However, some species heavily utilize agricultural fields. Alfalfa fields in the CLSP-2 Amendment Plan Area are expected to support small mammals, such as Botta's pocket gopher, western harvest mouse, and California meadow vole. These small mammals are prey for a variety of raptor species known to occur in the CLSP-2 area, including American kestrel, northern harrier, red-tailed hawk, and Swainson's hawk. A variety of other birds were observed or are expected to forage in CLSP-2 Amendment Plan Area agricultural fields, including western kingbird, barn swallow, western meadowlark, and Brewer's blackbird.

Ornamental vegetation and landscaping associated with developed areas, such as rural residences and the County park, also support a relatively low wildlife diversity. These areas are typically utilized by species adapted to highly disturbed and altered environments, such as house sparrow, house finch, raccoon, and opossum.

Wildlife diversity in agricultural ditches is limited due to the regular disturbance of the ditches for clearing and maintenance and the absence of natural vegetation in uplands adjacent to the ditches (e.g., agricultural lands). However, the marsh vegetation in the ditches may support species typical of this plant community such as marsh wren, song sparrow, and Pacific tree frog. Riparian vegetation and oak trees provide nesting habitat for a much wider variety of bird species and also provide potential nest sites for raptors.

The CLSP EIR contains a detailed description of sensitive habitats and wildlife, potential impacts and mitigation measures to alleviate development effects upon these resources.

CLSP-2 Plan Amendment designates some natural habitats as Open Space within the CLSP-2 Amendment Plan Area to assure their preservation. These habitats are located primarily along the San Joaquin River and will be integrated into the CLSP levee open space areas, river areas, and adjacent linear community park. The preservation of the levee open space corridor and parallel linear community park forms and continues a strong framework of continuous open space within and beyond the CLSP-2 area, maintains an interconnected habitat system that allows for the connectivity of plant and wildlife communities, and support daily wildlife needs, while permitting limited public access to these areas. Public access along the potential levee top trail will permit scenic views from and access along the levee and to certain open space areas; this will protect sensitive habitats and wildlife from effects associated with human interaction.

### ***Habitat Conservation Plan***

The City of Lathrop adopted the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) on January 16, 2001, and signed the implementation agreement. The SJMSCP provides a process for plan participants to offset impacts to biological resources, conserve open space, maintain the agricultural

economy, and allow development within the County. With the adoption of the SJMSCP, U.S. Fish and Wildlife Service and the California Department of Fish and Game (now known as the Department of Fish & Wildlife) issued incidental take permits (ITPs). The ITPs authorized the incidental take of federally listed and state-listed threatened and endangered species and their habitats for a period of 50 years in exchange for participating project applicants paying mitigation fees. Fees are based on the amount and type of land converted from agricultural or open space uses to urban uses.

Ninety-seven species are covered by the SJMSCP, which is intended to provide comprehensive mitigation pursuant to local, state, and federal regulations for impacts on these species from SJMSCP-permitted activities.

Focused surveys for special-status species were not conducted for this project. Reconnaissance level surveys were conducted that included a habitat evaluation for all potentially occurring special-status species. Development of the CLSP-2 Amendment Plan Area is covered under the SJMSCP, with comprehensive habitat evaluations and focused surveys, when necessary, to be conducted for covered special-status species in accordance with the SJMSCP prior to ground disturbance.

Impacts to fishery and wetland resources that might occur in the CLSP-2 Amendment Plan Area that are not covered under the SJMSCP program must be permitted separately. Such permits may include authorization of dredge or fill of wetlands under Section 404 of the Clean Water Act and Incidental Take Authorization under Section 7 or Section 10 of the federal Endangered Species Act.

### ***Historic and Cultural Resources***

Based on a series of archaeological and historical resource surveys and records searches performed for the project, no archaeological sites have been identified within the CLSP-2 Amendment Plan

Area, nor would construction of the project affect any known prehistoric archaeological site.

The CLSP EIR provides mitigation and direction for further analysis of project related impacts on historical and cultural resources, as needed, and on how to proceed if any previously undiscovered or sub-surface archaeological artifacts or historical sites are discovered in the Plan Area. Refer to the CLSP EIR for additional information.

## Chapter Five: Community Services and Facilities

### ***Introduction***

A wide array of public services and facilities are required to address the recreational, governmental, and emergency response needs of the CLSP-2 Amendment Plan Area. These services and facilities include parks; police, fire, and animal control services; civic facilities; and solid waste services. As the CLSP-2 Amendment Plan area develops, the City and other responsible agencies will review the plans to ensure that adequate public facilities and improvements are provided in a timely manner.

### ***Parks and Recreation***

Recreation is a key component in the lifestyle of people residing in any community environment. Recreation facilities and parks, in their active and passive forms, are an important asset contributing to the stability, attractiveness, and quality of life of a community. The City of Lathrop does not have adopted park/open space dedication or fee requirements for non-residential development. Such requirements are associated with residential uses which create the primary demand for, and benefit from proximity to, recreational facilities. The CLSP-2 Amendment designates an open space corridor along the San Joaquin River levee frontage. The open space provides opportunities to create an interconnected trail system from the CLSP-2 area to the Phase 1 Central Lathrop Specific Plan area, the West Lathrop Specific Plan area, and the South Lathrop Specific Plan area.

The general location of CLSP-2 Amendment parks, open space, and trails are included on Figure 5.1.

### ***CLSP-2 Open Space***

Open Space, Levee and River areas provide significant recreational, visual and aesthetic amenity to the CLSP-2. These areas offer a variety of functions and elements including passive recreation, scenic corridors, resource preservation, interpretive signage and informal recreation activities (i.e. picnic tables). In addition, the open space and levee corridor will improve the interface between urban and natural areas and define the City's edge.

The CLSP-2 Amendment open space and recreational areas consist of the levee and San Joaquin River that border the entire west side of the CLSP-2 Amendment Plan Area. The river provides several different recreational opportunities for the community, including fishing, bird watching, scenic views, camping and boating launch facilities at Dos Reis Regional Park. A regional gravel multi-use trail may be located within the open space adjacent to the levee if approved by the City of Lathrop and RD-17. The accessibility to the regional trail system, if approved, and the San Joaquin River will be direct and easy, with walking paths and bicycle trails extending to the north and south project boundaries.

### ***CLSP-2 Open Space Interface***

#### *Linear Community Park, Open Space, Levee and Neighborhood Interface*

The interface between the linear community park, open space and levee areas and adjacent development presents opportunities within the CLSP-2 Amendment Plan Area. Multiple edge treatments are required to maximize the opportunities therein. Access along the open space/levee frontage shall be provided as required by RD-17 and the City of Lathrop.

Where appropriate, the interface should be designed to allow residents to enjoy and appreciate the adjacent trails, park facilities, and open space areas, while providing a safe environment.

#### *Dos Reis Regional Park Interface*

The County operates and maintains Dos Reis Park, an existing park within the CLSP-2 Area. Dos Reis Regional Park provides for boat access to the San Joaquin River as well as camping and recreational opportunities for those from out of town. The Central Lathrop Park Master Plan design integrates with and thereby enhances the existing Dos Reis Regional Park. The interface of the Dos Reis Park with the community park will benefit both park systems and their users. Dos Reis Park will continue to be accessed via Dos Reis Road. No additional boat parking facilities will be provided as part of this Project. The interface between Dos Reis Park and the future adjacent limited industrial parcel shall include a masonry wall. See Chapter 7 Design Guidelines for more information.

#### ***Police and Animal Control Services***

The City of Lathrop operates its own police department for police protection services. The City of Lathrop Police Department is located at 940 River Islands Parkway within Lathrop, approximately two and a half miles south of the Plan Area. The Lathrop Police Department provides services such as emergency law enforcement, routine patrol, traffic enforcement, a Crime Stoppers program, and a Crime Prevention program. The Police Department has 35 sworn officers and 12 non-sworn professional personnel.

New development in the CLSP-2 Amendment Plan Area will be required to pay the City's Capital Facility Development Fee to offset capital facility costs associated with police protection. In addition, development will be required to pay its pro rata share of start-up and ongoing costs.

The City of Lathrop will provide animal services to the CLSP-2 Plan Area. Animal Services Officers protect the health and safety of humans and animals and are responsible for enforcing local and state laws regarding animals and their humane treatment. Services include, but are not limited to, patrol, stray/abandoned animal pick-up, aggressive animal impounds, injured animal pick-up, humane investigations, nuisance investigations, wild animal complaints/impounds, licensing, dead animal impounds, adoption, and education.

New CLSP-2 Amendment development will be required to pay the City's Capital Facility Development Fee to offset capital facility costs associated with animal services. In addition, development will be required to pay its pro rata share of start-up and ongoing costs.

#### ***Fire and Emergency Services***

The CLSP-2 Amendment Plan Area is within the service area of the Lathrop-Manteca Fire Protection District (LMFD). The District has multiple fire stations, three of which are located within the City of Lathrop. Station 34, located near the intersection of River Islands Parkways and Golden Valley Parkway, will initially be the first responder to serve the CLSP-2 area. In addition, Station 31, located on East J Street in Lathrop, and Station 35, on Somerston near River Islands, will both also provide service to the CLSP-2 area.

The LMFD maintains delivery standards for the provision of emergency services that adhere to the National Fire Protection Association's national standards and outlined in the LMFD Annual Report.

Development in the CLSP-2 Amendment Plan Area will pay applicable fire service fees and assessments required to fund its fair share of LMFD facilities and services. In addition, all development is required to conform to the California Fire Code, the City's Fire Sprinkler

Ordinance, fire flow standards, and other applicable requirements.

### ***Solid Waste***

Republic Services is the franchise waste hauler for residential and non-residential uses. The County of San Joaquin provides solid waste disposal facilities, including transfer stations and landfills. The City utilizes designated carts for the storage and collection of garbage, green (yard) waste, and paper, plastic, can, and bottle recycling. To reduce solid waste collection, builders, as mandated by AB 939, are required to implement and utilize construction debris recycling programs.

.

## Chapter Six: Utilities and Drainage Infrastructure

### ***Introduction***

There is a very limited amount of infrastructure currently serving existing development within the CLSP-2 Amendment Plan Area. In order to accommodate the proposed development, numerous onsite and offsite infrastructure improvements will be needed. This chapter describes the major infrastructure improvements needed to serve the CLSP-2 Amendment Plan Area. Other infrastructure elements are discussed in other chapters of this Specific Plan as follows:

- Circulation and Transportation (roads, bike paths, and trails) - Chapter Three
- Emergency Services (fire and police) - Chapter Five

### ***Potable Water***

#### *Supply*

The City will supply potable water to the CLSP-2 Amendment Plan Area. The CLSP-2 Amendment Developers will fund the provision of water service. The City will provide potable groundwater from the City's existing well field and potable surface water from Phase 1 and/or the Phase 2 expansion of the South County Surface Water Supply Program (SCSWSP) by the South San Joaquin Irrigation District (SSJID).

The City has prepared a citywide 2020 Urban Water Management Plan (UWMP). The Plan reflects the City's existing and future water

demands (including those of the Plan Area) compared to available water supplies to ensure that adequate water is, or will be, available to accommodate the CLSP-2 Amendment. The studies conclude that with the combined groundwater and SCSWSP surface water sources adequate water supplies would be available to serve the CLSP-2 Amendment Plan Area.

Table 6.1 identifies Plan Area water demand for the CLSP-2 Amendment. The availability of potable water is a primary factor regulating the level of development in the CLSP-2 Amendment Plan Area.

In addition to the potable supply, the CLSP-2 Amendment makes maximum use of recycled water (treated wastewater) for the irrigation of public rights of way and open space. Further, the potential exists for the irrigation of private open space areas and other landscaping with the use of recycled water to the extent allowed by the City of Lathrop's Waste Discharge Permit issued by the RWQCB.

#### *Treatment*

Treatment of water supply occurs, as necessary, to meet federal, state, and local standards. The SCSWSP surface water supply is treated at a centralized facility located outside the City of Lathrop, with Lathrop's groundwater treated at the wellhead. As a result, there is not a need for potable water treatment facilities within the Plan Area.

*Table 6.1: Estimated Water Demand*

<b>Designation</b>	<b>Land Use</b>	<b>Area (acres)</b>	<b>Demand Factor (gpd/ac)</b>	<b>Demand (gpd)</b>
LI-CL	Limited Industrial	618.2	926	572,453
OS-CL	Open Space	29.3	0	
P-CL	Park	11.2	0	
	Major Road Right-of-Way	65.3	0	
	Total	724.0		572,453

*Storage and Pressure*

Potable water storage and distribution will be provided to the CLSP-2 Amendment Plan Area by extending the City’s existing pipe network into the CLSP-2 Amendment Plan Area generally consistent with the City Master Utility Plan. Project proponents in the CLSP-2 Amendment will construct and/or contribute fees toward its proportional share of water storage as specified in the City Master Utility Plan.

The City’s 2020 Urban Water Management Plan identifies three components of water storage including emergency, fire and equalization. Emergency storage is intended to provide water supply in the event there is a problem with the typical daily supply. Emergency supply can consist of “emergency only” wells and/or tank storage. Fire storage is intended to provide water supply to fight fires and must be accommodated by tank storage. Equalization storage is intended to help dampen out the impact of daily fluctuations in demand and must be accommodated by tank storage. The timing and size of the water storage tank and booster pump will be determined with future planning efforts such as during tentative map and/or site plan review processing. The water tank could potentially be located anywhere within the CLSP-1 or CLSP-2 Amendment Plan Area. A 1.6-million-gallon water tank and booster pump station was constructed within the CLSP Phase 1

area, and this site can accommodate a second tank to serve development of the CLSP-2 Amendment. Booster pump modifications may be required. The exact location of the water tank will be determined when more detailed development proposals are submitted. The first project to develop within the CLSP-2 Amendment Plan Area will be responsible for preparing the water study to determine the size, location, and construction timing of the water tank.

*Potable Water Pipe Network*

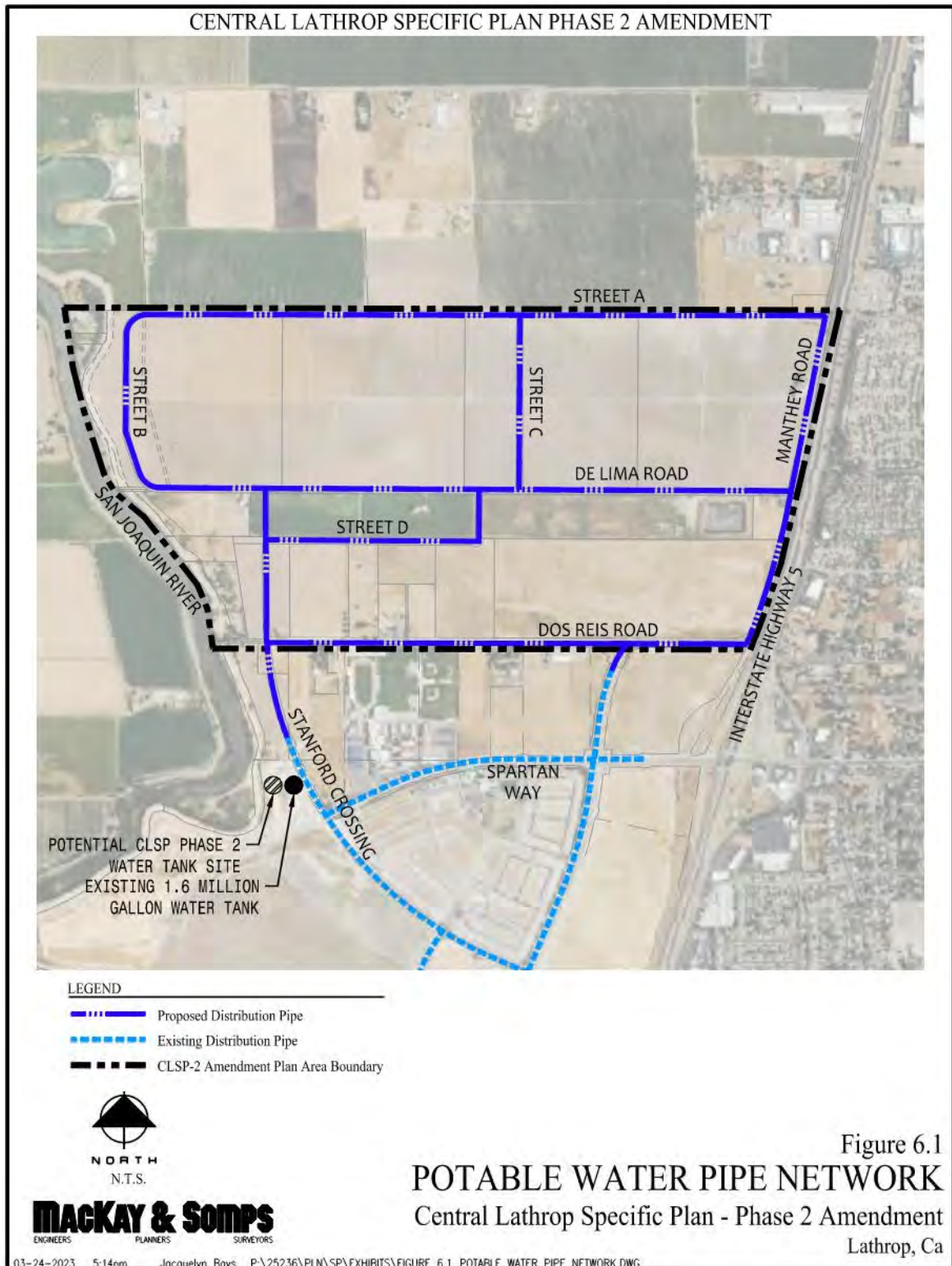
The City currently serves properties along Dos Reis, De Lima and a portion of Manthey Roads with potable water via old pipes. It is possible that some, if not all, of these existing pipes may need to be replaced to accommodate pipe and street improvements associated with development of the CLSP-2 Amendment.

Each of the major roadways in the Plan Area includes a water main as shown on Figure 6.1. These proposed mains form a looped infrastructure water system into which individual industrial and commercial parcels in the CLSP-2 Amendment Plan Area and will subsequently be connected. It is estimated that the water mains will be 12” diameter pipes. The exact size of the mains will be determined through a water model analysis that considers the rest of the City’s water system and pressures necessary to meet fire flow



requirements. The water model will be prepared with future planning efforts such as during tentative map and/or site plan review processing.

Figure 6.1- Potable Water Pipe Network



## ***Wastewater***

When the City adopted the CLSP in 2004, a public sewer system did not exist in the CLSP Plan Area. Existing rural residences and other developments disposed of their wastewater through private septic systems and/or leech fields. However, a public sewer system was installed with the CLSP Phase 1 development that was oversized for the CLSP Phase 2 Plan Area. New pipes and a new pump station will be required within the CLSP-2 Amendment Plan Area that will connect to the existing infrastructure within Phase 1. CLSP-2 Amendment Developers will fund or construct the new infrastructure through the payment of development impact fees.

### *Estimated Wastewater Generation*

The estimated wastewater generation from the CLSP-2 Amendment Plan Area is approximately 219,461 gallons per day average dry weather flow (ADWF). The City of Lathrop utilizes two different demand factors for wastewater generation. Dry uses can assume a demand factor of 172 gpd/ac and other uses can assume a demand factor of 355 gpd/ac. If the dry use demand is used for a particular development a deed restriction would need to be recorded. The more conservative 355 gpd/ac was used to generate wastewater demands in order to size the infrastructure Table 6.2 summarizing the estimated wastewater generation.

### *Collection System*

The CLSP-2 Amendment would rely on a gravity wastewater collection infrastructure system as shown on Figure 6.2. Due to the flat topography of the area, a lift or pump station will be needed to convey wastewater to the existing Central Lathrop Specific Plan Phase 1 pump station. From that pump station, force main systems convey wastewater to the treatment plant.

Once cumulative wastewater generation from Central Lathrop Specific Plan Phases 1 & 2 exceeds 400,000 gpd, offsite force main improvements are required to increase the overall capacity of the system. To achieve the increased capacity for the wastewater system within the CLSP Plan Area the following improvements are needed:

- Adjust the pump flow control restrictions as required at the existing Central Lathrop Specific Plan Phase 1 pump station.
- Disconnect the Central Lathrop Specific Plan to Mossdale intertie and construct a manifold connecting the Central Lathrop Specific Plan 14" and 18" force mains to the River Islands 12" and 18" force mains near the end of Harlan Road at the I-5 crossing. Construct a new 20" force main from the Central Lathrop Specific Plan/River Islands manifold to the Consolidated Treatment Facility (CTF) manifold.

The offsite wastewater improvements are shown in Figure 6.3.

### *Treatment*

Wastewater generated by development in the CLSP-2 Amendment Plan Area will be treated to meet Federal, State, and City standards before it is disposed of. As shown on Figure 6.2, wastewater will be treated by existing capacity and future expansions to the Consolidated Treatment Facility (CTF).

The City has a river discharge permit that will allow for the disposal of recycled water to the San Joaquin River. The City constructed the outfall in the Fall of 2022.

*Table 6.2: Estimated Sewer Demand*

<b>Designation</b>	<b>Land Use</b>	<b>Area (acres)</b>	<b>Demand Factor (gpd/ac)</b>	<b>Demand (gpd)</b>
LI-CL	Limited Industrial	618.2	355	219,461
OS-CL	Open Space	29.3	0	
P-CL	Park	11.2	0	
	Major Road Right-of-Way	65.3	0	
	Total	724.0		219,461

Figure 6.2- Wastewater Network

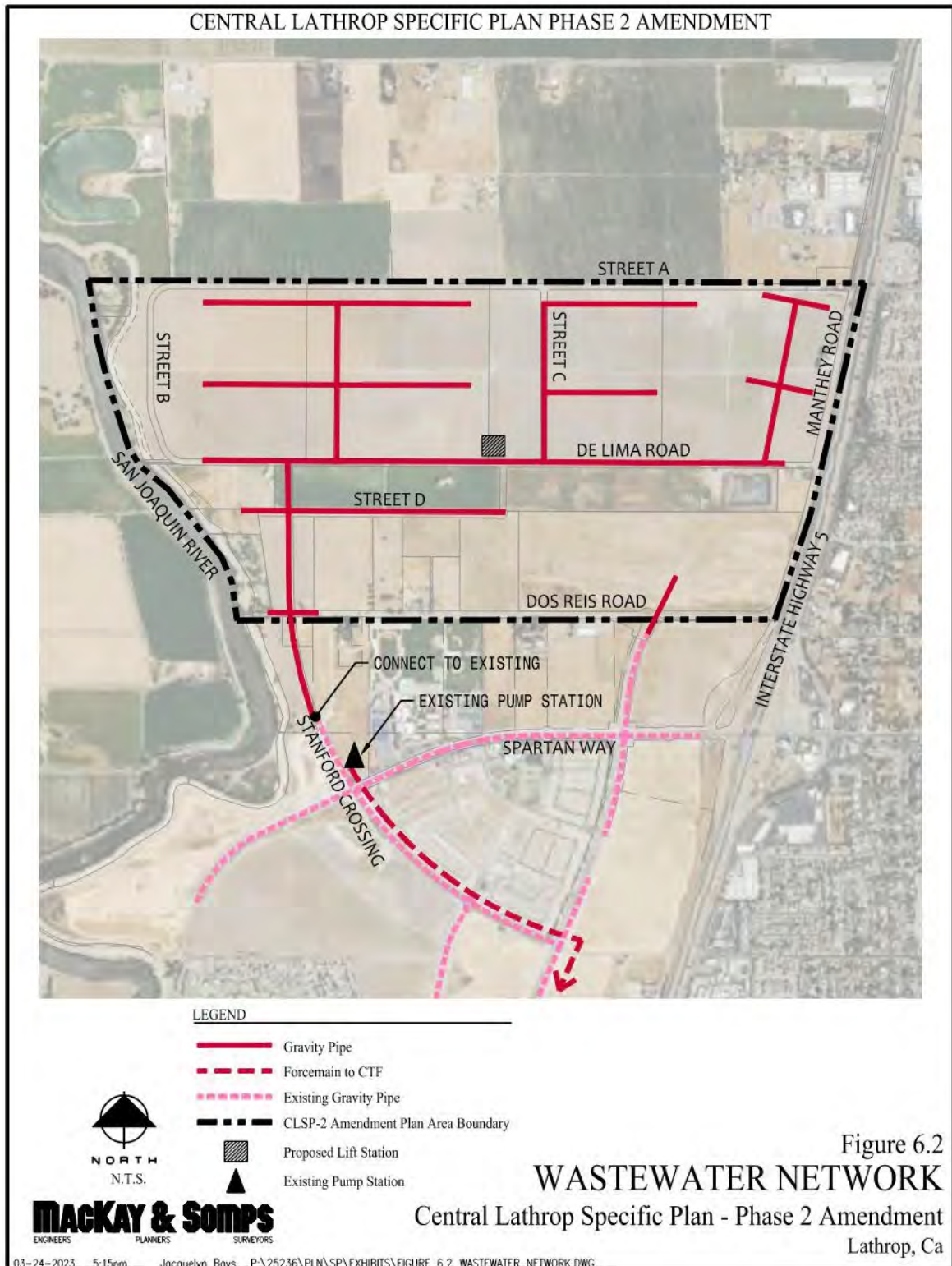
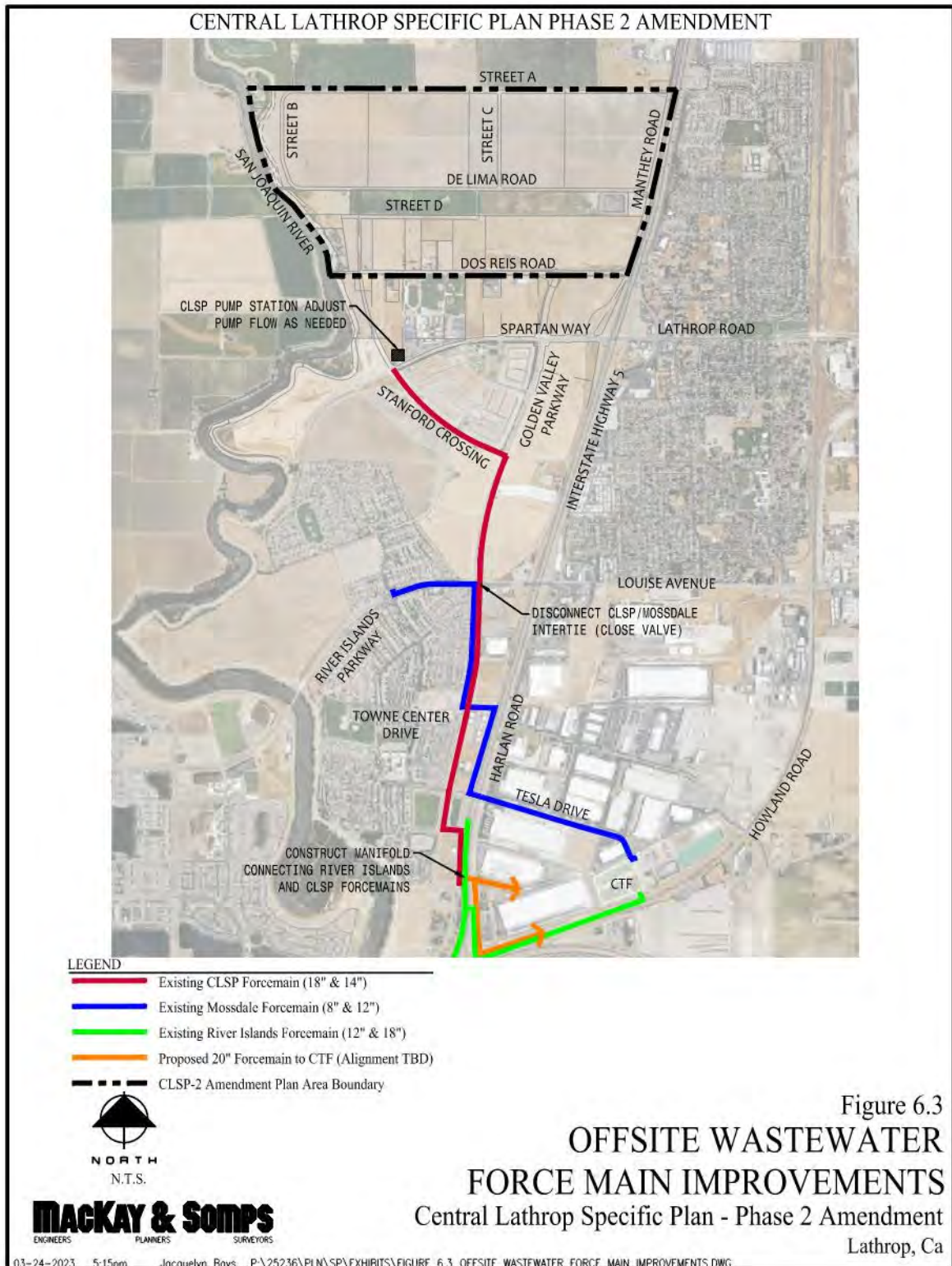


Figure 6.3- Offsite Wastewater Force Main Improvements



### ***Recycled Water***

The CLSP-2 Amendment will maximize reuse opportunities for recycled water. The term “recycled water” refers to wastewater that has been treated and disinfected to tertiary levels. Water treated to this level has been determined by governmental regulations to be acceptable for human contact without cause for concern and is commonly used for irrigation. The use of recycled water is regulated by the Regional Water Quality Control Board (RWQCB) and the Department of Health Services, which apply stringent water quality, treatment and disinfection standards.

The use of recycled water for irrigation serves to conserve potable water for other uses. In addition, in the event the potable water supply is limited at any time, such as a “dry year” situation, the use of recycled water ensures a supply for landscaped areas and reduces the likelihood that potable water would be needed for this purpose.

The CLSP-2 Amendment proposes to make recycled water available for public irrigation uses. This includes irrigation of landscaped areas within street rights-of-way and open space. In addition, there may be potential for the use of recycled water for private irrigation uses as well,

such as common open space areas and landscaping around buildings.

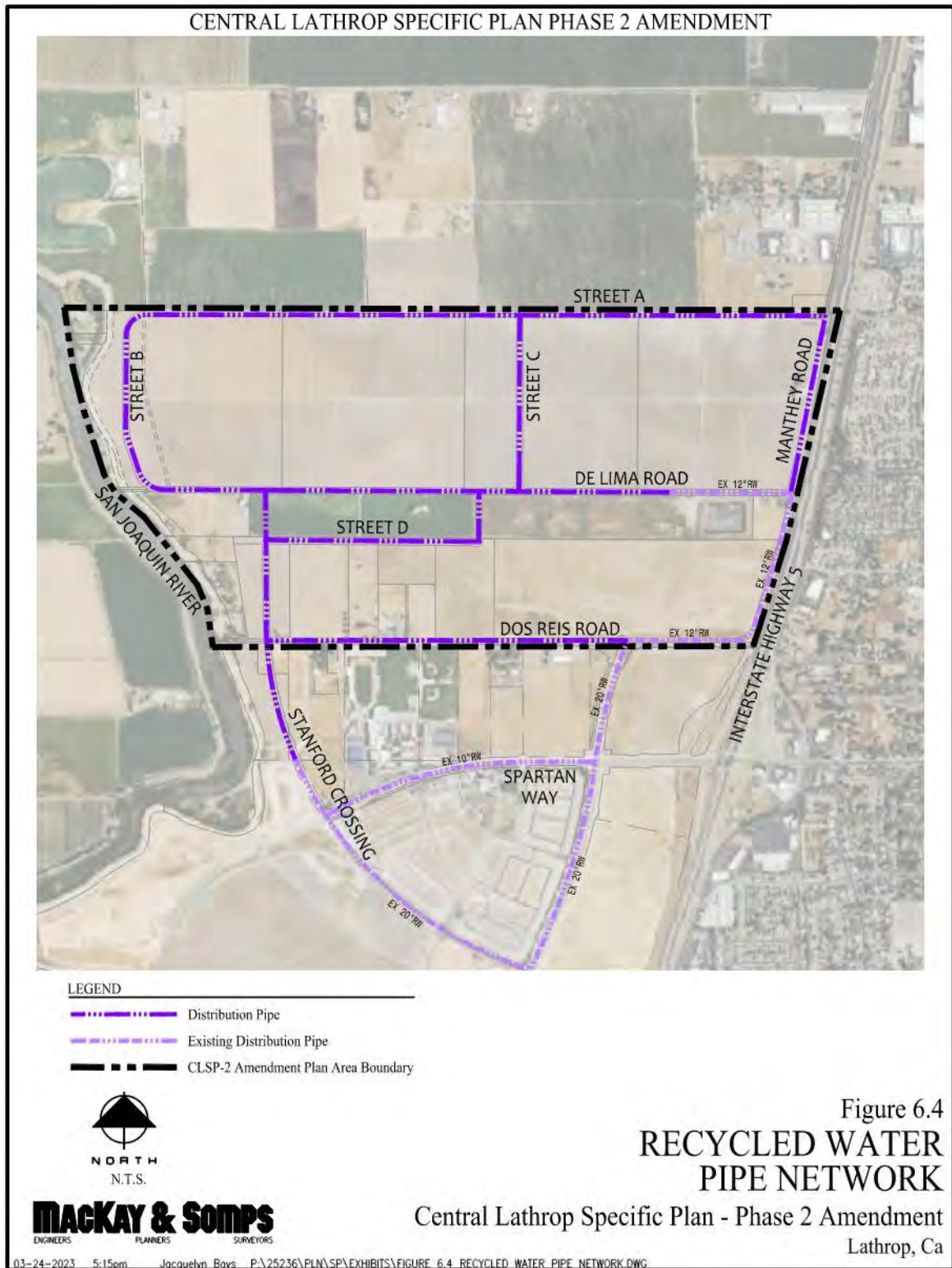
Criteria for management of the recycled water system and public education about it will be established in future reports (or other documents) and will be subject to City approval.

### ***Recycled Water Pipe Network***

An existing recycled water pipeline is located in Golden Valley Parkway and Stanford Crossing and will be the connection point for the Plan Area. Each of the major roadways in the Plan Area includes a recycled water main as shown in Figure 6.4. These proposed mains form a looped infrastructure recycled water system into which public and potentially private landscaped areas can be connected.

Due to the limited demand for recycled water within the Plan Area, the City Engineer can determine the need for recycled water improvements with future development applications. The pipe network illustrated on Figure 6.4 is conceptual and subject to final review by the City Engineer when public improvement plan are prepared.

Figure 6.4- Recycled Water Pipe Network





## ***Flood Protection and Storm Water Quality***

### *Background*

An existing levee along the San Joaquin River protects the Plan Area from flooding RD-17 operates and maintains the levee. The Federal Emergency Management Agency (FEMA) has categorized the Plan Area as being in Zone X as shown on Flood Insurance Rate Map (FIRM) panel numbers 06077C0605F and 06077C0610F. The Zone X definition relevant to the Plan Area is “areas protected by levees from 1% annual chance flood”.

The RD-17 levee system has been undergoing seepage berm and/or other improvement repair/upgrade projects to increase the resistance to under-seepage and through-seepage in order maintain compliance with applicable Federal, State, and local standards. A minimum 120 foot “no-build” buffer along the levee as measured from the levee toe is provided within the CLSP-2 Amendment Plan Area to allow adequate space for future improvements if/when needed.

RD-17 has been working with the Department of Water Resources (DWR) and the Central Valley Flood Protection Board (CVFPB) to evaluate options for providing 200-year protection for the Mossdale Tract including the CLSP-2 Amendment Plan Area. The 120’ “no-build” buffer within the CLSP-2 Amendment Plan Area provides sufficient area to accommodate any 100-year improvements and any additional incremental improvements to provide 200-year protection in the future in conjunction with the Mossdale Tract 200-year flood protection improvements to meet the urban level of flood protection criteria.

Using design standards developed in cooperation with the City, the CLSP drainage improvement program will provide for efficient discharge of runoff from a 10-year storm event while also protecting the site from flooding during a 100-year storm event. It is also desirable that a high

degree of design flexibility be incorporated into the drainage program. This flexibility will allow sufficient latitude for each new development within the CLSP-2 Amendment Plan Area to design an internal system that meets its site-specific needs, so long as the design is consistent with the overall CLSP-2 Amendment Plan Area Drainage Plan.

### *Existing Conditions and Constraints*

The CLSP area is part of a larger watershed known as “the Northern Area” that includes areas both east and west of Interstate 5.

The CLSP-2 Amendment Plan Area is about 20 feet lower than the top of the adjacent San Joaquin River levee. Therefore, runoff must be pumped over/through the levee. To avoid adverse impact to the levees near the CLSP Plan Area, peak discharge is limited to 30% of the 100-year flow rate from the watershed as stated in the 2004 CLSP and CLSP EIR. Therefore, the CLSP-2 Amendment incorporates on-site detention to store excess runoff during periods of peak storm activity.

Two storm drain outfalls to the San Joaquin River exist within the CLSP Plan Area. One outfall is located within the Phase 1 area and the other is located within the Phase 2 area. The outfalls are sized to accommodate the development of the CLSP-2 Amendment Plan Area.

An existing storm drain force main is located within Dos Reis Road and connects existing development east of Interstate-5 to the existing outfall located at the end of Dos Reis Road.

When the City approved the 2004 CLSP, runoff from the CLSP Plan Area was collected in a system of shallow agricultural ditches, roadside ditches, and percolation basins with some small private agricultural pumps that discharged water to the San Joaquin River. However, public storm drain infrastructure is now available that was built with Phase 1 of the CLSP. Existing pipes

are located at the northern end of Golden Valley Parkway just south of Dos Reis Road and at the northern end of Stanford Crossing.

Shallow groundwater exists throughout the CLSP-2 Amendment Plan Area and is influenced by both the water level in the river and sub-surface flow from areas of higher elevation to the east, as well as local irrigation practices. Even though the groundwater level may decline with a reduction in farming activities, it is expected that this high ground water condition will generally persist after development, impacting both construction and the future operation of the storm drain system. Infiltration into the storm pipes through joints and underground structures can result in excessive pumping demands throughout the life of the project. This impact will be reduced by proper installation of pipes having rubber gasket sealed joints.

High groundwater levels can also impact the effectiveness of detention basins. To the extent that groundwater enters the basins, the storage available for the runoff is diminished. There are no detention basins proposed, however if a detention basin is proposed in-lieu of underground storage, the bottom of the basin will be designed to maintain a minimum of two feet of separation from groundwater or other design measures will be implemented such as impervious liners with sub drain systems.

### *The Storm Collection System*

Runoff from the CLSP-2 Amendment Plan Area is designed to discharge to the river through an existing outfall located near the southwest corner of the CLSP-2 Amendment Plan Area at the end of Dos Reis Road and the existing outfall within the Phase 1 area. The existing outfalls are regional facilities. As shown on Figure 6.7, the CLSP-2 Amendment Plan Area will consist of a system having the following three integrated components.

- Gravity lines that collect and deliver surface runoff;

- “Watershed” detention facilities that hold the runoff; and
- A pump station and force main that conveys water to an existing San Joaquin River outfall structure.

The CLSP-2 Amendment Plan Area consists of two major drainage sheds with underground storage pipes to reduce the peak discharge from the Plan Area to the San Joaquin River. Watershed 4 is a part of both the Central Lathrop Specific Plan Phase 1 and this Phase 2 Specific Plan Amendment. The CLSP-2 Amendment proposes to modify the boundary of the existing Watershed 4 to better align with existing property boundaries. See Figure 6.5 for the existing watersheds and Figure 6.6 for the proposed watersheds.

The modification to the watershed 4 boundary will require additional storage which can be accomplished with large diameter storm drain pipes.

In addition to the added storage, a new 39cfs pump will need to be added to the existing Phase 1 storm drain pump station. The pump station is already set up to accept the additional pump so physical pump station modifications are not expected.

The remainder of the CLSP-2 Amendment Plan Area falls within Watershed 3. Large diameter storm drain pipes will be utilized to provide the required underground storage. The underground pipe storage system location will be dispersed throughout the CLSP-2 Amendment Plan Area, with individual developments responsible for a per acre proportional share of the overall storage requirement. A new pump station and force main will be constructed that will connect to an existing outfall structure. The existing outfall structure will need to be retrofit to meet current design standards. The existing headwall is expected to remain in-place, but the existing pipes connecting to the headwall will need to

removed and replaced near to the top of the levees to increase the elevation of the pipes. New valves will also need to be added to the pipes as required by the current design standards. The Storm drain-system illustrated in Figure 6.7 is conceptual and subject to change based on future planning and engineering efforts.

The proposed stormwater collection system functions by discharging all runoff directly into the river up to the point where the runoff rate exceeds the capacity of the pump station. When the rate of runoff exceeds the pump station capacity, water “backs up” into the detention pipes until the runoff rate declines and once again equals the capacity of the pump station. The water level in the storage pipes then decreases, emptying completely.

Based on a preliminary design analysis the approximate volume of the underground storage and maximum allowable discharge rates are summarized in Table 6.3. Storage is based on the maximum discharge rate shown.

*Table 6.3: Watershed Detention Facilities and Pump Station Sizes*

Watershed	Maximum Pumping Rate	Total Storage
	CFS	Acre-feet
3	176.7	1.53
4	78.6	17.36
<b>Total</b>	<b>255.3</b>	<b>18.89</b>

*Flood Protection*

A key element of the CLSP-2 Amendment Plan Area storm drain system is its ability to handle the runoff that occurs during a high intensity storm. The drainage system provides multiple layers of protection based on the severity of storm events:

- 10-year Event - The underground system is designed with capacity to accommodate the drainage flows anticipated to occur as a result of a 10-year storm event.

- 10 to 100-year Event - When the capacity of the underground system is exceeded during an intense storm event (in excess of a ten-year event), water flows will be detained in underground storage pipes, designed for the 100-year storm event and distributed throughout the CLSP-2 Amendment Plan Area. This design method keeps the flow depth underground, within acceptable limits (i.e., one foot below floor elevations) and the threat of flooding posed to private property is minimized. An alternative design could be to allow the streets to flood and provide overland release by means of a descending gradient directing surface flow towards a proposed detention basin. This type of design would require flow in the streets.
- 10 to 100-year Event with Pump Discharge limited – The CLSP-2 Amendment Plan Area storm drain system is also designed to provide flood protection in circumstances requiring a reduction in flow rates of the system pumps that discharge into the San Joaquin River. The Central Valley Flood Protection Board and the City may limit river discharge to pre-development levels whenever the river stage exceeds certain flood elevations. When pump discharge is limited, the CLSP-2 Amendment Plan Area must be able to accommodate the volume of a 100-year, 24-hour storm without flooding buildings. Under these extreme circumstances, the volume of water that must be stored in the Plan Area may exceed the capacity of the detention facilities and will be held in the streets, parking lots and/or other areas.

The CLSP-2 Amendment Plan Area grading concept preserves the elevation of the streets within the watershed at approximately the same elevation as existing conditions. During a rare condition, when the San Joaquin River is high and the stormwater pumps must be reduced, the underground storage allows runoff to be spread

throughout the shed avoiding excessive depth of inundation in any one area.

The 2022 Lathrop General Plan amendment changing residential uses to Limited Industrial uses in the CLSP-2 Amendment Plan Area is consistent with the floodplain management strategy included in the San Joaquin Area Flood Control Agency (SJAFCA) 200-year Fix-in-Place levee improvement project for the Mossdale Tract.

### *Stormwater Quality*

The CLSP- 2 Amendment Plan Area drainage system will include features designed to ensure that the stormwater quality meets current water quality standards in conformance with Phase II MS4 National Pollutant Discharge Elimination System (NPDES) regulations. Because the site discharges into the San Joaquin River, runoff quality must also meet standards of the regulatory agencies.

Runoff will be treated to the “maximum extent practicable” by implementing appropriate source and treatment control Best Management Practices (BMPs). These practices may include, but are not limited to:

- Bioretention
- Infiltration basin
- Underground water quality vaults (i.e., CDS vaults)
- Disconnected roof leaders (i.e., roof leaders connect to “bubble-up” inlets in landscaped areas away from building foundations rather than to the storm drain system)
- Swales
- Downspout and/or inlet filters
- Porous Pavements

- Inlet stenciling
- Street sweeping

Stormwater treatment must meet the criteria of the Multi-Agency Post Construction Stormwater Standards Manual. Additional requirements may be imposed on some industrial and commercial uses.

It is anticipated that new public roads within the CLSP-2 Amendment Plan Area will be treated with roadside bioretention areas and stormwater quality for the individual developments will be treated onsite in bioretention areas, prior to discharging into the public storm drain system. Per Section 1.5 of the Multi-Agency Post Construction Stormwater Standards Manual public roadway replacements and widenings allow for reductions and/or exceptions in storm water quality treatment requirements.

The storm water runoff on Dos Reis Road between Stanford Crossing and Golden Valley Parkway is exempt from storm water quality requirements per Section 1.5 of the Multi-Agency Post Construction Stormwater Standards Manual because the addition of traffic lanes results in an alteration of 50% or less of the existing Dos Reis Road impervious area in this section of roadway and the proposed 8’ trail and bicycle lane are graded to runoff to adjacent vegetated areas.

Similarly, the storm water runoff from Manthey Road is exempt from storm water quality requirements per Section 1.5 of the Multi-Agency Post Construction Stormwater Standards Manual because the addition of traffic lanes results in an alteration of 50% or less of the existing Manthey Road impervious area in this section of improvement and the proposed 8’ trail and bicycle lane are graded to runoff to adjacent vegetated areas.

Section 1.5 of the Multi-Agency Post Construction Stormwater Standards Manual also allows for the reduction of storm water treatment area required to treat runoff from Dos Reis Road

between Golden Valley Parkway and Manthey Road because the addition of traffic lanes results in an alteration of 50% or less of the existing Dos Reis Road impervious area in this section of roadway and the proposed 8' trail and bicycle lane are graded to runoff to adjacent vegetated areas.

It is likely other street replacements/widenings in the CLSP-2 Amendment Area will fall into these reductions/exceptions categories in the future reducing the required treatment areas for public roadways as directed by the City.

Figure 6.5- Existing Watersheds

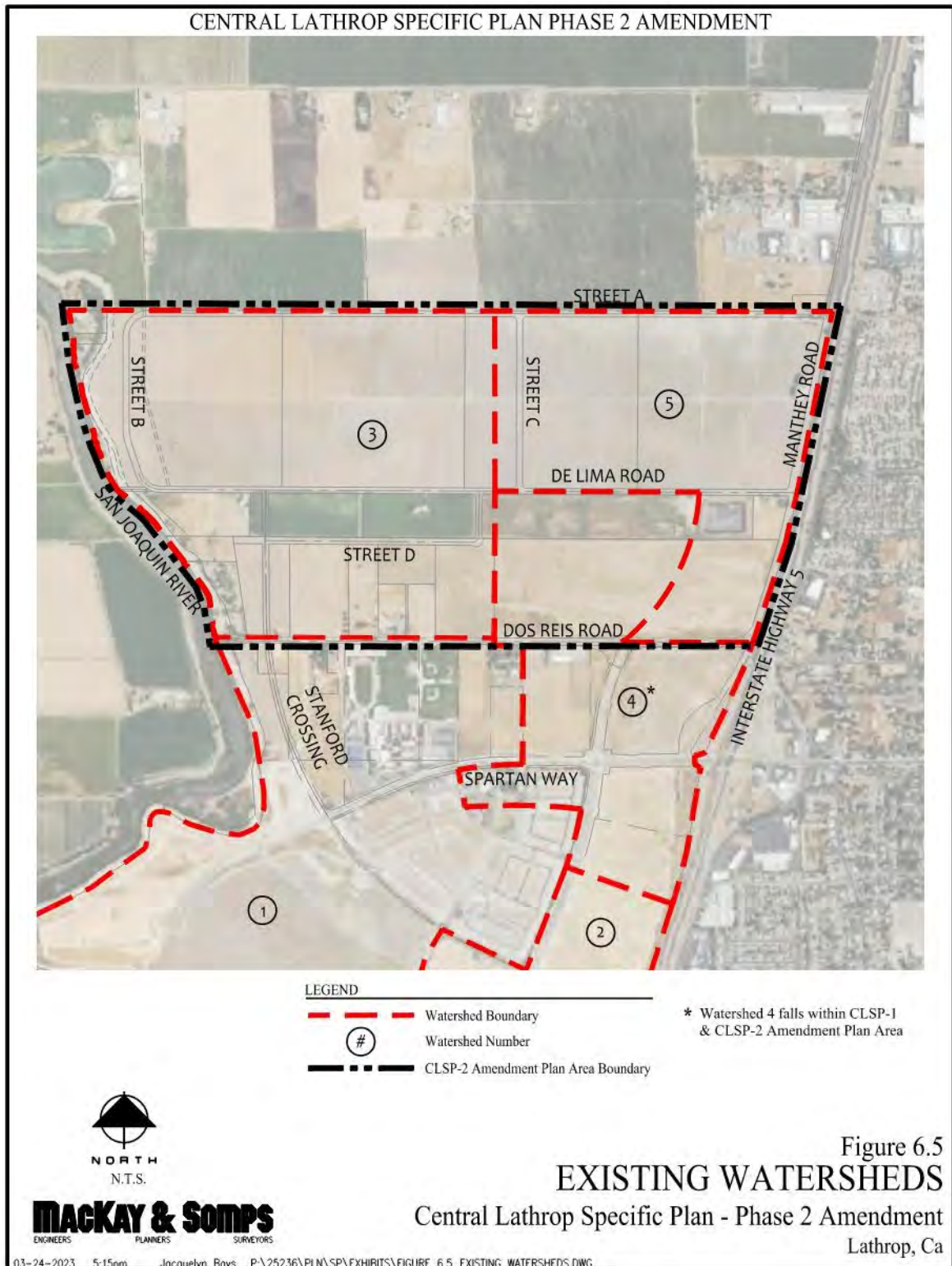


Figure 6.6- Proposed Watersheds

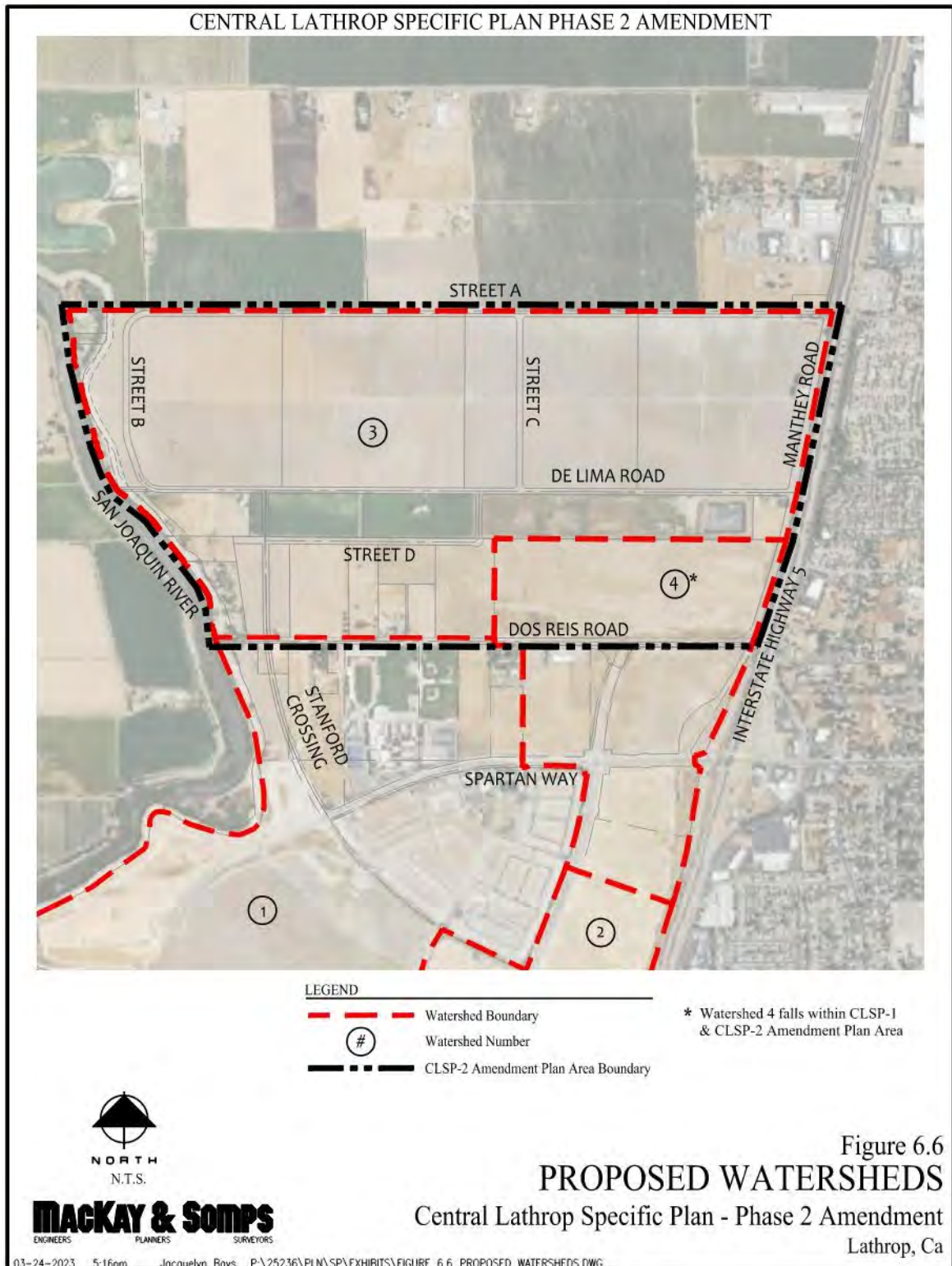
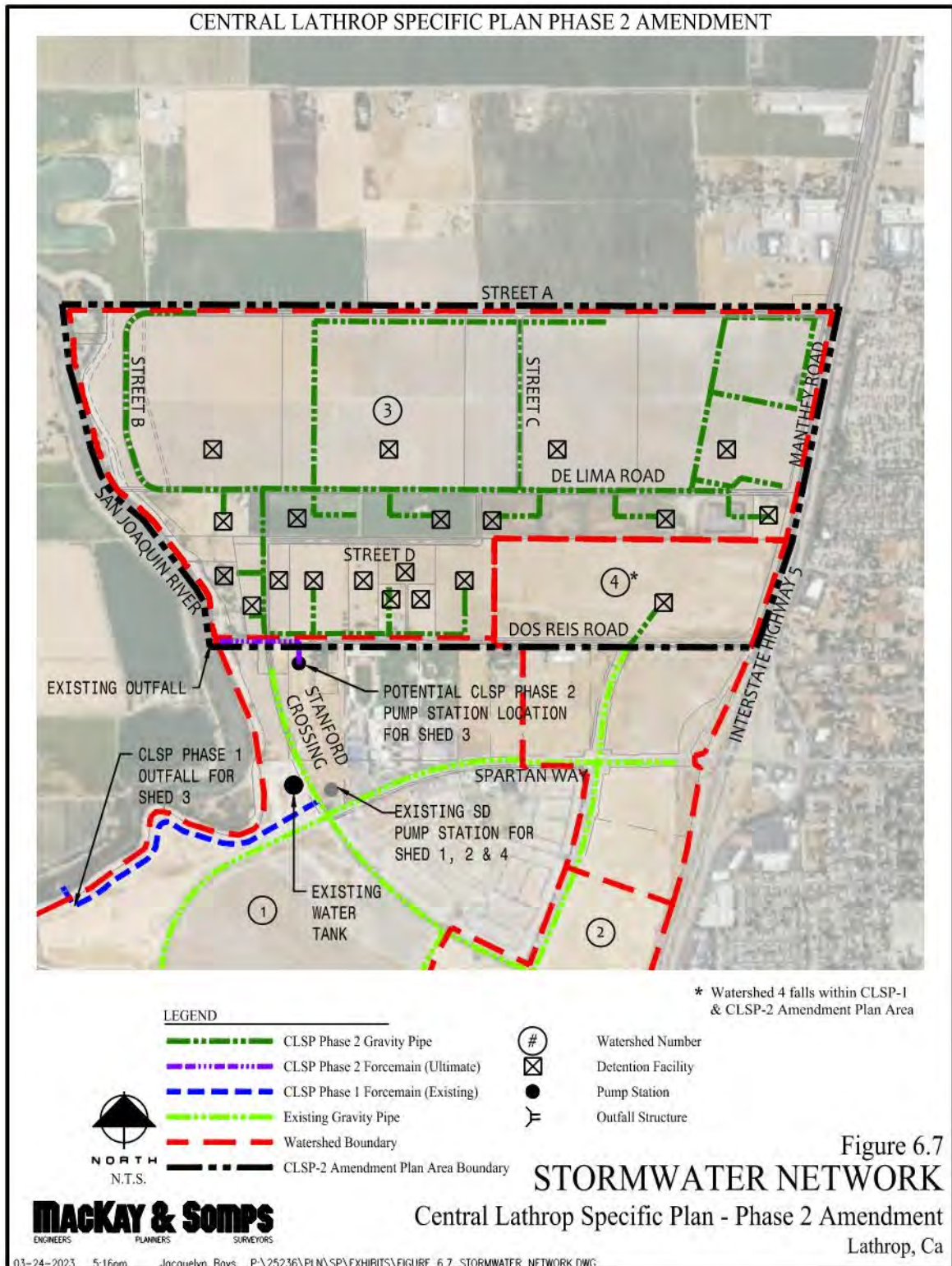


Figure 6.7- Stormwater Network





### ***Public Utility Easements and Utility Corridors***

For a discussion regarding the location and use of public utility easements and utility corridors, please refer to Chapter Three: Circulation and Transportation.

### ***Energy and Telecommunications***

#### *Power*

Electrical service will be provided to the CLSP-2 Amendment Plan Area by Pacific Gas and Electric (PG&E). Existing high voltage power lines, within PG&E power line easements, traverse through a portion of the CLSP-2 Amendment Plan Area. Existing power lines within the CLSP-2 Amendment Plan Area 1 are shown on Figure 6.8.

It is anticipated that all existing overhead power lines 34.5Kv and under will be relocated and/or be placed underground as the CLSP-2 Amendment Plan Area develops. New power lines constructed to serve the Plan Area, as well as all other utilities, will be installed underground in a typical joint trench.

PG&E will extend electricity service in a timely manner to serve each development as needed during the phased implementation of the CLSP-2 Amendment.

#### *Gas*

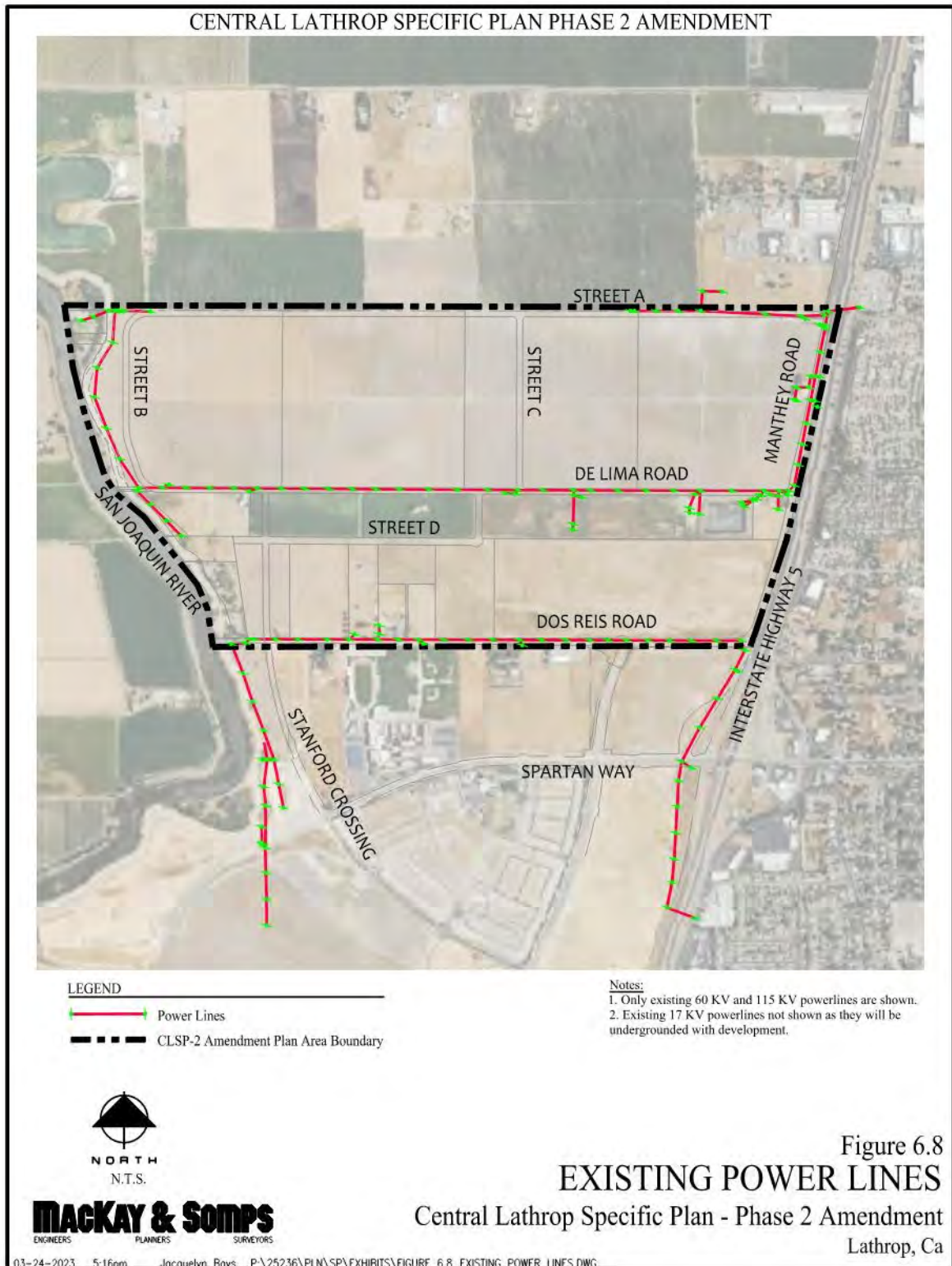
PG&E will provide natural gas service to the CLSP-2 Amendment Plan Area. The CLSP-2 Amendment Plan Area ties into existing natural gas lines located within the CLSP Phase 1 area.

#### *Telecommunications*

Telephone service, cable television service, and possibly high-speed data lines to the CLSP-2 Amendment Plan Area are to be provided by the appropriate utility companies. Telecommunication systems will be located

underground in a joint trench with gas and electric facilities.

Figure 6.8- Existing Power Lines



## Chapter Seven: Design Guidelines

### *Introduction*

The Design Guidelines provide the vision for the CLSP-2 Amendment Plan Area by establishing minimum standards for character, building design and landscape elements. The 2022 General Plan, the CLSP-2 Amendment and the City's Zoning Code, ensure a coherent well thought out design for the CLSP-2 Amendment Plan Area.

The following guidelines provide site design and architectural standards, including provisions for landscaping and sustainability efforts applicable to development within the CLSP-2 Amendment Plan Area. All development proposals in the CLSP-2 Amendment Plan Area must adhere to the standards and guidelines set forth in this amended specific plan.

These guidelines and standards are consistent with and provide a companion document to the City's Zoning Ordinance. Standards not addressed in the CLSP-2 Amendment shall be those set forth in the Lathrop Municipal Code.

### *Purpose*

The purpose of the guidelines and standards for industrial development, park, and open space is to ensure consistency of design between the various uses within the CLSP Plan Area.

These guidelines provide for the development of a well-designed project, that is compatible with adjacent land uses of the overall CLSP Plan Area, and is designed to promote accessibility and provides the ability for pedestrians and alternative modes of transportation to, from and within the CLSP-2 Amendment Plan Area.

### *Land Use*

A brief description and the vision of each land use designation within the CLSP-2 Amendment Plan Area are provided below:

#### *Limited Industrial*

Envisioned as a prominent employment-generating land use, this designation shall provide a high degree of functionality, including convenient access to major roadways. Buildings within this area may likely be warehouse, manufacturing, assembly and repair-type buildings. Careful consideration shall be placed in the material, color, and scale of buildings as well as the articulation of each façade. Although multiple industries would likely be located in the CLSP-2 Amendment Plan Area, the architecture styles of buildings should create cohesion and compatibility across the CLSP-2 Amendment Plan Area.

#### *Open Space & Parks*

The Open Space and Park uses are located along San Joaquin River and span the length of the CLSP-2 Amendment Plan Area Project Area. The existing Dos Reis Country Park will remain, with additional park areas proposed to connect to the open space corridor. The open space corridor along the San Joaquin River is intended as a local community wide facility with the possibility of regional linkage. This Open Space Corridor would also provide the ability to connect the CLSP-2 Amendment Plan Area to CLSP Phase 1 and other developments to the south. Though not required or mandated, provision is made within this CLSP-2 Amendment for the construction and use of outdoor recreation facilities such as recreation fields, fitness equipment and courses, or other such uses intended for the physical recreation

and well-being of the community and/or the employee users.

General principles guide the overall Central Lathrop Specific Plan - Phase 2 and lay the foundation for standards and guidelines. Standards and guidelines apply to the entire Phase 2 Amendment Plan Area, and standards and guidelines apply to each land use designation. All site design standards and guidelines are organized into two sections: 1) site design and 2) architecture. Within each section, subcategories further define and illustrate design objectives through written descriptions and photographic examples that convey desired design elements. The applicable standards and guidelines support the design objectives, defining how desired development should be achieved.

### ***CLSP-2 Amendment Principles, Standards and Guidelines***

The CLSP-2 Amendment strives for a realistic and attractive development. The CLSP-2 Amendment, within the existing and surrounding landscape, will continue to advance the economic vitality and job growth in Lathrop by creating a development of quality site design and architecture. To achieve these goals, the following planning and design principles have been developed to assist designers and developers in meeting the CLSP-2 Amendment design objectives.

All industrial projects in the CLSP-2 Amendment Plan Area should be designed to meet, or exceed the following planning and design principles:

1. Site Design.
  - a. Design pedestrian accessible buildings.
  - b. Encourage design elements that consider environmental conditions, like sun, shade, wind, etc., to improve the pedestrian experience and provide natural environmental control.

- c. Encourage streetscape with landscaping.
- d. Provide outdoor lighting for safety and security; minimize outdoor lighting from spilling over to adjacent properties.

2. Architecture.

- a. Use design styles, elements, and materials that complement or do not visually compete with surrounding context and scale of neighboring land uses within the CLSP-2 Amendment Plan Area.
- b. Incorporate distinctive design elements into buildings including colors and building relief.

### ***Site Design***

The CLSP-2 allows for a mix of industrial uses. Due to the wide variety of allowed uses for Industrial developments, circulation, site planning, landscaping, and architecture should be the key elements that unify development in the CLSP-2 Amendment Plan Area. Development projects are encouraged to provide a safe and functional environment for all users and patrons, including pedestrians, bicycles, and automobiles. Development should reflect quality and visual appeal as it relates to adjacent streets and surrounding development. This specific plan amendment guides future design for the CLSP-2 Amendment Plan Area 2 but is flexible in terms of building design, type, size and locations.

### ***Site Planning***

#### **A. Circulation**

The objective of the Central Lathrop Specific Plan - Phase 2 circulation is to promote efficient and safe movement of goods and people throughout the CLSP-2 Amendment Plan Area. The circulation design should consider all types of users: vehicle, pedestrian and bicycle.

Refer to Chapter 3 Circulation and Transportation for details on vehicle, pedestrian and bicycle route locations.

The design of access for large development areas and individual project sites should tie land uses and existing roadways into the overall circulation network in the CLSP-2 Amendment Plan Area. In some cases, the internal circulation may be part of the larger CLSP Plan Area circulation and street network.

Pedestrians should have continuous sidewalks, free of obstructions, and with convenient access to buildings and other adjacent land uses. Additionally, pedestrian connections are encouraged between site buildings, parking and other adjoining uses.

Additional modes of travel, including bicycle and public transit should be incorporated into each development project. Bicyclists should have consistent safe access from major roadways into and around each development area to minimize potential conflicts with vehicles.

1. Land uses that are automobile dependent should be designed to minimize the conflict between pedestrians, bicycles, and automobiles, by the following means:
  - Create pedestrian-only connections between public sidewalks and buildings, avoiding crossing drive-thru lanes wherever possible; or
  - Place vehicle entrances and drive-thru areas away from main pedestrian entries.



*Photo Example 1  
Pedestrian facilities along public roads*



*Photo Example 2  
Minimizing conflicts between pedestrians, bicycles and automobiles.*

The following circulation design guidelines apply to all development areas of the Central Lathrop Specific Plan - Phase 2:

2. Each development should provide pedestrian and bicycle connection to adjacent uses within the Central Lathrop Specific Plan - Phase 2. This would include public sidewalk connections to internal project circulation for pedestrians and public right-of-way bicycle paths to internal on and off-street routes for bicycles. These connections should be well lit and marked for the safety of its users.



*Photo Example 3  
Pedestrian/bicycle safe crossing*

### B. Building Placement & Parking

Building placement and orientation is key in creating a safe and efficient site design. Buildings with uses that rely on visibility should be placed close to adjacent streets and specifically on high-volume corners. Optimal building placement on individual development sites can create opportunities for public or employee spaces, encourage pedestrian connections, establish streetscapes, and provide drive-by advertising for the companies. Building placement and parking orientation considerations can greatly increase the efficiency of a building.

The following building placement and parking design guidelines apply to all individual

development sites of the Central Lathrop Specific Plan - Phase 2:

1. Where feasible and desirable, buildings should maintain close proximity to streets;
2. Buildings should be sited to be conveniently located and attract users:
  - Entrances should be designed to accommodate safe pedestrian travel;
  - Parking should have close proximity to buildings;



*Photo Example 4  
Parking near buildings*

- Create spaces with gathering areas, plantings, bicycle parking, or other amenities between or adjacent to buildings;



*Photo Example 5  
Encouraging gathering areas in open spaces*

- Minimize excessive building setbacks that detract from the streetscape, or optimize excessive setback areas by providing distinctive landscaping within the setback;
  - Building elevations should consider the human-scale design elements on ground floor facades and specifically at building entrances.
3. Parking areas should be designed for circulation efficiency and safety of all users:
- Large parking areas should be screened from view and placed away from major rights-of-way, behind buildings, or obscured with landscape treatments, such as berms, tall shrubs, and trees;
  - Landscaping should be provided in parking areas as specified by the landscaping section in this chapter;
  - Pedestrian pathways and walkways, clearly marked with enhanced paving material, should be provided through parking areas as direct routes to building entries.

4. Loading and delivery areas should be located appropriately to minimize their visibility, avoid pedestrian/loading zone activity conflicts, and minimize potential circulation, noise, and lighting conflicts. Screening these areas with landscaping, buildings, fences or walls is encouraged.
5. Corner and mid-block buildings should be oriented towards the public right-of-way and should be designed to achieve the following:
- Where feasible and desirable, driveway entrances and stacking lanes should be separated from public pedestrian spaces and crossings.

C. Refuse, Storage & Equipment Areas

The design and placement of refuse containers, service areas, loading docks, and similar facilities shall be considered as part of the overall site design of a project. In general, these uses should be located as to not interfere or detract from circulation, parking, and adjacent uses, and in most cases should be screened from view.

The following design guidelines apply to all development areas of the Central Lathrop Specific Plan - Phase 2 Amendment Plan Area as it relates to refuse, storage and equipment areas:

1. Trash/recycling enclosures and service and loading docks areas should be sufficiently sized to accommodate the site’s needs, but located in areas as to not interfere with on-site circulation and parking;



*Photo Example 6  
Sufficiently sized loading docks*

2. Trash and outdoor storage facilities should be placed away from public streets and/or screened from view with materials consistent to adjacent building exteriors or other mature plantings; and



*Photo Example 7  
Screened outdoor storage area placed away from public streets.*

3. Trash and outdoor storage that is visible from upper stories, arterial roads or freeways should be screened with trellis or other horizontal cover and should be consistent with the architectural style of adjacent buildings. Furthermore, trash enclosures should be designed—through colors, materials, details, and/or forms, that serve to compliment associated building design for the particular building complex it serves.
4. Trash and outdoor storage facilities are required to include a covered roof and sewer drain as described in the Public Works Stormwater Standards.



*Photo Example 8  
Enclosed refuse areas*



#### D. Landscaping

The intent of the landscape design is to provide continuity throughout the CLSP-2 Amendment Plan Area. Landscaping guidelines will specify standards for streetscape, public space, and parking lot design within the development area. Through the use of deciduous and evergreen plant material, year-round interest will be given to the site with an evenly layered plant design. This layered plant design will screen or diminish adverse views and utilities. Plant materials should be easy to maintain while attractive and diverse. Designers shall emphasize the use of low-water use plants with a lush character and vibrant colors.

The streetscape within the CLSP-2 Amendment Plan Area will be unified through a consistent palette of ground cover, shrubs, and street trees. The street tree will create a canopy along all public streets to increase aesthetics of the project while providing shade and creating a walkable development. Street trees size required at time of planting will be determined during the Site Plan Review process for each development. Street trees shall be centered in the parkway strip or planted at least 4' behind the sidewalk. A mix of evergreen and deciduous trees is encouraged as primary and accent tree options. Where it is determined by City staff that more screening is required, an increase in evergreen tree locations may be required.

The landscaping of public spaces should be carefully considered to attract visitors. Trees with a consistent canopy should be used in areas where shade is desirable. In general, the landscaping of public spaces should complement the other features and amenities of the area, becoming a backdrop to pedestrian activities.

Parking lots will have drive aisles and parking aisles delineated through parking lot medians and planter strips. Ground cover, shrubs, and trees will be planted within the medians and planter strips, where feasible and practical. When a median or planter strip is adjacent to a parking

stall, all plant material and irrigation shall be kept eighteen inches from the curb, or confined to low groundcover or lawn, to allow for car overhang and door swing. Trees should provide a shade canopy, reducing heat island effect: a sustainable site planning measure. It is recommended that 50% shade be provided within vehicular parking lots. (Estimated shade diameter is projected at 15 years from time of planting.) Vehicular parking lot shade trees shall conform, at a minimum, to standards and requirements shown in Chapter 17.9 Landscape and Screening Standards of the Lathrop Municipal Code.

Irrigation and water efficiency/conservation is mandatory in accordance with the "Model Water Efficient Landscape Ordinance." Irrigation systems should be designed to ensure the efficient use of water and avoidance of overspray and overwatering. To help ensure an efficient irrigation system, plants should be grouped in hydro-zones, which is a combination of plants with similar water needs. The use of low-water native and adaptive plants is highly encouraged. All landscape areas must be irrigated with an automatic irrigation system controlled by a timer. Use of drip irrigation is encouraged where practical and most effective, especially in shrub and tree areas.

Where feasible and desirable, drainage and water quality measures should be used in on-site landscape areas. Using landscape strips and medians for percolation, drainage swales, and rain gardens is highly encouraged. Use of many sustainable landscape techniques is highly recommended and can result in substantial maintenance cost savings.

The following design guidelines apply to all development areas of the Central Lathrop Specific Plan - Phase 2 as it relates to landscaping:

1. Landscaping should be used to define outdoor spaces, softening and complementing structures, and should also be used for utilitarian qualities:

- Become a backdrop to pedestrian outdoor gathering places;
- Screening parking, loading, storage, and equipment areas;
- Provide shade and enhancement to the streetscape, parking lots, and pedestrian outdoor gathering places; and
- Directional, defining entries and pedestrian ways.

2. Landscaping and trees should be employed in parking areas to break up expanses of hardscape and to minimize heat island effect;



*Photo Example 9  
Landscaping in parking areas*

3. Where feasible and desirable, mature trees and plantings should be maintained and incorporated into the landscape design;
4. Natural and existing vegetation should be preserved where possible and incorporated into the new landscaping. Retention and detention areas should be planted to create the appearance of natural vegetation. Careful selection of plant types is necessary to ensure survival and be compatible with the proper functioning of the drainage system;



*Photo Example 10  
Preserved Natural Vegetation*

5. Conservation and efficient use of water is at the forefront of the Central Lathrop Specific Plan - Phase 2 landscaping objectives. Landscaping and irrigation shall comply with the City Municipal Code Section 17.92.060 “Water Efficient Landscape Ordinance” and the following guidelines:

- Plants should be selected and grouped according to their maintenance and water use profile. In all cases, low-maintenance and drought tolerant plantings are highly encouraged;
- Planting of turf areas should be kept at a minimum. A maximum of 10% of the total landscaped site area may be irrigated turf. Drought-tolerant ground covers and shrubs are lower maintenance and seen as more desirable;
- All landscaped areas should be designed for maximum water efficiency and irrigated through an automatic irrigation system controlled by a timer. Non-potable or recycled water should be used to the extent feasible;

- Use alternative and porous paving options for pedestrian pathways and non-vehicular and bicycle circulation to maximize infiltration of water runoff;
  - Curb, header boards, pavers, and other materials should be used to minimize water run-off and define landscaped areas; and
  - Water features should be designed for maximum maintenance and water efficiency.
6. Where feasible and desirable, landscape strips and medians should be programmed for the treatment and conveyance of water run-off. Landscaping used for percolation, drainage swales, and rain gardens are highly encouraged.
7. A landscape buffer shall be provided along Dos Reis Road, across from existing and proposed sensitive receptors. The landscape buffer is intended to soften the transition from non-industrial uses to the future industrial uses of the site. A 30 minimum foot wide landscape buffer including 22 feet of landscaping with an 8 foot wide paved trail will be provided in the public right-of-way behind the curb. An additional buffer will be provided on private property to be designed with individual development applications. Refer to the Land Use chapter of this specific plan amendment for additional information.



*Photo Example 11  
Landscape buffer at entry monumentation*

#### E. Walls & Fences

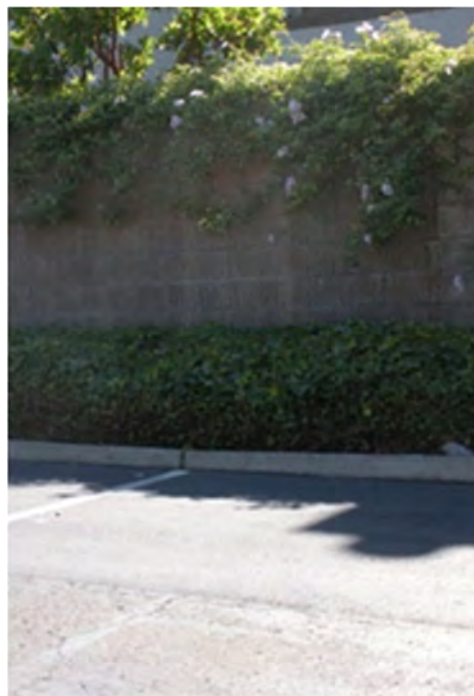
Walls and fences in the Plan Area are intended to provide screening between projects and adjacent uses where necessary, helping to define edges of arterial and collector streetscapes and providing security to property. It is anticipated that there will be limited use of walls, except where needed for sound attenuation or where desired for entry features or for screening unsightly elements, such as trash areas. The material and design for the walls and fencing may vary throughout the development area, depending on location and specific project needs. However, the color and materials of the walls through the CLSP-2 Plan Area should be complimentary. Both masonry and wood fences are permitted in the Plan Area.

The following design guidelines apply Central Lathrop Specific Plan - Phase 2 as it relates to walls and fences:

1. Walls and fences will not be permitted if they aren't necessary for noise attenuation, specific screening, gateway, aesthetic, or security purposes;



*Photo Example 12  
Site walls and fences*



*Photo Example 13  
Landscape screening at wall*

2. Tall walls and fences are discouraged along arterial and collector roadways, as they diminish the street scene. Fences and walls should not exceed a maximum height of seven feet, unless special screening and/or security issues are demonstrated which necessitates a higher fence. Low decorative or auto-screening walls, 2 to 4-feet in height, may serve to enhance a building area or streetscape, if tastefully designed. Maximum wall heights should be inclusive of fill from existing ground (ie berms). At locations where industrial land use is proposed adjacent to sensitive receptor land use (like along Dos Reis Road), an 8 ft. masonry wall for special screening shall be installed;
3. Walls and fences, used at property frontages or for screening, should be designed as an extension of a building’s architecture; top caps on masonry walls and tubular steel fences are encouraged. Self-clinging or supported vines shall be planted at regular intervals along walls to ensure coverage within 5 years in order to discourage graffiti and soften the overall appearance of the wall;
4. Where long expanses of wall or fence are unavoidable, articulation in the form of wall offsets or landscaping should be implemented; and

5. Where security fencing is required, a combination of solid and open grill work is encouraged. Barbed, razor, wire or similar fences shall comply with LMC Section 17.92.070.
6. At the interface between Dos Reis Regional Park and the adjacent industrial site a shall include a masonry wall for screening.

F. Public Spaces and Pedestrian Amenities

It is the intent of the public spaces and pedestrian amenities section to promote usable public gathering spaces oriented toward pedestrian users that function as an amenity to the development. These outdoor spaces should be visually pleasing, appropriately scaled, and should encourage greater activity within each development area. As well as providing pedestrian-oriented features and amenities, these spaces should connect pedestrians with the site and surrounding uses.

An employee or public gathering place should be provided for appropriate projects in each development area. The scale and program of the

space should be appropriate to the adjacent building and type of users. It is encouraged to site these spaces in well-lit, shaded, secure, and interactive areas where they can become an integrated feature.



*Photo Example 14  
Shaded employee break area*



*Photo Example 15  
Employee well-being area*

2. Within the Limited Industrial designation, gathering places should be placed between or adjacent to buildings to encourage employee health and well-being.



*Photo Example 16  
Employee break area*

The following design guidelines apply to all of the Central Lathrop Specific Plan - Phase 2 as it relates to public spaces and pedestrian amenities:

1. An employee or public gathering and break area spaces should be encouraged in appropriate projects within each development area. These amenities can include, but are not limited to, small recreation areas or other open space facilities. These areas will count toward the landscape requirement designated for each land use district.

3. Pedestrian connections should be established within projects and development areas, where logical and practical. Areas for respite for users should be encouraged.

#### G. Lighting & Furniture

Lighting is an important element in the landscape and should be used to contribute to a safe and attractive environment. Natural areas will need little light while street intersections will require illumination levels safe for pedestrian crossings. Lighting is also used to reinforce the development’s overall design theme and create a consistent sense of place by adding a common,

thematic element that is repeated along all major roadways. Streetlighting within public right of way shall comply with the City of Lathrop design & construction standard details. The height of lights will vary depending on application. Light standards will typically be higher along roadways and will be lower in pedestrian areas. High Efficiency lighting is required within all buildings as well as on the exterior. Outdoor lighting shall be provided for safety and security but shall be minimized from spilling over to adjacent properties.

Site furniture is encouraged in outdoor areas and public spaces. The driving goal for the use of landscape elements is to create enjoyable outdoor spaces and furnish comfortable amenities for relaxation and leisure. Site furniture visible from public streets, plazas, and pedestrian linkages should be of a compatible style and design. Fixtures and furniture may vary in style, color, and materials from this standard design if they are used in enclosed courtyards or other locations where land uses require unique appeal. Designers shall give emphasis to vandalism-resistant criteria when selecting all site fixtures and furniture.

The following design guidelines apply to all of the Central Lathrop Specific Plan - Phase 2 as it relates to lighting and furniture:

1. Outdoor lighting should be specified and designed consistent with the zoning code for this Plan Area;
2. Exterior lighting, including parking areas, should be architecturally integrated with the style of the building and colors and materials used;
3. Parking lighting should be arranged to provide uniform illumination throughout parking areas and should achieve a minimum average of one foot-candle and a maximum of three;
4. Low energy LED lighting should be used for streetscapes and parking lots.

5. Architectural lighting may be used to highlight special features on or around the building, or to illuminate key entrances or other areas of access;
6. All lighting should utilize cut-off type fixture to minimize visibility from adjacent areas and should be the appropriate size and height given the activities for which they are designed. Lighting used for pedestrian connectors and gathering spaces should be lower, bollard-type or footlight fixtures and should not exceed 3-4 feet in height;
7. Where feasible and desirable, the use of pedestrian amenities, such as benches, drinking fountains, lighting, and trash receptacles, is encouraged. These elements may be sited in public gathering places and as respite along pedestrian connectors; and
8. The design of site lighting and furniture should be compatible throughout the CLSP-2 Amendment Plan Area.

### ***Architecture***

Architecture should establish project identity and enhance the character of the development in the CLSP-2 Amendment Plan Area and the City of Lathrop. As a high-quality development, a complementary design language should be established throughout the CLSP-2 Amendment Plan Area.

The architecture section is divided into two sub-sections:

- Massing, Scale, and Form
- Style and Design Details

#### **A. Massing, Scale and Form**

The design objective of this section is to encourage buildings that consider the human scale, include active areas, and are compatible with adjacent development. Buildings should be clustered to create compact, multi-story

structures that concentrate activities and related programmatic uses. Building height and massing should consider the surrounding context. Projects should consider the human scale at the ground floor and at entries to buildings. Buildings should take on varying form to increase visual interest and break up the monotony of large structures. In addition, horizontal and vertical wall articulation should be encouraged through the use of wall and second floor offsets, recessed entries and windows, human-scale awnings, overhangs and arcades.



*Photo Example 17  
Visual interest in articulation*

### B. Style and Design Details

The objective of the style and design detail section is to establish clear direction in terms of architectural styles and themes for future development in the CLSP-2 Amendment Plan Area. The style and design of the buildings will enhance the character of the Central Lathrop Specific Plan - Phase 2 and set it apart as a distinct and high-quality development. While these guidelines do not prescribe a specific style of architecture for the CLSP-2 Amendment Plan Area, the objective is to allow a diversity of styles while considering the context of surrounding development.

### C. Roofline

1. Rooflines should be clearly articulated by using the following feature:

- Parapets are encouraged to conceal flat roofs and to screen any rooftop equipment, such as HVAC units, from public view. Parapets should not exceed 15% or 1/3 of the supporting wall height. All parapets should feature three-dimensional cornice treatments.

### D. Entries

1. Building entrances should be designed for access both by patrons arriving via automobile and by foot or bicycle;
2. Each entry should be protected from the elements;



*Photo Example 18  
Entry protected from the elements.*

3. Entries should create an architectural point of interest using one or more of the following methods:
  - Wall recesses;
  - Roof overhangs;
  - Canopies;
  - Arches or arcades;
  - Columns; and/or
  - Signage.



*Photo Example 19  
Architectural points of interest at entryways*



*Photo Example 20  
Architectural color, texture and material changes with offset/projections*

4. Entries should incorporate windows to provide natural light and air; and
5. Where feasible and desired, pedestrian amenities, such as seating, lighting, fountains, sculptures, boulders, etc., should be incorporated into entry designs

E. Materials & Colors

1. All building elevations must include architectural patterns that include at least (2) of the following elements:
  - Color change;
  - Texture change;
  - Material change; and/or
  - A wall offset, reveal, or projection of at least 12 inches in depth.

2. Exterior materials should be durable and high quality to prevent degradation and for the ease of maintenance:

- Large expanses of smooth material such as concrete should be broken up with expansion joints, reveals, recesses, or changes in texture and color;
- Large expanses of highly reflective surface and mirror glass exterior walls should be avoided to prevent heat and glare impacts on the adjacent public streets and properties;
- Colors should be compatible throughout the CLSP-2 Amendment Plan Area, while allowing for individuality to each development area. A varied and rich color palette is encouraged, although color should not be used as an attention-seeking device. Colors should be used to enhance a building’s presence and integrate other materials throughout the project;

3. Building trim and other accent elements may feature brighter colors, if desired, but should always complement the base color.





*Photo Example 21  
Contrast in reflective surfaces – pop of color trim accents*

F. Windows & Doors

1. Ground floor, storefront-type glazing for display purposes along public façade frontages should be used as appropriate to enhance the exterior wall area;
2. Windows and/or other appropriate building features should be used on upper levels to break up large wall areas and create visual interest;



*Photo Example 22  
Window placement at upper levels - creating visual interest with architectural elements*

3. Window and door openings should be framed with trim, or recessed a minimum of 4 inches from the building face;
4. Where feasible and useful, use operable windows for maximum environment control and passive heating/cooling options

G. Facades

1. Facades of 100-feet or more in length are encouraged to break-up the elevation using one of the following techniques:
  - Wall and/or second floor offsets; or
  - Recessed entries or windows.
2. Facades that face public streets should create visual interest by using one or more of the following techniques:
  - Human-scale elements, like awnings or overhangs;
  - Arcades or recesses; or
  - Entry areas.



*Photo Example 23  
Human-scale awning element*

H. Signage

1. Signage shall comply with Lathrop Municipal Code Chapter 17.84 Signs;

2. Color and material options for signs should always complement the architectural style of the building;
3. Signage should be scaled appropriately for its given location;
4. Building signage should be located near the related business entry, or as identity feature as seen from major travel ways;



*Photo Example 24  
Monument signage*

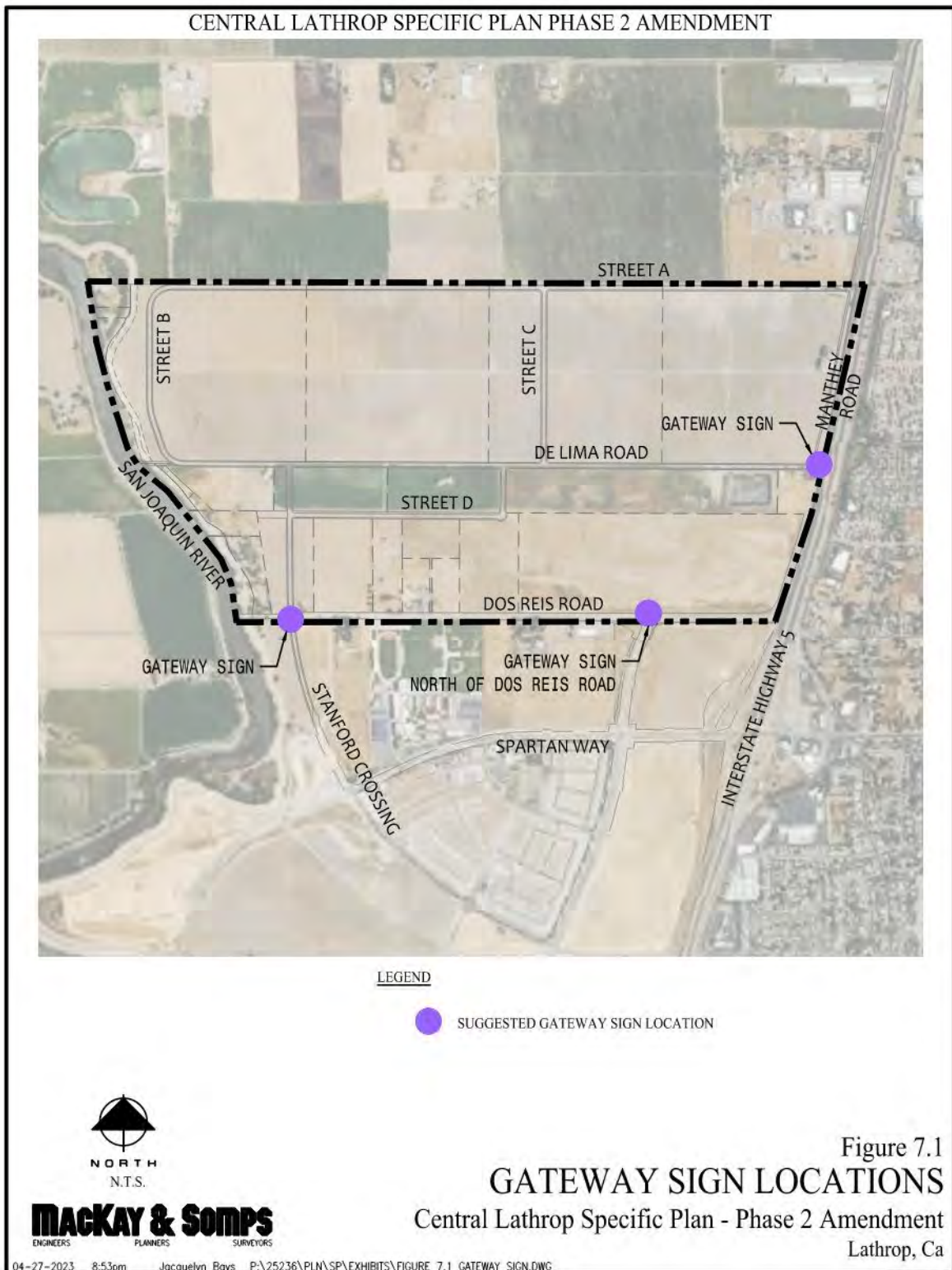


*Photo Example 25  
Low profile monument sign*

5. Signage should maintain a visual consistency throughout CLSP-2 Amendment Plan Area. When more than one sign is required for a given business or area, both signs should maintain visual compatibility with one another;
6. Signage text should be kept to a minimum and scaled appropriately for placement and legibility purposes;
7. Wall signs, monument signs, and low-profile freestanding signs are encouraged;

8. Signage for pedestrian and bicycle way-finding is encouraged; and
9. Lighting is allowed to illuminate signage at night. Lighting should be designed appropriately as to not create hazardous glare for pedestrians, bicyclists, and vehicles. Both externally and internally illuminated signage is allowed.
10. At key entry areas along De Lima Road, Manthey Road, and future Street A, project-wide decorative entry features and monument signs shall be located to identify and enhance the image of the Central Lathrop Specific Plan - Phase 2 Area. Developers and builders of the project shall work with City Staff to establish appropriate locations and criteria for this project-wide monumentation and signage.
11. On-site directional signs at gateways and entries are encouraged to be provided for both pedestrian and vehicular visitors to the site.
12. Suggested Gateway Sign locations are shown on Figure 7.1.

Figure 7.1- Gateway Sign Locations



## Chapter Eight: Implementation

### ***Introduction***

This chapter describes the CLSP-2 Amendment implementation, including project review procedures, development agreements, specific plan amendment procedures, enforcement, mitigation monitoring and other review and approvals required during the implementation of the CLSP-2 Amendment.

### ***Specific Plan Implementation***

The City would implement the CLSP-2 Amendment in accordance with the terms and conditions of several related planning and program documents, including, in particular, the landowner development agreements, the project CEQA analysis, the CLSP-2 Amendment Design Guidelines (this document), the City of Lathrop General Plan, related Master Plans, and the Zoning Ordinance. These documents provide guidance and direction and otherwise inform City discretion in the review and approval of future development within the CLSP-2 Amendment Plan Area.

#### *Central Lathrop Design Guidelines*

As described in Chapter Seven, the CLSP-2 Design Guidelines contain architectural, site planning, and landscaping design principles and guidelines.

#### *City of Lathrop General Plan*

Development within the CLSP-2 Amendment Plan Area must be consistent with the City of Lathrop General Plan.

**The Lathrop General Plan requires Conditional Use Permits for industrial**

**development located between Dos Reis Road and De Lima Road.**

#### *Municipal Code*

The City of Lathrop Municipal Code has been amended to include special zoning districts for the purpose of defining for each parcel the permitted, conditionally permitted, and administratively permitted land uses that may be developed within the CLSP-2 area, the process pursuant to which such land uses are approved and the development standards applicable to each land use.

#### *Drainage Plan Implementation*

A detailed drainage report, including hydrologic and hydraulic calculations and focused geotechnical investigations relating to soil and groundwater conditions, will be a critical part of the individual application for each project proposed for development.

There are two distinct watersheds within the CLSP-2 Amendment Plan Area. The parcels within each watershed are linked by the drainage system and therefore, the detailed planning of any portion of a watershed must take into consideration the rest of the proposed development within that watershed.

If an individual development does not encompass the entire watershed, the individual project must show that it will implement the requirements of the CLSP-2 Amendment Drainage Plan as described in the Utilities and Drainage chapter.

#### ***Right to Farm Provisions***

The Plan Area has existing agricultural uses of various kinds and intensities. As the Plan Area builds out, several existing parcels on-site could remain in their existing agricultural state for some foreseeable period of time. In order to ensure the viability of the on-going agricultural uses, this specific plan amendment shall require that a “right-to-farm” provision be included as a part of any subsequent stage in the land entitlement process. Along these same lines, an entitlement application or document shall mandate full right-to-farm disclosures at point-of-sale of lots within the Plan Area. This provision shall include all properties on site which may be impacted or affected by on-going farming operations.

### ***Development Agreements***

Subject to the Specific Plan, the property owners and the City may execute Development Agreements in accordance with Government Code and local ordinance. The Development Agreements will set forth the infrastructure improvements, public dedication requirements, landscaping amenities, and other contributions to be made by a property owner in return for guarantees by the City that certain land uses and densities in effect at the time of execution of the agreement will not be modified.

Both the City and the project sponsors would commit themselves to proceed with the terms of the agreement. The City can agree to process future development applications in accordance with the Plan and laws that were in existence when the agreements were made. The City then commits to maintaining its planning or zoning statutes related to the developments for an agreed-upon period of time. In return, the developer/applicant agrees to develop according to an agreed-upon time schedule or commit to other measures which the City might otherwise have no authority to require the developer/applicant to perform.

Generally, Development Agreements include the following provisions, or similar variations:

- Specify how the Specific Plan and General Plan will be implemented in connection with the Development Agreement,
- Provide the terms for reimbursement in the event that a developer provides advance funding for facilities which have community benefit,
- Provide for adequate public facilities for each project phase in a timely manner,
- Shorten the approval process by consolidating and coordinating various discretionary approvals, and
- Specify the monetary responsibilities of the developers.

### ***City Review Process***

#### *Community Development Department Review*

Subsequent to adoption of the CLSP-2 Amendment, individual project applications will be reviewed to determine consistency with the specific plan amendment and other regulatory documents. Applications such as site plan review applications, use permits, conditional use permits, variances and the like, will be reviewed using established Community Development Department and Planning Division procedures.

Development applications will be submitted to the City of Lathrop’s Planning Division. The Planning Division will conduct an initial review of the application for completeness and consistency with the adopted Specific Plan, as well as other ordinances and standards. The applicant will be notified within 30 days of the initial submittal date of any deficiencies that must be rectified to deem the application complete. If the applicant or the City believes that an Amendment to the Specific Plan is warranted, an Amendment to the Specific Plan may be requested in accordance with the Amendment Procedures. The request must provide adequate

justification. The application may also be subject to environmental review as discussed in the following section.

#### *Conditional Use Permits (CUP)*

Per the City of Lathrop General Plan, conditional use permits will be required for any development within the CLSP-2 Amendment Plan Area located between Dos Reis Road to the south and De Lima Road to the north. A CUP may also be required within the CLSP-2 area if the proposed use requires a CUP per the Lathrop Municipal Code.

#### *Site Plan/Architectural Design Review*

Generally, all industrial projects within the CLSP-2 Amendment Plan Area will be subject to Site Plan/Architectural Design Review by the City; design review shall be implemented before issuance of building permits. Also, all public improvements (such as landscape plantings, street and entry signs, lighting, or special paving) are subject to Site Plan/Architectural Design Review. All Site Plan/Architectural Design Review procedures will be conducted in compliance with Chapters 17.100 and 17.104 of the Lathrop Municipal Code.

#### *Public Improvement Plans*

The on-site and off-site public improvements necessary to serve the CLSP-2 area need to be specifically designed. The applicants shall prepare for City review and approval Public Improvement Plans, consisting of detailed engineering designs and documents for all utilities necessary to develop the land uses identified in the Specific Plan. These plans shall include an infrastructure sequencing program that will allow orderly development throughout the Specific Plan area. The sequencing program shall prioritize roads, water, sewer, storm drainage and other utilities that must be in place prior to specific levels of development. Refer to Section 6.3.3 for additional details regarding infrastructure phasing.

#### *Environmental Review*

The EIR certified for the 2022 General Plan established a program level environmental review for development within the City including the CLSP-2 Amendment Plan Area and supports the Amendment. Individual project applications will be reviewed for consistency with the 2022 GP EIR. If consistency is determined and the project meets the criteria established in Section 15162 of the CEQA guidelines no subsequent environmental review is necessary. The intent of the EIR associated with the specific plan is to cover all development consistent with this document, stream-lining the permitting and review process.

The City of Lathrop Community Development Department is the lead agency in processing the review of development projects within the Plan Area. Upon receipt of an application the City shall initiate an initial study and environmental review of the project which may require the preparation of additional environmental or engineering studies to address site-specific concerns.

The foregoing discussion details the initial project review and environmental review submittal procedures. Projects submitted for consideration will be reviewed for consistency with established development standards and design guidelines of the Specific Plan.

#### *Habitat Conservation Plan*

All individual project applications must comply with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The SJMSCP, prepared by San Joaquin County and other participating agencies, protects special-status plants and wildlife and their habitats, while allowing for planned growth in the County. This protection is accomplished by, 1) identifying important habitats and habitat features to aid in the development of protection areas, and 2) establishing a funding mechanism through which project proponents can provide

replacement habitat while enabling them to meet their no net loss of habitat value goals. Project proponents as part of this Specific Plan will be required to participate in the SJMSCP by contributing appropriate impact fees and implementing mitigation as identified by the SJMSCP.

### ***Amendments to CLSP-2***

An applicant for a specific development proposal may request amendments to the CLSP-2 to respond to changing circumstances and conditions. Amendments to the CLSP-2 should be categorized as minor or major. This determination is to be made by the Community Development Director or his/her designee. The Community Development Director or his/her designee shall administratively make a written determination as to whether or not a requested amendment is major or minor. The Community Development Director's decision may be appealed to the Planning Commission.

#### *Major Amendments*

The following are examples of what could be considered major amendments:

- Introduction of a new land use category not specifically discussed in this CLSP-2.
- Significant changes to the distribution of land uses, major acreage changes of land uses, or other changes affecting land use which may substantially affect the key planning concepts set for this in this CLSP-2.
- Significant changes to the collector street system that would substantially alter the land use or circulation concepts set forth in this CLSP-2.
- Changes to design guidelines and/or development standards which, if adopted would substantially change the

physical character of the plan area as envisioned by this CLSP-2.

- Any change that could significantly increase environmental impacts.

All Amendments to CLSP-2 shall be consistent with the City's General Plan. Major amendments may therefore require an accompanying General Plan Amendment and Zoning Ordinance revision. Generally, the process for amending the CLSP-2 Amendment is similar to that for amending the City's General Plan, with the main difference that there is no limitation of the number of amendments that may be approved in any one year. The materials and documents necessary to process a major amendment application should be consistent with those outlined in the City's Discretionary Permit Form for Rezones/Amendments. A detailed justification statement shall be submitted which explains in detail why an amendment to the CLSP-2 Amendment is warranted. All requirements of CEQA will be applicable. Application fees associated with the major amendment shall be submitted to cover all processing costs. Major amendments shall require City Council approval, with a recommendation forwarded by the Planning Commission.

#### *Minor Amendments*

An amendment shall be considered a minor amendment when it is determined that it does not have a significant impact on the character of the plan or the environment. The following are examples of what could be considered minor amendments:

- Change in the configuration of a particular CLSP-2 Amendment land use which does not significantly alter its relationship to other land uses or compromise the concept and principles of the CLSP-2 Amendment.

- Minor changes to land uses which result in minor acreage changes of land uses, or other changes altering land uses, which do not significantly affect the key planning concepts or principles set forth in this CLSP-2 Amendment.
- Changes to the collector street system and alignments that do not significantly alter the intended land uses or circulation functioning as set forth in this CLSP-2 Amendment.
- The relocation or reconfiguration of open space that is not less in acreage size than specified minimums in the CLSP-2 Amendment.
- Changes to design guidelines (architectural types and materials, landscape materials, etc.) and/or development standards that do not substantially change the physical character of the CLSP-2 Amendment development as envisioned.
- Clarification and interpretation of land uses.
- Any change to the CLSP-2 Amendment that would not significantly increase environmental impacts.

Applications for minor amendments shall be submitted to the Planning Division and shall include a description of the requested amendment, a justification statement, and the application processing fee (determined by the City Council). Minor amendments shall require Community Development Director approval.

An amendment or amendments to this CLSP-2 Amendment shall not require a concurrent general plan amendment unless City Staff determines that the proposed specific plan amendment would not be consistent with the General Plan goals, objectives, or policies.

### ***Overview of Development Approval Process***

The approval of any development project within CLSP-2 Amendment Plan Area shall be based on its consistency with the Lathrop General Plan, the CLSP-2 Amendment, the CLSP-2 Amendment Design Guidelines, and the Lathrop Zoning Code. In addition, each application for a development project within the CLSP-2 Amendment Plan Area will be evaluated to assess the applicability of environmental mitigation measures included in the 2022 Lathrop General Plan EIR to determine whether future environmental review is required under CEQA (Public Resources Code Sections 21166; 21083.3. See also CEQA Guidelines Sections 15162-15164, 15182, and 15183).

Development projects within the CLSP-2 Amendment Plan Area are subject to the standard permit and approval requirements of the City of Lathrop's Zoning and Subdivision Ordinances, except as modified by this Specific Plan Amendment and related approvals.

### ***Site Plan Review Conditional Use Permits, Variances, and other permits for individual development projects***

#### *Site Plan/Architectural Design Review*

Generally, all industrial projects within the CLSP-2 Amendment Plan Area will be subject to Site Plan/Architectural Design Review by the City; design review shall be implemented before issuance of building permits. Also, all public improvements (such as landscape plantings, street and entry signs, lighting, or special paving) are subject to Site Plan/Architectural Design Review. All Site Plan/Architectural Design Review procedures will be conducted in compliance with Chapters 17.100 and 17.104 of the Lathrop Municipal Code.

#### *Conditional Use Permits*



The development of certain land uses within the CLSP-2 Amendment Plan Area or within certain locations may require a conditional use permit (CUP) based on the Lathrop Zoning Ordinance. Issuance of conditional use permits are governed by Lathrop Municipal Code, which specifies the application process, including the submittal of plans, processing fees and related information as may be needed. CUPs are subject to a public hearing held by the Planning Commission that must make findings prior to approval.

The 2022 Lathrop General Plan, Land Use Element, Implementation Action, LU-5.f, b., iii., h., requires that all development projects proposed north of Dos Reis Road and south of De Lima Road be required to obtain a Conditional Use Permit (CUP), which shall be subject to discretionary review by the City Council.

#### *Variances*

In some instances due to special circumstances applicable to a property, Chapter 17.120 of the Lathrop Municipal Code authorizes the Planning Commission to consider and grant “major” variances to specific development standards as set forth in the zoning code. The Community Development Director may consider and grant “minor” variances. Chapter 17.120 of the Municipal Code includes a discussion of major and minor variances, submittal requirements and requirements for a public hearing.

#### *Building, Grading and Demolition Permits*

A building permit is required prior to the construction, alteration, or renovation of buildings, including interior improvements. Grading permits are required for the excavation, fill or moving of dirt in excess of 50 cubic yards on any building site within the CLSP-2 area. Issuance of a demolition permit by the Lathrop Building Department is required prior to removal of existing buildings.

#### *Phasing*

The implementation program for the CLSP-2 Amendment is designed to allow development of the CLSP-2 Amendment Plan Area and construction of supporting public improvements to be phased. Phasing is a critical component of the CLSP-2 Amendment for the following reasons:

- It allows the backbone infrastructure necessary to support development to be constructed and financed in manageable increments on an as-needed basis.
- It assures the construction of backbone infrastructure will stay ahead of the development it serves while, at the same time, providing the flexibility to respond to changes in market conditions.
- It is more efficient because it minimizes the extent to which costly public improvements requiring on-going maintenance will be constructed only to sit unused until development occurs.
- It provides an opportunity to coordinate land secured infrastructure financing more closely with market absorption resulting in higher lien to value ratios.

#### ***The CLSP Phasing Program***

The CLSP-2 Amendment land uses, and the backbone infrastructure (refer to Chapter Six for details), are designed to be developed in two primary phases, with the possibility of multiple sub phases. The two primary phases of development are shown in Figure 8-1. Both development phases within the CLSP-2 Amendment Plan Area rely on infrastructure that was constructed to the south within the original CLSP Phase 1 Plan Area such as the underground utilities and pump stations. Reimbursements for the oversized utilities within the original CLSP Phase 1 Plan Area will be paid through the City of Lathrop’s Capital Facility Fee (CFF) Program.

The first phase of the CLSP-2 Amendment Plan Area is a single parcel adjacent to Dos Reis Road near the intersection of Golden Valley Parkway that is approximately 90 acres. The second phase is the remaining area within the CLSP-2 Amendment Plan Area. Development phasing may be further divided into sub-phases as market conditions and infrastructure financing options warrant. The timing of the ultimate buildout will depend upon market conditions.

### ***Infrastructure Administration***

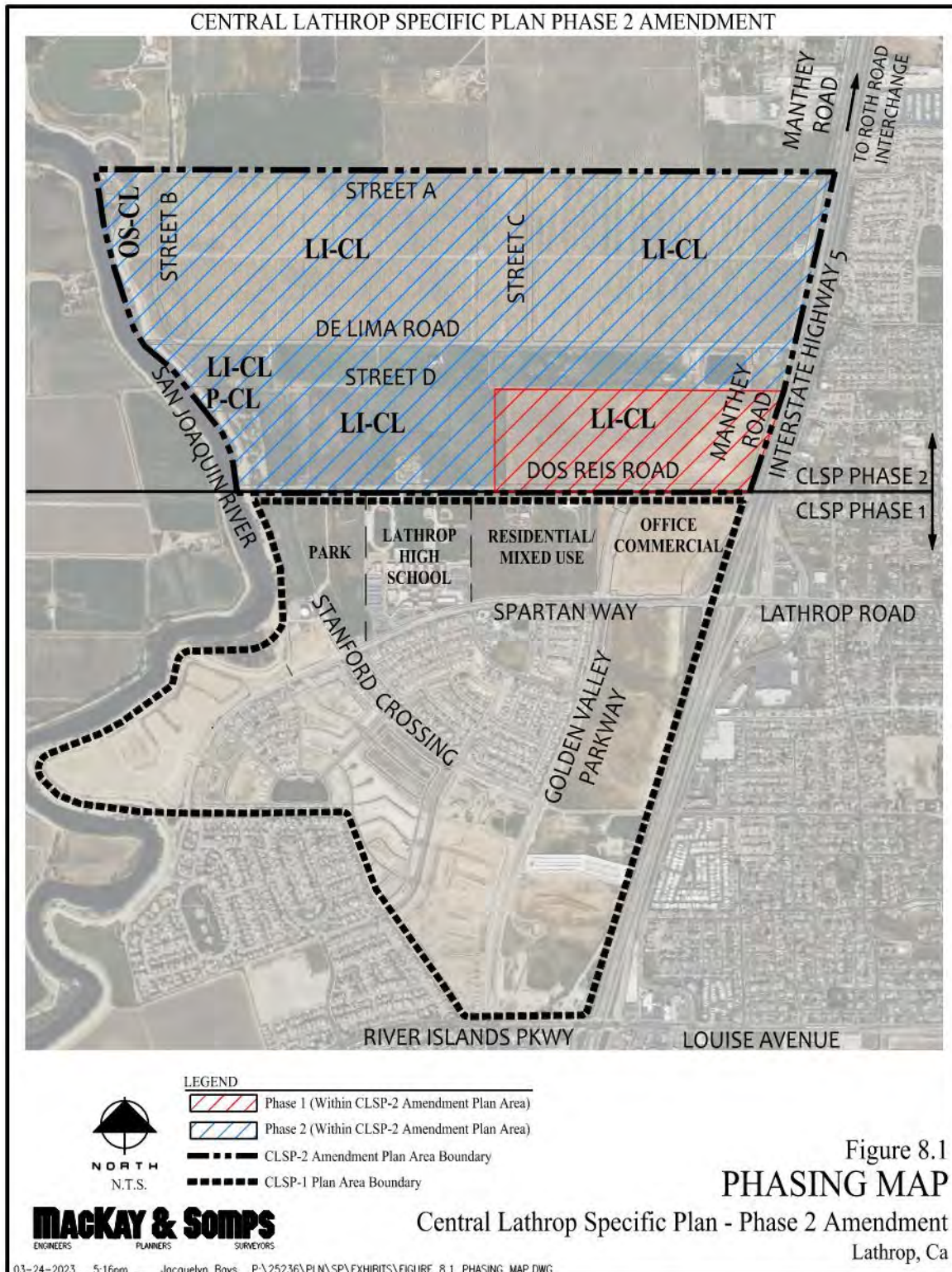
A developer may request either changes to the initial infrastructure phasing plan shown in Figure 8.1 or the establishment of sub phases. Changes to the initial infrastructure phasing plan or the establishment of sub phases are explicitly allowed without amendment to the CLSP-2 provided a developer demonstrates, to the satisfaction of the Public Works Director and Community Development Director, that infrastructure improvements necessary to adequately serve the phased development will be provided in a timely manner and will be sufficient if no further development occurs. For example:

- Roadways may be constructed at less than full width, or full length so long as the interim roadways are functional and safe and meet City improvement standards as determined by the Public Works Director or City Engineer;
- Certain segments of the water and/or recycled water systems may be deferred until needed to serve a particular phase or sub phase so long as adequate looping and pressure are provided as determined by the Public Works Director or City Engineer.;
- As it relates to stormwater runoff from individual developments, interim drainage solutions, such as temporary retention basins may be employed until off-site facilities (i.e., permanent detention pipes, pump stations, force mains and/or outfall structures) are

complete so long as a demonstration is made, to the satisfaction of the Public Works Director or City Engineer, showing that an interim alternate solution can be constructed, and that flooding will not occur. Projects shall comply with NPDES standards.

A developer may also request that changes be made to the backbone infrastructure required to serve the CLSP-2 (as such infrastructure requirements are set forth in Chapter Six) in order to respond to changing conditions of development or the availability of new technologies to address the infrastructure needs created by development. Such changes in the backbone infrastructure plan are explicitly allowed without amendment to the CLSP-2 provided a developer demonstrates, to the satisfaction of the Public Works Director and Community Development Director, that the proposed changes meet certain performance or level of service standards prescribed in the project development agreements or, where applicable performance or level of service standards are not prescribed, results in a level of service that is at least comparable to the level of service that would have been provided had the changes not been proposed.

Figure 8.1- Phasing Map



**Capital Improvement and Operation/  
Maintenance Responsibilities**

The responsibilities for capital improvement provisions and ongoing operation and maintenance of public facilities and services are another important element of the overall CLSP-2 implementation program. The City is to

operate and maintain all public facilities in the CLSP-2 with the exception of those operated and maintained by special service providers, such as the reclamation district maintaining the levees. Refer to Table 8.3 for a matrix identifying the types of capital improvements and who is responsible for the associated operation/maintenance.

*Table 8.1: Capital Improvement and Operation/Maintenance Responsibilities*

<b>Capital Improvement</b>	<b>Capital Improvement Responsibility</b>	<b>Operation and Maintenance Responsibility</b>
On-site streets, alleys, and shared driveways (within CLSP-2 boundary)	Developer Individual Property Owner	City for public streets Owners Association for private streets
Off-site streets (outside of the CLSP-2 boundary)	Developer (fair share as identified in Capital Facility Fee program)	City or other public agency
Potable Water Distribution Facilities	Developer Individual Property Owner	City
Potable Surface Water Supply	South San Joaquin Irrigation District City	City
Potable Surface Water Treatment and Transmission Facilities	South San Joaquin Irrigation District City	City
Potable Groundwater Supply	Developer City	City
Potable Groundwater Treatment Facilities	Developer City	City
Wastewater Collection Facilities, including pump station(s)	Developer Individual Property Owner	City
Wastewater Treatment Facilities	City	City
Recycled Water Distribution Facilities	Developer City	City
Storm Drainage (includes all facilities including pipes, pumps, and basins)	Developer Individual Property Owner	City
Dry Utilities (electric, gas, communications)	Utility Companies Developer Individual Property Owner	Utility Companies
Public Parks and Open Space, including trails and public rights-of-way landscaping.	City[1] Developer Individual Property Owner	City or other Public entity
Fire Station and Equipment	Lathrop-Manteca Fire District	Lathrop-Manteca Fire District
Police Station and Equipment	City	City
Levee and related easements	Reclamation District 17	Reclamation District 17

[1] The potential trail along the levee adjacent open space shown on Figure 3.10 will be funded by a capital improvement fee program and constructed by the City.

**Interpretation of Specific Plan**

Amendments to the Specific Plan, including the Design Guidelines, may be proposed by a developer or property owner or initiated by the City, and shall be processed in accordance with the provisions described in this chapter.

Two of the primary objectives of the Central Lathrop Specific Plan-2 Amendment are:

- to maintain flexibility and the ability of the City and property owners to react quickly to changes in the marketplace, and

- to ensure, to the extent reasonably possible, the ultimate development of the CLSP-2 Amendment at the overall level of intensity of land use assumed in the CLSP-2 Amendment as approved.

The latter objective is intended to ensure the recovery of infrastructure investments made in reliance on such assumed intensities and densities. To achieve these two objectives, the City intends that the CLSP-2 Amendment be interpreted and applied with as much flexibility and creativity as is permissible within the reasonable scope of the language of the CLSP-2 Amendment. Where these two objectives can be achieved through the reasonable interpretation of the CLSP-2 Amendment, rather than through formal amendment, such interpretations is desirable and favorable over amendment. Accordingly, formal amendments shall not be necessary where a specific development proposal is in “substantial conformity” with the CLSP-2 Amendment.

The Community Development Director may determine that a specific development proposal is in substantial conformity with the CLSP-2 Amendment, where, considering all aspects of the proposal, the he/she determines that the proposal will further the objectives and policies of the CLSP-2 Amendment and not obstruct their attainment. Such as proposal need not be in perfect conformity with each and very provision of the CLSP-2 Amendment policy, provided it is consistent with the intent and basic objectives, policies, general land uses, and programs specified in the CLSP-2 Amendment. Where the Community Development Director determines that a particular development proposal is not in substantial conformity with the CLSP-2 Amendment, the land owner making the proposal has the right to appeal that determination to the Planning Commission and, if necessary, to the City Council.

The following general categories of proposals shall necessarily be determined to be in substantial conformity with the CLSP-2 Amendment, being:

- those proposals by which a developer or land owner, in response to changing conditions of development or the availability of new technologies, proposes to modify the initially-approved phasing plan provided by a developer demonstrates, to the satisfaction of the Public Works Director and the Community Development Director, that the infrastructure improvements necessary to adequately serve the developing portion of the site will be provided in a timely manner. Such proposals shall be deemed to be in substantial conformity with the CLSP-2 Amendment.
- those by which a developer or land owner seeks to modify trail alignments, fence locations or types, or similar CLSP-2 Amendment features in common areas such as parks, trails, and other public amenities. Such proposal shall be deemed to be in substantial conformity with the CLSP-2 Amendment unless the proposal is fundamentally inconsistent with the development patterns envisioned in the CLSP-2 Amendment in terms of the general locations of public amenities, trail locations and alignments, and other private land uses.
- those by which a developer or land owner seeks to add new architectural styles or planning concepts to the Design Guidelines. Such proposal might include, but not necessarily be limited to, changes in permitted building materials or detailing, additional design styles, changes to plant palettes, and different entry concepts. Proposal for such new architectural styles or planning concepts shall be accompanied by a written description of the style, a schematic drawing, and an illustration of architectural or planning elements that

typify the proposed style or concept. Such proposal shall be deemed to be in substantial conformity with the CLSP-2 Amendment unless the new architectural style or planning concept is fundamentally inconsistent with the aesthetic vision embodied in the original Design Guidelines.

***Specific Plan Consistency and Enforcement***

Any violation of the requirements of the CLSP-2 Amendment as adopted by the City Council shall be enforced in the same manner as a violation of the Municipal Code.

# Chapter Nine: Financing

## *Introduction*

Development in the CLSP-2 Amendment Plan Area is to be constructed and maintained through a combination of financing mechanisms. This chapter describes a preliminary Financing Plan and identifies various financing options that may be utilized to implement the CLSP-2 Amendment.

## *Financing Plan*

The funding mechanisms for improvements within CLSP-2 Amendment Plan Area may include development impact fees and fee credits, private financing and reimbursements, Mello-Roos community facilities and assessment districts, and other public and private strategies.

Once City staff, the Developer(s), and other public entities agree upon specific improvements and facilities that need to be constructed in the CLSP-2 Amendment Plan Area, appropriate funding mechanisms will be identified for each individual improvement and facility.

The following principles shall govern the implementation of the Financing Plan unless otherwise stated in an applicable Development Agreement:

Principle 1 — New development in the CLSP-2 Plan Area shall be required to pay its own way. There shall be no cost to the City’s existing residents for facilities or services necessary to serve the CLSP-2 Amendment Plan Area. All costs of municipal services related to the CLSP-2, be they on-site or off-site, shall be borne by the individual development.

Principle 2 — The City will consider the establishment of appropriate public financing mechanisms to help finance the initial development and ongoing maintenance of

backbone infrastructure, community facilities, and public services in the CLSP-2 Amendment Plan Area. These mechanisms include but are not limited to:

- Community Facilities Districts, Assessment Districts, Benefit Districts, Infrastructure Financing Districts, and Joint Powers Arrangements for capital construction.
- Lighting and Landscape Districts, Community Facilities Districts, other maintenance assessment districts, and/or user charges for ongoing operation and maintenance purposes.

Principle 3 — The City may enter into a Joint Powers Agreement with the County, State, or any other appropriate governmental agencies that facilitates the financing of infrastructure improvements.

Principle 4 — The City shall establish appropriate reimbursement mechanisms in the event that the CLSP-2 Amendment Plan Area is required to pay for oversizing of backbone infrastructure or public facilities beyond its fair share to the benefit of existing or other new development in the City.

Principle 5 — The City shall consider implementing funding and reimbursement mechanisms to help facilitate the fair allocation of backbone infrastructure and public facilities construction costs among the various landowners in the CLSP-2 Amendment Plan Area.

Principle 6 — The City will reasonably assist developers in the CLSP-2 Amendment Plan Area in obtaining public financing for construction of both on- and off- site public improvements.

Principle 7 — The City may help fund public improvements such as the levee adjacent open

space benefiting the entire population of the City. These improvements may be supplemented by including them in the Capital Improvement Fee Program.

### ***Updates of Financing Plan***

Updates of the Financing Plan shall occur as significant new information becomes available regarding backbone infrastructure and public facilities cost estimates, land uses, and funding strategies. An administration-and-monitoring process shall be established to provide for implementation and updating of the Financing Plan.

### ***Financing/Fiscal Measures***

Various financing measures could be utilized to implement both the development and the operation and maintenance of backbone infrastructure, public facilities, and community services.

Before the recordation of any tentative tract map within the boundaries of the CLSP-2, appropriate financing mechanisms will be established to ensure adequate funding of capital improvements is available at the time when the improvements need to be constructed. Payment schedules and sources of funds for the repayment of any proposed debt will be identified for each such mechanism.

Ongoing special tax and/or assessment revenues are to be earmarked to fund operations and services in the CLSP-2 Amendment Plan Area. The level of public facilities and services in the CLSP-2 Amendment Plan Area are to be of the same or higher quality as presently being provided elsewhere in the City. Such ongoing operational concerns would include police and fire services, park and road maintenance, and other municipal services generally provided in a city.

The various mechanisms that may be used to implement the development and the operation and maintenance of backbone infrastructure, public

facilities, and community services include, but are not limited to:

### ***Infrastructure Financing Districts***

An Infrastructure Financing District (IFD) allocates a portion of new property taxes to pay for capital improvements. Essentially, when tax increment financing is utilized, subsequent increases in tax revenues are set aside for the use of the financing district. A requirement of an IFD is that it is used only in areas that are substantially underdeveloped. Formation of an IFD and issuance of bonds is contingent upon the two-thirds approval of the registered voters or property owners in the area.

Facilities eligible per Government Code section 53395.3 for financing through an IFD include the following facilities:

- Highway interchanges, bridges, arterial streets, parking facilities and transit facilities
- Sewage treatment and water reclamation plants and interceptor lines
- Water collection and treatment facilities for urban use
- Flood control structures
- Child care facilities
- Libraries
- Parks, recreational facilities and open space
- Solid waste transfer and disposal facilities.



### *Capital Facilities Fees*

A range of Capital Facilities Fees (CFF) has been established in the City of Lathrop. for funding of sewer, drainage, environmental mitigation, transportation, culture and leisure, and municipal service facilities. Some of the backbone infrastructure and public facility improvements that need to be constructed in the CLSP-2 area fall into the CFF category.

### *Special Taxes*

Special taxes typically are generated through formation of Mello Roos Community Facilities Districts or other similar mechanisms. Formation of Mello Roos Districts require approval by two-thirds of the property owners or the electorate within the proposed district boundary if there are twelve or more registered resident voters. The special taxes generated from Mello Roos Districts may be used to pay for purchase, construction, expansion, improvement, operations and maintenance, or rehabilitation of real property with a useful life of five years or more. Alternatively, the special taxes can be used to fund the debt service for bonds that have been issued for financing of such improvements.

### *Special Assessments*

Most of the special assessment acts provide for the issuance of bonds. These bonds generally are secured by the property in the district, and the bonded indebtedness is repaid with the money generated through the assessments. Some of the most common types of special assessments are outlined in the Improvement Act of 1911, the Municipal Improvement Act of 1913, and the Improvement Bond Act of 1915.

### *Landscape and Lighting Districts*

The most commonly known and widely used special assessment is a Landscape and Lighting District, enabled by the Landscape and Lighting Act of 1972 (Streets and Highways Code Section 22500 *et seq.*). A Landscape and Lighting District may be formed to assist in funding of the ongoing

operation and maintenance of street rights of ways and other public improvements.

### *General Obligation Bonds*

In 1986, with the passage of Proposition 46, cities and counties were empowered with the right to issue general obligation bonds. General obligation bonds, which are repaid with revenues from increased property taxes, may be used to finance land acquisition and construction of capital improvements. A general obligation bond requires a two-thirds voter approval.

### *Revenue Bonds*

Cities, counties, and some special districts can issue bonds to finance facilities for revenue-producing enterprises such as water and sewer improvements, golf courses, harbors, etc. The bonds are repaid solely from the revenues generated by the financed facility. Revenue bond issuance may require voter authorization.

### *Plan Area Development Impact Fees*

Generally paid at the time of building permit, development impact fees may be charged for construction of facilities benefiting the affected area. A nexus study is required to justify the imposition of the plan area development impact fees. The City can adopt the fees through approval of an ordinance and/or resolution.

### *Third Party Assistance*

Some costs may be eligible for outside financing assistance. For example, schools and libraries may be partially financed by state contributions.

### *Private Developer Financing*

In addition to the use of public financing mechanisms, private developers in the CLSP will be required to pay for a significant portion of the backbone infrastructure and public facilities development costs.

### *Financing of Ongoing Operation and Maintenance*

Financing of ongoing operation and maintenance of the public facilities and services is another important element of the overall financing program for the CLSP. The City is to operate and maintain all public facilities in the CLSP with the exception of those operated and maintained by special service providers. For example, the reclamation district maintains levees.

A Landscape and Lighting District or a Mello Roos CFD Services District may be formed to assist in funding of the ongoing operation and maintenance of street rights of ways and other components.

A detailed operation and maintenance budget is to be developed for each public facility and service prior to the recordation of the first tentative tract map in the CLSP-2. The budget will identify the appropriate sources of funds and the agencies responsible for maintenance and operation of the facilities and services.

The City intends to utilize a variety of financing measures for operation and maintenance. These measures include but are not limited to:

#### *Property Taxes*

The City receives a portion of the 1-percent property tax paid by all residential and commercial property owners within the City limits. As the CLSP develops, the incremental property tax is to be used to pay for the services required by new residents. In addition, existing special districts, like the Lathrop-Manteca Fire District, that also receive a direct allocation of the 1-percent property tax, will use the incremental taxes to provide required services. Property taxes are likely to be the primary funding source for operation and maintenance of the special districts.

#### *Sales Taxes*

Retail establishments in the CLSP-2 Amendment Plan Area generate sales tax revenues for the City. These taxes, of which the City receives a large portion, are to be used by the City to pay for services provided to its new and existing residents.

#### *User Fees*

Primarily charged by utility providers, user fees may be charged to pay for the cost of services. For example, the City, through its Public Works Department, will determine and assess a user fee for water and sewer services in the CLSP-2 Amendment Plan Area.

#### *Regional Transportation Fees*

In 1990, San Joaquin voters passed the Measure K Ordinance and Expenditure Plan (Measure K), which establishes and implements a 1/2-cent sales tax for transportation purposes up to year 2011. Measure K provides for the implementation of the San Joaquin Expenditure Plan, resulting in countywide transportation facility and service improvements including highway, public transit, railroad grade crossing, and passenger rail improvements.

In addition, the San Joaquin Council Governments, the regional planning agency for San Joaquin County, established a countywide regional transportation impact fee (RTIF). Mitigation Fees

Payment of fees may be required to mitigate the impact(s) that the development of the CLSP-2 has on the environment and existing development.

#### *Special Assessments*

Special assessments may be charged to the CLSP-2 Amendment users to pay for operation and maintenance of public infrastructure. Special assessments cannot exceed the cost of providing services and are limited to special benefit properties subject to the assessment received. The most commonly known and widely used special assessment is a Landscape and Lighting District, enabled by the Landscape and Lighting Act of 1972 (Streets and Highways Code Section 22500 et seq.).

#### *Special Taxes*

Mello Roos Community Facilities Districts (CFD) also allow for collection of special taxes to fund

operations and maintenance of facilities built or financed with CFD bond proceeds. The operations and maintenance costs funded by the special taxes have to be new costs associated with the new development. The special taxes cannot be used to replace general fund revenues.

#### *Dedications and Exactions*

Under the Subdivision Map Act, developers may be required to dedicate land or make cash payments for public facilities required or affected by their project (e.g., road right-of-way fronting individual properties). Dedications are typically made for road and utility rights-of-way, park sites, and land for other public facilities. Cash contributions are made for other public facilities that are directly required by their projects (e.g., payments for a traffic signal).

#### *Development Agreements*

The City and developers in the CLSP-2 may enter into development agreements. These agreements outline responsibilities for financing and construction of backbone infrastructure and public facilities, as well as for funding of ongoing operations and maintenance of the facilities and services in the CLSP-2 Amendment Plan Area. The City may design and build the required infrastructure and public facilities and fund the construction through collection of development impact fees, issuance of bonds, or any other appropriate financing mechanism. If a developer is required to design and build the improvements, fee credits and acquisition agreements with the City or other public agencies may be utilized along with issuance of bonds, private financing, and other funding mechanisms.

#### *Federal and State Grants*

The City has in the past received funding for public facilities from other levels of government, including the State and federal government. Historically, these funding sources were more available; however, several sources of grant funding still remain and several new programs have

recently been established. Further investigation of potential funding sources is appropriate. However, since the availability of funding from these sources is unknown, it has not been assumed that these sources would be available for development financing.

An example would be the EIFD for funding 200-year flood control improvements for the Fix in Place Project.

#### ***Reimbursement Agreements***

Each benefiting property in the CLSP-2 Amendment Plan Area is required to pay its fair share of the backbone infrastructure and public facilities construction, maintenance, and land acquisition costs. To the extent a developer or landowner may be required to dedicate land for public purpose; fund the acquisition, construction, or operation and maintenance, or otherwise contribute to the provision of public facilities and/or services (including the oversizing of such facilities); finance the preparation of this Specific Plan amendment and the processing of the related entitlements including annexation; or incur costs related to the legal defense of such entitlements in excess of his or her fair share to the benefit of other properties, a reimbursement mechanism shall be executed to ensure a fair-share cost allocation among all properties. The reimbursement mechanism can be in the form of a benefit or another type of a financing district, a private or public reimbursement agreement, and/or any other appropriate arrangement that can guarantee a fair allocation of costs.

A fair share cost allocation shall be implemented through the Financing Plan for on- and off-site improvements, based on net costs after accounting for any Federal, State, regional, or other public funding that may have been obtained.





# Environmental Noise Assessment

## Ashley Lathrop Project

City of Lathrop, California

May 15, 2023

Project #220908

Prepared for:



**Hodgdon Group Realty, Inc.**

1461 E. Cooley Drive, Suite 230  
Colton, California 92324

Prepared by:

**Saxelby Acoustics LLC**

**Luke Saxelby, INCE Bd. Cert.**

**Principal Consultant**

**Board Certified, Institute of Noise Control Engineering (INCE)**



(916) 760-8821  
www.SaxNoise.com | Luke@SaxNoise.com  
915 Highland Pointe Drive, Suite 250  
Roseville, CA 95678

## INTRODUCTION

The Ashley Lathrop Project is located in the City of Lathrop, California. The project will consist of a 1,486,607 s.f. multi-use building that will contain 24,000 s.f. of office space, 110,260 s.f. of retail space, and a 1,352,347 s.f. warehouse space containing a parking lot with 942 stalls for automobiles, 1,104 stalls for trucks, and 237 loading docks. The primary noise source associated with operation of the project is truck and automobile circulation and loading docks. Single family residential land uses are located to the north, west, and south of the project, Lathrop High School is located to the west of the project, and Interstate 5 (I-5) is located directly east of the project. The project is located northwest of the intersection of South Manthey Road and Dos Reis Road. The purpose of this analysis is to predict the noise generation associated with these uses and to achieve compliance with the applicable City of Lathrop noise level standards.

**Figure 1** shows the project site plan. **Figure 2** shows an aerial photo of the project site and noise measurement locations.

## ENVIRONMENTAL SETTING

### BACKGROUND INFORMATION ON NOISE

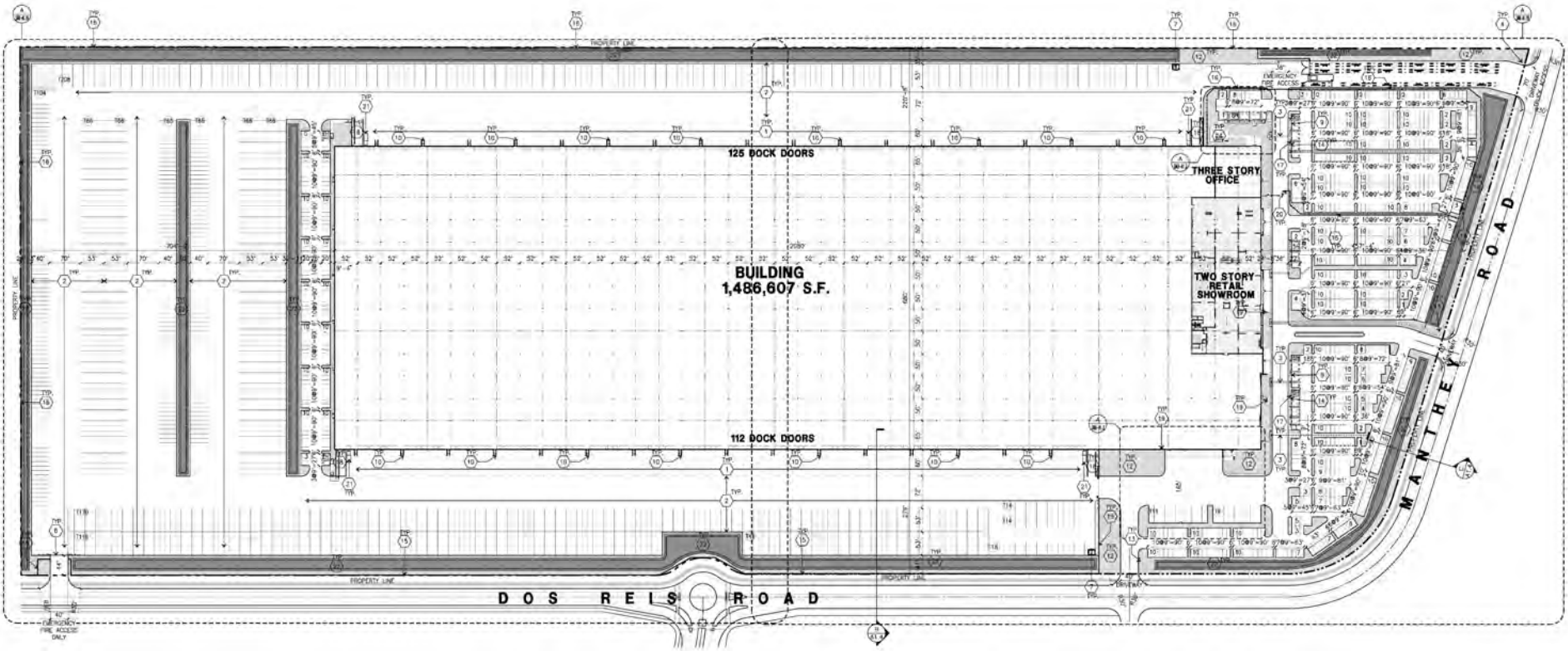
#### *Fundamentals of Acoustics*

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

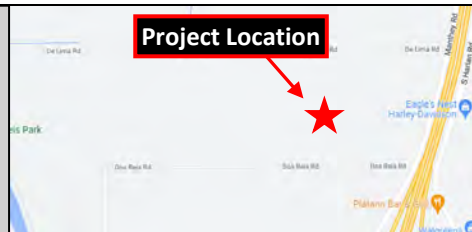


## Ashley Lathrop Project

City of Lathrop, California

Figure 1

Project Site Plan



# Ashley Lathrop Project



City of Lathrop, California

Figure 2

Noise Measurement Sites



### Legend

-  Project Site
-  Noise Measurement Site - Long Term



Projection: UTM Zone 10 / WGS84 / meters  
Rev. Date: 10/13/2022





The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level ( $L_{eq}$ ), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptor,  $L_{dn}$ , and shows very good correlation with community response to noise.

The day/night average level ( $L_{dn}$ ) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because  $L_{dn}$  represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

**Table 1** lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

**TABLE 1: TYPICAL NOISE LEVELS**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

### ***Effects of Noise on People***

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

## EXISTING AMBIENT NOISE LEVELS

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at two locations near the project site. Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted  $L_{max}$ , represents the highest noise level measured. The average value, denoted  $L_{eq}$ , represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted  $L_{50}$ , represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL 200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

**Table 2: Summary of Existing Background Noise Measurement Data**

Site	Date	$L_{dn}$	Daytime $L_{eq}$	Daytime $L_{50}$	Daytime $L_{max}$	Nighttime $L_{eq}$	Nighttime $L_{50}$	Nighttime $L_{max}$
LT-1: 660 Ft West of CL of Interstate 5	10/7/22	68	59	58	74	62	61	74
	10/8/22	66	59	57	72	60	59	71
	10/9/22	65	58	57	72	59	58	69
	<b>Average</b>	<b>66</b>	<b>59</b>	<b>57</b>	<b>73</b>	<b>60</b>	<b>59</b>	<b>71</b>
LT-2: 20 ft North of CL of Dos Reis Road	10/7/22	60	59	45	80	50	45	70
	10/8/22	59	56	42	80	52	45	67
	10/9/22	58	57	42	81	49	43	66
	10/10/22	59	55	43	80	52	47	72
	<b>Average</b>	<b>59</b>	<b>57</b>	<b>43</b>	<b>80</b>	<b>51</b>	<b>45</b>	<b>69</b>

**Notes:**

- All values shown in dBA
- Daytime hours: 7:00 a.m. to 10:00 p.m.
- Nighttime Hours: 10:00 p.m. to 7:00 a.m.
- Source: Saxelby Acoustics 2022

## REGULATORY CONTEXT

### FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

### STATE

There are no state regulations related to noise that apply to the Proposed Project.

### LOCAL

#### *City of Lathrop General Plan*

#### **N-1 POLICIES**

N-1.3 Indoor Residential Noise Level. Ensure that new development does not result in indoor noise levels exceeding 45 dBA  $L_{dn}$  for residential uses by requiring the implementation of construction techniques and noise reduction measures for all new residential development.

N-1.4 Acoustical Studies. For projects that are required to prepare an acoustical study, the following stationary and transportation noise source criteria shall be used to determine the significance of those impacts.

A. Stationary and Non-Transportation Noise Sources – A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

B. Transportation Noise Sources -

1. Where existing traffic noise levels are less than 60 dB  $L_{dn}$  at the outdoor activity areas of noise-sensitive uses, a +5 dB  $L_{dn}$  increase in roadway noise levels will be considered significant;
2. Where existing traffic noise levels range between 60 and 65 dB  $L_{dn}$  at the outdoor activity areas of noise-sensitive uses, a +3 dB  $L_{dn}$  increase in roadway noise levels will be considered significant; and
3. Where existing traffic noise levels are greater than 65 dB  $L_{dn}$  at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB  $L_{dn}$  increase in roadway noise levels will be considered significant.

N-1.15 Construction Noise. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified in Table N-3, or, if the criteria cannot be met, to the maximum extent feasible complying with Title 15 of the LMC (Building and Construction) and use best practices. Construction activities outside of the permitted construction hours identified in the LMC may be approved on a case by case basis by the Building Official.

**TABLE 3: PERFORMANCE STANDARDS FOR STATIONARY NOISE SOURCES, INCLUDING AFFECTED PROJECTS <sup>1,2,3,4</sup> (N-3)**

Noise Level Descriptor	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
Hourly Leq, dB	55	45

1. Each of the noise levels specified above should be lowered by 5 dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered to be particularly annoying and are a primary source of noise complaints.
2. No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.
3. Stationary noise sources which are typically of concern include, but are not limited to, the following:
 

a) HVAC Systems	b) Cooling Towers/Evaporative Condensers
c) Pump Stations	d) Lift Stations
e) Emergency	f) Boilers
g) Steam Valves	h) Steam Turbines
i) Generators	j) Fans
k) Air Compressors	l) Heavy Equipment
m) Conveyor Systems	n) Transformers
o) Pile Drives	p) Grinder
q) Drill Rigs	r) Gas or Diesel Motors
s) Welders	t) Cutting Equipment
u) Outdoor Speaker	v) Blowers
4. The types of uses which may typically produce the noise sources described above include but are not limited to: industrial facilities, pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

## EVALUATION OF PROJECT OPERATIONAL NOISE ON EXISTING SENSITIVE RECEPTORS

### MODELING METHODOLOGY

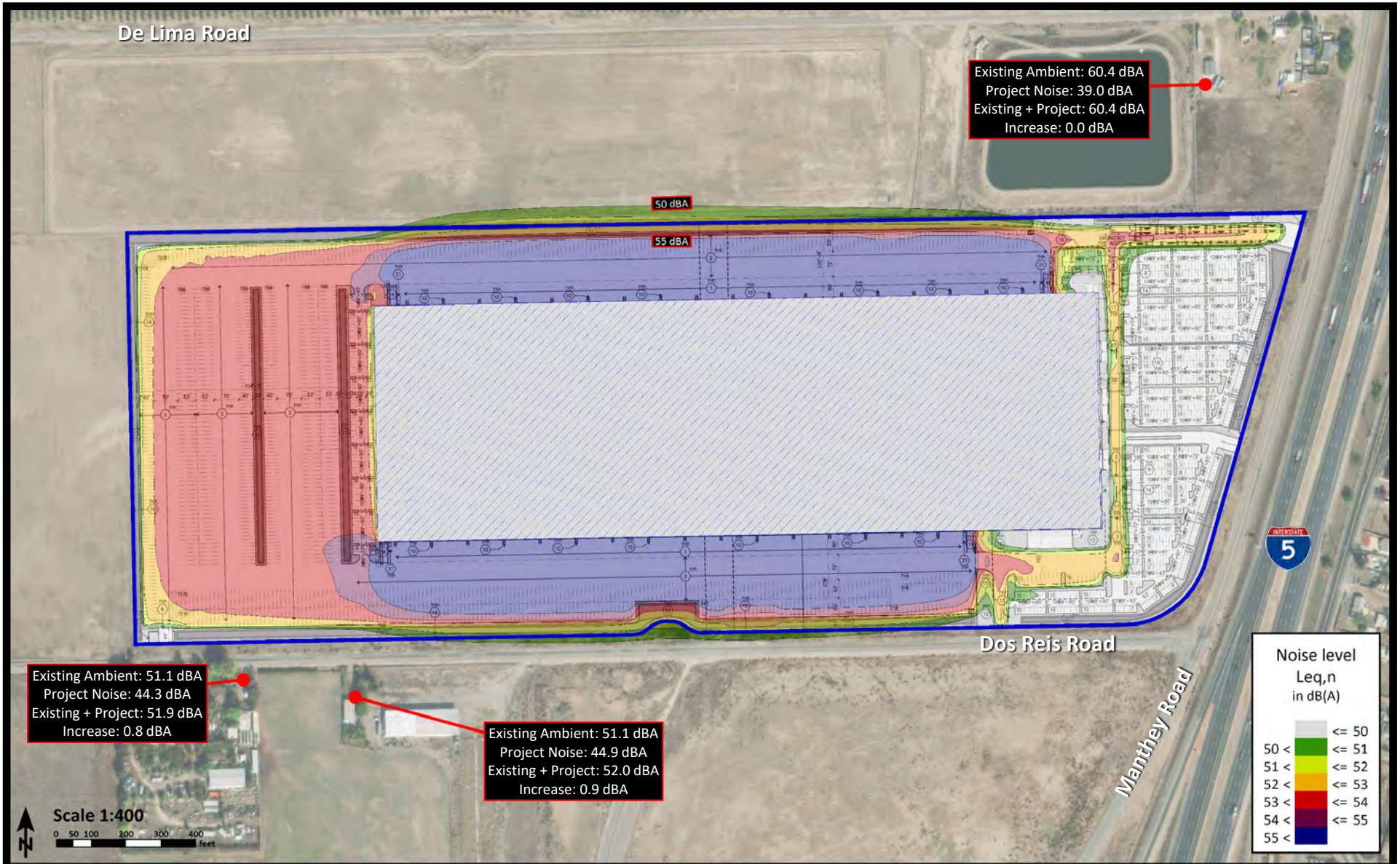
The primary noise source on the proposed project site would be operation noise from the loading docks and vehicle circulation on site. The following is a list of assumptions used for the noise modeling. The data used is based upon Saxelby Acoustics data from similar operations.

**On-Site Circulation:** The proposed project is projected to generate 2,798 daily automobile trips with 203 trips in the morning peak hour and 680 daily heavy truck trips with 95 trips in the morning peak hour (TJKM). Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. It was assumed that the morning peak hour could occur during nighttime (10:00 p.m. to 7:00 a.m.) hours. Saxelby Acoustics data.

**Loading Docks:** Saxelby Acoustics conducted noise level measurements at the existing Ashley Facility located at 18290 S Harlan Road in Lathrop, California. Measurements were conducted of the loading dock area during a weekday peak hour of use. Activities during the peak hour include truck arrival/departures, truck idling, truck backing, air brake release, passenger vehicle trips to and from docks, and

operation of forklifts. Loading dock activity was found to generate continuous average noise levels of approximately 57 dBA  $L_{eq}$  at the edge of the truck maneuvering lanes, approximately 120 feet from the façade of the warehouse building at the center of the loading area. Loading dock activity was assumed to operate at this level continuously during nighttime (10:00 p.m. to 7:00 a.m.) hours. Saxelby Acoustics data.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed equipment, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. **Figure 3** shows the noise level contours resulting from operation of the project.



**Ashley Lathrop Warehouse**  
City of Lathrop, California

Figure 3  
Project-Generated Noise Levels (dBA  $L_{eq}$ )

- Legend**
- Project Site
  - ▨ Project Building
  - Noise Level



## RESULTS AND ANALYSIS

The City of Lathrop General Plan limits stationary noise increases to 3 dBA, or the **Table 3** standards, whichever is greater. The nighttime (10:00 p.m. to 7:00 a.m.) average noise level standard is 45 dBA  $L_{eq}$ , as shown in **Table 3**. **Table 2** indicates that the average ambient noise level during nighttime hours at the closest sensitive receptors to the southwest is 51 dBA  $L_{eq}$ . At the sensitive receptors to the southwest, a project-generated noise level of 51 dBA  $L_{eq}$  would result in a total noise level of 54 dBA  $L_{eq}$ , resulting in a 3 dBA increase. Therefore, the nighttime noise level standard applicable to the proposed project is 51 dBA  $L_{eq}$ .

As shown in **Figure 3**, the proposed project is predicted to generate noise levels of up to 45 dBA  $L_{eq}$  at the nearest residences to the southwest and 39 dBA  $L_{eq}$  at the residences to the northeast, resulting in a maximum increase of 0.9 dBA at nearby residences. This complies with the adjusted nighttime noise level standard of 51 dBA  $L_{eq}$  and limit of a 3 dBA increase. Therefore, no additional noise control measures are required to achieve compliance with the City of Lathrop noise level standards.

## CONCLUSIONS

The proposed project is predicted to comply with the City of Lathrop noise level standards with no additional noise control measures.



## REFERENCES

- American National Standards Institute. (1998). *[Standard] ANSI S1.43-1997 (R2007): Specifications for integrating-averaging sound level meters*. New York: Acoustical Society of America.
- American Standard Testing Methods, *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels, American Standard Testing Methods (ASTM) E1014-08*, 2008.
- ASTM E1014-12. *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels*. ASTM International. West Conshohocken, PA. 2012.
- ASTM E1780-12. *Standard Guide for Measuring Outdoor Sound Received from a Nearby Fixed Source*. ASTM International. West Conshohocken, PA. 2012.
- Barry, T M. (1978). *FHWA highway traffic noise prediction model (FHWA-RD-77-108)*. Washington, DC: U.S. Department of transportation, Federal highway administration, Office of research, Office of environmental policy.
- California Department of Transportation (Caltrans), *Technical Noise Supplement, Traffic Noise Analysis Protocol*, September 2013.
- California Department of Transportation (Caltrans), *Traffic Noise Analysis Protocol*, May 2011.
- Egan, M. D. (1988). *Architectural acoustics*. United States of America: McGraw-Hill Book Company.
- Federal Highway Administration. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01. January 2006.
- Hanson, Carl E. (Carl Elmer). (2006). *Transit noise and vibration impact assessment*. Washington, DC: U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment.
- International Electrotechnical Commission. Technical committee 29: Electroacoustics. International Organization of Legal Metrology. (2013). *Electroacoustics: Sound level meters*.
- International Organization for Standardization. (1996). *Acoustic - ISO 9613-2: Attenuation of sound during propagation outdoors. Part 2: General methods of calculation*. Geneva: I.S.O.
- Miller, L. N., Bolt, Beranek, & and Newman, Inc. (1981). *Noise control for buildings and manufacturing plants*. Cambridge, MA: Bolt, Beranek and Newman, Inc.
- SoundPLAN. SoundPLAN GmbH. Backnang, Germany. <http://www.soundplan.eu/english/>

## Appendix A: Acoustical Terminology

<b>Acoustics</b>	The science of sound.
<b>Ambient Noise</b>	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
<b>ASTC</b>	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Attenuation</b>	The reduction of an acoustic signal.
<b>A-Weighting</b>	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
<b>Decibel or dB</b>	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
<b>CNEL</b>	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
<b>DNL</b>	See definition of Ldn.
<b>IIC</b>	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Frequency</b>	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
<b>Ldn</b>	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
<b>Leq</b>	Equivalent or energy-averaged sound level.
<b>Lmax</b>	The highest root-mean-square (RMS) sound level measured over a given period of time.
<b>L(n)</b>	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
<b>Loudness</b>	A subjective term for the sensation of the magnitude of sound.
<b>NIC</b>	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
<b>NNIC</b>	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
<b>Noise</b>	Unwanted sound.
<b>NRC</b>	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
<b>RT60</b>	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
<b>Sabin</b>	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
<b>SEL</b>	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
<b>SPC</b>	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
<b>STC</b>	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Threshold of Hearing</b>	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
<b>Threshold of Pain</b>	Approximately 120 dB above the threshold of hearing.
<b>Impulsive</b>	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
<b>Simple Tone</b>	Any sound which can be judged as audible as a single pitch or set of single pitches.

## Appendix B: Continuous Ambient Noise Measurement Results



**Appendix B1a: Continuous Noise Monitoring Results**

Site: LT-1

Project: Ashley Lathrop Project

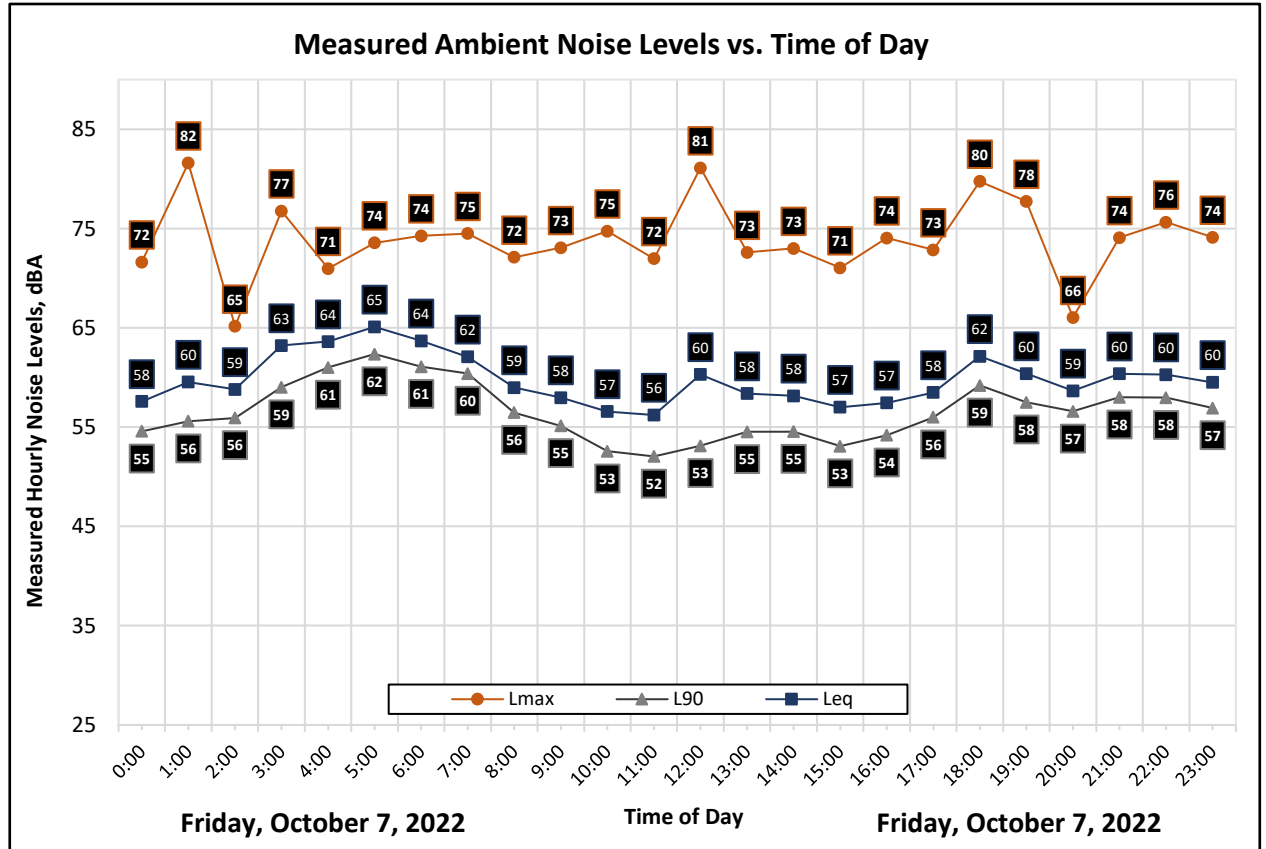
Location: Northeast Residential Receivers

Coordinates: (37.835048, -121.289223)

Meter: LDL 820-1

Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Friday, October 7, 2022	0:00	58	72	57	55
Friday, October 7, 2022	1:00	60	82	59	56
Friday, October 7, 2022	2:00	59	65	58	56
Friday, October 7, 2022	3:00	63	77	63	59
Friday, October 7, 2022	4:00	64	71	63	61
Friday, October 7, 2022	5:00	65	74	65	62
Friday, October 7, 2022	6:00	64	74	63	61
Friday, October 7, 2022	7:00	62	75	62	60
Friday, October 7, 2022	8:00	59	72	59	56
Friday, October 7, 2022	9:00	58	73	57	55
Friday, October 7, 2022	10:00	57	75	56	53
Friday, October 7, 2022	11:00	56	72	55	52
Friday, October 7, 2022	12:00	60	81	57	53
Friday, October 7, 2022	13:00	58	73	58	55
Friday, October 7, 2022	14:00	58	73	58	55
Friday, October 7, 2022	15:00	57	71	56	53
Friday, October 7, 2022	16:00	57	74	57	54
Friday, October 7, 2022	17:00	58	73	58	56
Friday, October 7, 2022	18:00	62	80	62	59
Friday, October 7, 2022	19:00	60	78	60	58
Friday, October 7, 2022	20:00	59	66	58	57
Friday, October 7, 2022	21:00	60	74	60	58
Friday, October 7, 2022	22:00	60	76	60	58
Friday, October 7, 2022	23:00	60	74	59	57



Statistics	Leq	Lmax	L50	L90
Day Average	59	74	58	56
Night Average	62	74	61	58
Day Low	56	66	55	52
Day High	62	81	62	60
Night Low	58	65	57	55
Night High	65	82	65	62
Ldn	68	Day %		49
CNEL	68	Night %		51



**Appendix B1b: Continuous Noise Monitoring Results**

Site: LT-1

Project: Ashley Lathrop Project

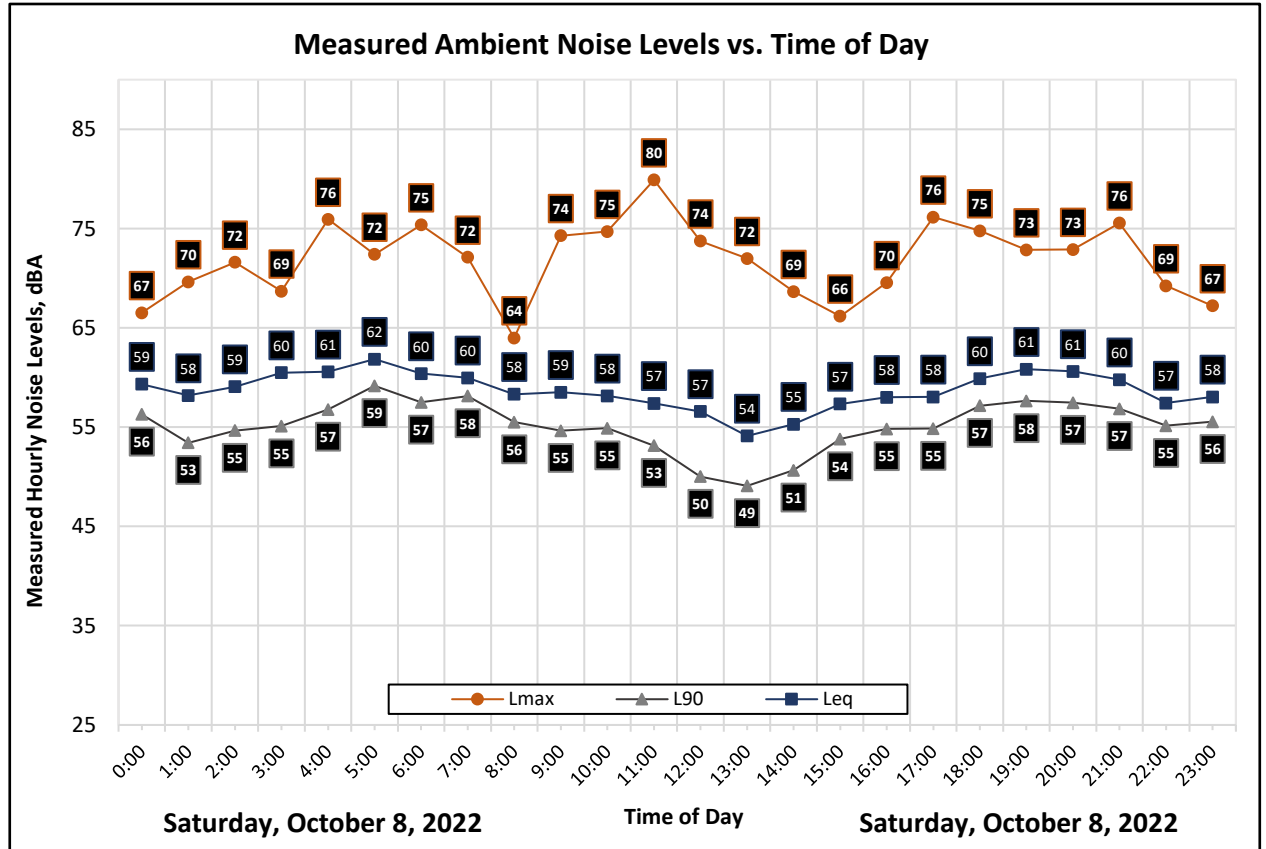
Meter: LDL 820-1

Location: Northeast Residential Receivers

Calibrator: CAL200

Coordinates: (37.835048, -121.289223)

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Saturday, October 8, 2022	0:00	59	67	59	56
Saturday, October 8, 2022	1:00	58	70	57	53
Saturday, October 8, 2022	2:00	59	72	58	55
Saturday, October 8, 2022	3:00	60	69	59	55
Saturday, October 8, 2022	4:00	61	76	60	57
Saturday, October 8, 2022	5:00	62	72	61	59
Saturday, October 8, 2022	6:00	60	75	60	57
Saturday, October 8, 2022	7:00	60	72	60	58
Saturday, October 8, 2022	8:00	58	64	58	56
Saturday, October 8, 2022	9:00	59	74	58	55
Saturday, October 8, 2022	10:00	58	75	58	55
Saturday, October 8, 2022	11:00	57	80	56	53
Saturday, October 8, 2022	12:00	57	74	54	50
Saturday, October 8, 2022	13:00	54	72	53	49
Saturday, October 8, 2022	14:00	55	69	54	51
Saturday, October 8, 2022	15:00	57	66	57	54
Saturday, October 8, 2022	16:00	58	70	57	55
Saturday, October 8, 2022	17:00	58	76	57	55
Saturday, October 8, 2022	18:00	60	75	59	57
Saturday, October 8, 2022	19:00	61	73	60	58
Saturday, October 8, 2022	20:00	61	73	60	57
Saturday, October 8, 2022	21:00	60	76	59	57
Saturday, October 8, 2022	22:00	57	69	57	55
Saturday, October 8, 2022	23:00	58	67	58	56



Statistics	Leq	Lmax	L50	L90
Day Average	59	72	57	55
Night Average	60	71	59	56
Day Low	54	64	53	49
Day High	61	80	60	58
Night Low	58	67	57	53
Night High	62	76	61	59
Ldn	66	Day %		58
CNEL	66	Night %		42



**Appendix B1c: Continuous Noise Monitoring Results**

Site: LT-1

Project: Ashley Lathrop Project

Meter: LDL 820-1

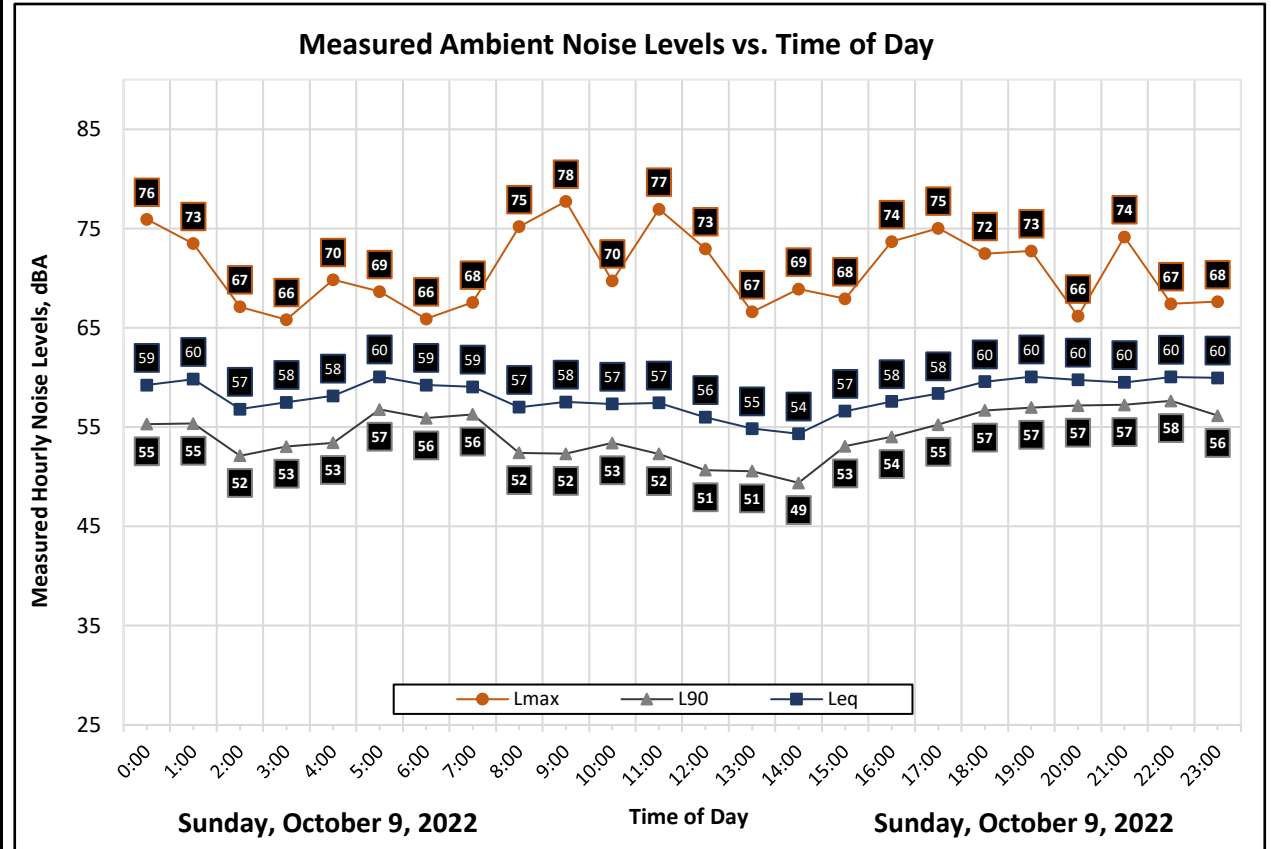
Location: Northeast Residential Receivers

Calibrator: CAL200

Coordinates: (37.835048, -121.289223)

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Sunday, October 9, 2022	0:00	59	76	58	55
Sunday, October 9, 2022	1:00	60	73	59	55
Sunday, October 9, 2022	2:00	57	67	56	52
Sunday, October 9, 2022	3:00	58	66	57	53
Sunday, October 9, 2022	4:00	58	70	57	53
Sunday, October 9, 2022	5:00	60	69	60	57
Sunday, October 9, 2022	6:00	59	66	59	56
Sunday, October 9, 2022	7:00	59	68	59	56
Sunday, October 9, 2022	8:00	57	75	56	52
Sunday, October 9, 2022	9:00	58	78	56	52
Sunday, October 9, 2022	10:00	57	70	57	53
Sunday, October 9, 2022	11:00	57	77	56	52
Sunday, October 9, 2022	12:00	56	73	55	51
Sunday, October 9, 2022	13:00	55	67	54	51
Sunday, October 9, 2022	14:00	54	69	53	49
Sunday, October 9, 2022	15:00	57	68	56	53
Sunday, October 9, 2022	16:00	58	74	57	54
Sunday, October 9, 2022	17:00	58	75	58	55
Sunday, October 9, 2022	18:00	60	72	59	57
Sunday, October 9, 2022	19:00	60	73	60	57
Sunday, October 9, 2022	20:00	60	66	59	57
Sunday, October 9, 2022	21:00	60	74	59	57
Sunday, October 9, 2022	22:00	60	67	60	58
Sunday, October 9, 2022	23:00	60	68	59	56

Statistics	Leq	Lmax	L50	L90
Day Average	58	72	57	54
Night Average	59	69	58	55
Day Low	54	66	53	49
Day High	60	78	60	57
Night Low	57	66	56	52
Night High	60	76	60	58
Ldn	65	Day %		60
CNEL	65	Night %		40



**Appendix B2a: Continuous Noise Monitoring Results**

Site: LT-2

Project: Ashley Lathrop Project

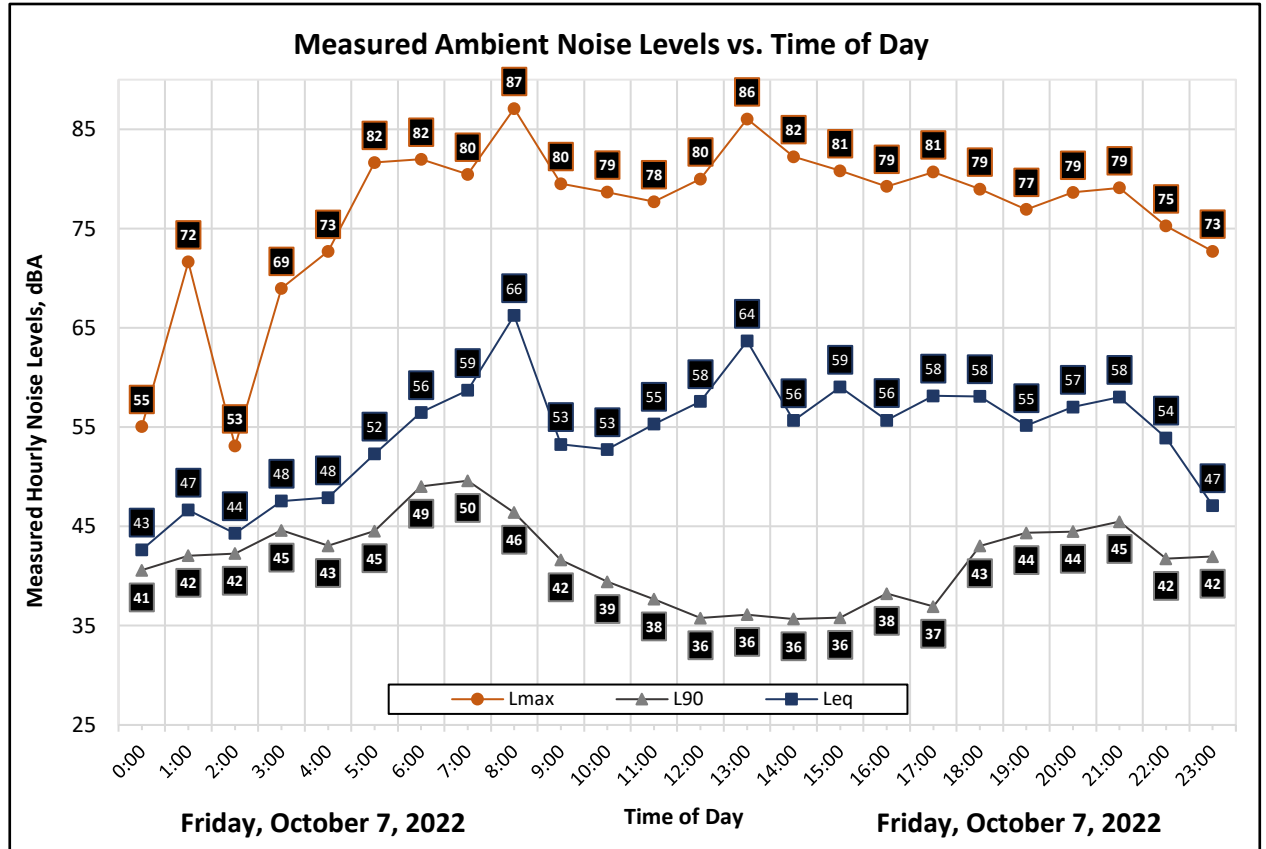
Meter: LDL 820-2

Location: Southwest Residential Receivers

Calibrator: CAL200

Coordinates: (37.830211, -121.299750)

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Friday, October 7, 2022	0:00	43	55	42	41
Friday, October 7, 2022	1:00	47	72	44	42
Friday, October 7, 2022	2:00	44	53	44	42
Friday, October 7, 2022	3:00	48	69	47	45
Friday, October 7, 2022	4:00	48	73	45	43
Friday, October 7, 2022	5:00	52	82	47	45
Friday, October 7, 2022	6:00	56	82	52	49
Friday, October 7, 2022	7:00	59	80	54	50
Friday, October 7, 2022	8:00	66	87	51	46
Friday, October 7, 2022	9:00	53	80	45	42
Friday, October 7, 2022	10:00	53	79	42	39
Friday, October 7, 2022	11:00	55	78	40	38
Friday, October 7, 2022	12:00	58	80	38	36
Friday, October 7, 2022	13:00	64	86	40	36
Friday, October 7, 2022	14:00	56	82	38	36
Friday, October 7, 2022	15:00	59	81	41	36
Friday, October 7, 2022	16:00	56	79	44	38
Friday, October 7, 2022	17:00	58	81	41	37
Friday, October 7, 2022	18:00	58	79	47	43
Friday, October 7, 2022	19:00	55	77	48	44
Friday, October 7, 2022	20:00	57	79	49	44
Friday, October 7, 2022	21:00	58	79	50	45
Friday, October 7, 2022	22:00	54	75	43	42
Friday, October 7, 2022	23:00	47	73	44	42



Statistics	Leq	Lmax	L50	L90
Day Average	59	80	45	41
Night Average	50	70	45	43
Day Low	53	77	38	36
Day High	66	87	54	50
Night Low	43	53	42	41
Night High	56	82	52	49
Ldn	60	Day %		94
CNEL	60	Night %		6



**Appendix B2b: Continuous Noise Monitoring Results**

Site: LT-2

Project: Ashley Lathrop Project

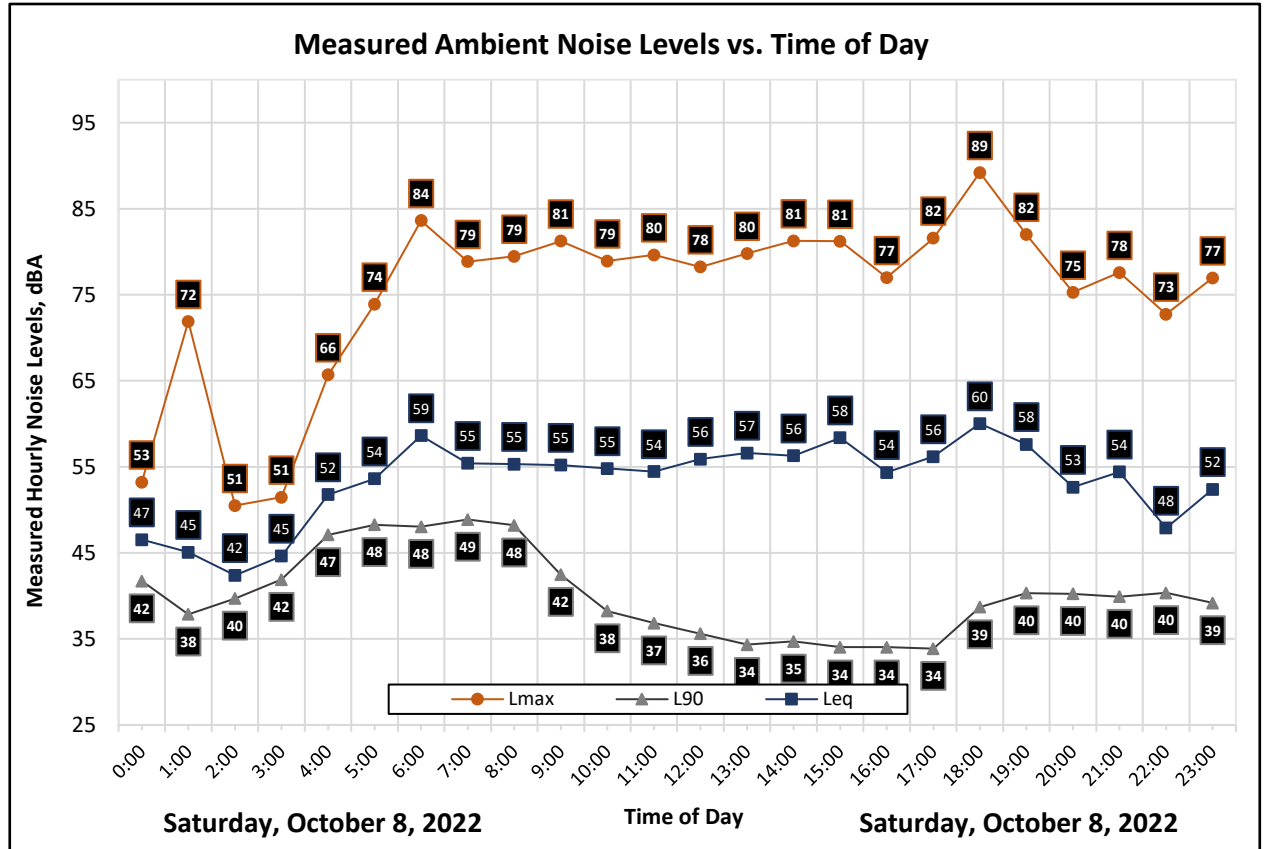
Meter: LDL 820-2

Location: Southwest Residential Receivers

Calibrator: CAL200

Coordinates: (37.830211, -121.299750)

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Saturday, October 8, 2022	0:00	47	53	46	42
Saturday, October 8, 2022	1:00	45	72	40	38
Saturday, October 8, 2022	2:00	42	51	42	40
Saturday, October 8, 2022	3:00	45	51	44	42
Saturday, October 8, 2022	4:00	52	66	51	47
Saturday, October 8, 2022	5:00	54	74	50	48
Saturday, October 8, 2022	6:00	59	84	50	48
Saturday, October 8, 2022	7:00	55	79	51	49
Saturday, October 8, 2022	8:00	55	79	50	48
Saturday, October 8, 2022	9:00	55	81	46	42
Saturday, October 8, 2022	10:00	55	79	41	38
Saturday, October 8, 2022	11:00	54	80	40	37
Saturday, October 8, 2022	12:00	56	78	39	36
Saturday, October 8, 2022	13:00	57	80	37	34
Saturday, October 8, 2022	14:00	56	81	38	35
Saturday, October 8, 2022	15:00	58	81	37	34
Saturday, October 8, 2022	16:00	54	77	36	34
Saturday, October 8, 2022	17:00	56	82	37	34
Saturday, October 8, 2022	18:00	60	89	44	39
Saturday, October 8, 2022	19:00	58	82	43	40
Saturday, October 8, 2022	20:00	53	75	42	40
Saturday, October 8, 2022	21:00	54	78	43	40
Saturday, October 8, 2022	22:00	48	73	42	40
Saturday, October 8, 2022	23:00	52	77	41	39



Statistics	Leq	Lmax	L50	L90
Day Average	56	80	42	39
Night Average	52	67	45	43
Day Low	53	75	36	34
Day High	60	89	51	49
Night Low	42	51	40	38
Night High	59	84	51	48
Ldn	59	Day %		82
CNEL	60	Night %		18





**Appendix B2c: Continuous Noise Monitoring Results**

Site: LT-2

Project: Ashley Lathrop Project

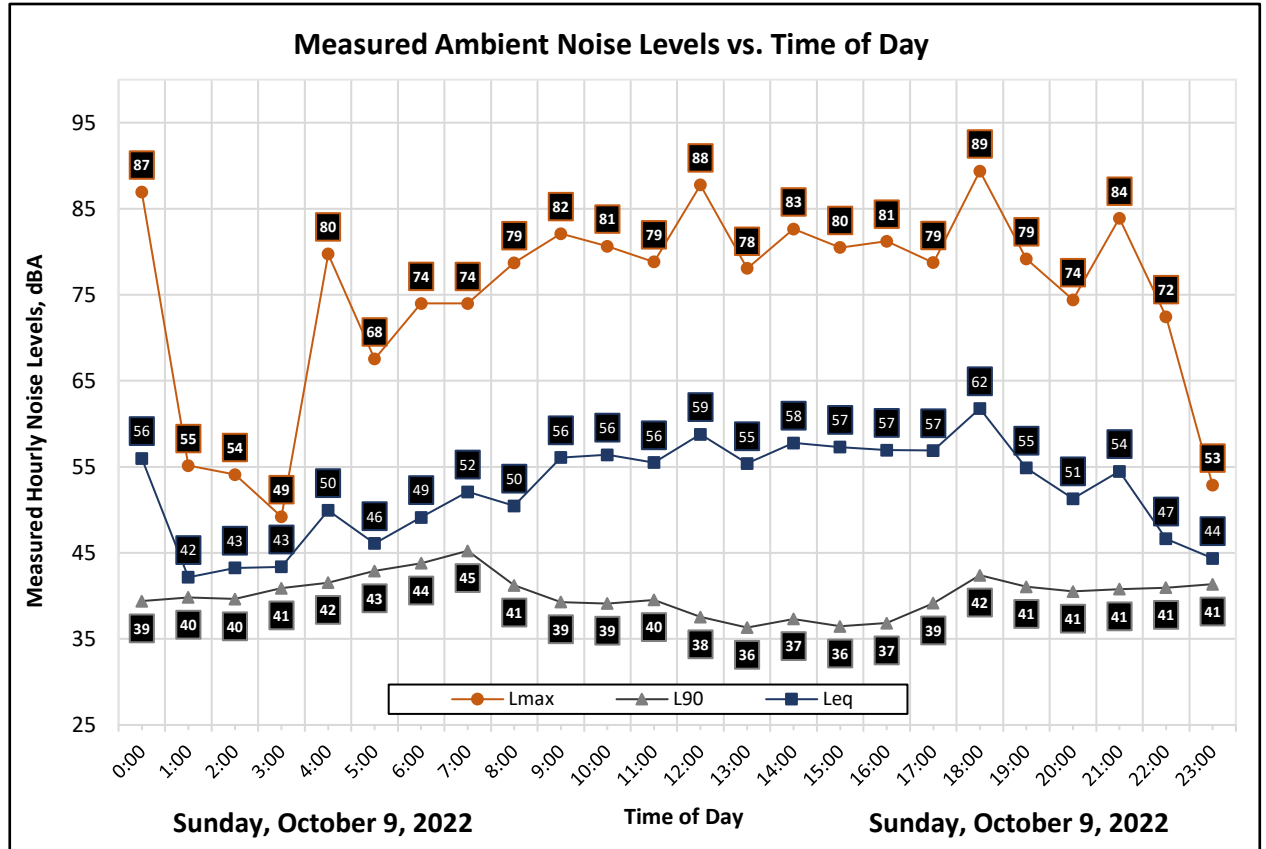
Meter: LDL 820-2

Location: Southwest Residential Receivers

Calibrator: CAL200

Coordinates: (37.830211, -121.299750)

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Sunday, October 9, 2022	0:00	56	87	42	39
Sunday, October 9, 2022	1:00	42	55	42	40
Sunday, October 9, 2022	2:00	43	54	42	40
Sunday, October 9, 2022	3:00	43	49	43	41
Sunday, October 9, 2022	4:00	50	80	44	42
Sunday, October 9, 2022	5:00	46	68	45	43
Sunday, October 9, 2022	6:00	49	74	46	44
Sunday, October 9, 2022	7:00	52	74	47	45
Sunday, October 9, 2022	8:00	50	79	44	41
Sunday, October 9, 2022	9:00	56	82	41	39
Sunday, October 9, 2022	10:00	56	81	41	39
Sunday, October 9, 2022	11:00	56	79	42	40
Sunday, October 9, 2022	12:00	59	88	39	38
Sunday, October 9, 2022	13:00	55	78	38	36
Sunday, October 9, 2022	14:00	58	83	42	37
Sunday, October 9, 2022	15:00	57	80	40	36
Sunday, October 9, 2022	16:00	57	81	39	37
Sunday, October 9, 2022	17:00	57	79	41	39
Sunday, October 9, 2022	18:00	62	89	46	42
Sunday, October 9, 2022	19:00	55	79	43	41
Sunday, October 9, 2022	20:00	51	74	42	41
Sunday, October 9, 2022	21:00	54	84	43	41
Sunday, October 9, 2022	22:00	47	72	43	41
Sunday, October 9, 2022	23:00	44	53	44	41



Statistics	Leq	Lmax	L50	L90
Day Average	57	81	42	40
Night Average	49	66	43	41
Day Low	50	74	38	36
Day High	62	89	47	45
Night Low	42	49	42	39
Night High	56	87	46	44
Ldn	58	Day %		91
CNEL	58	Night %		9



**Appendix B2d: Continuous Noise Monitoring Results**

Site: LT-2

Project: Ashley Lathrop Project

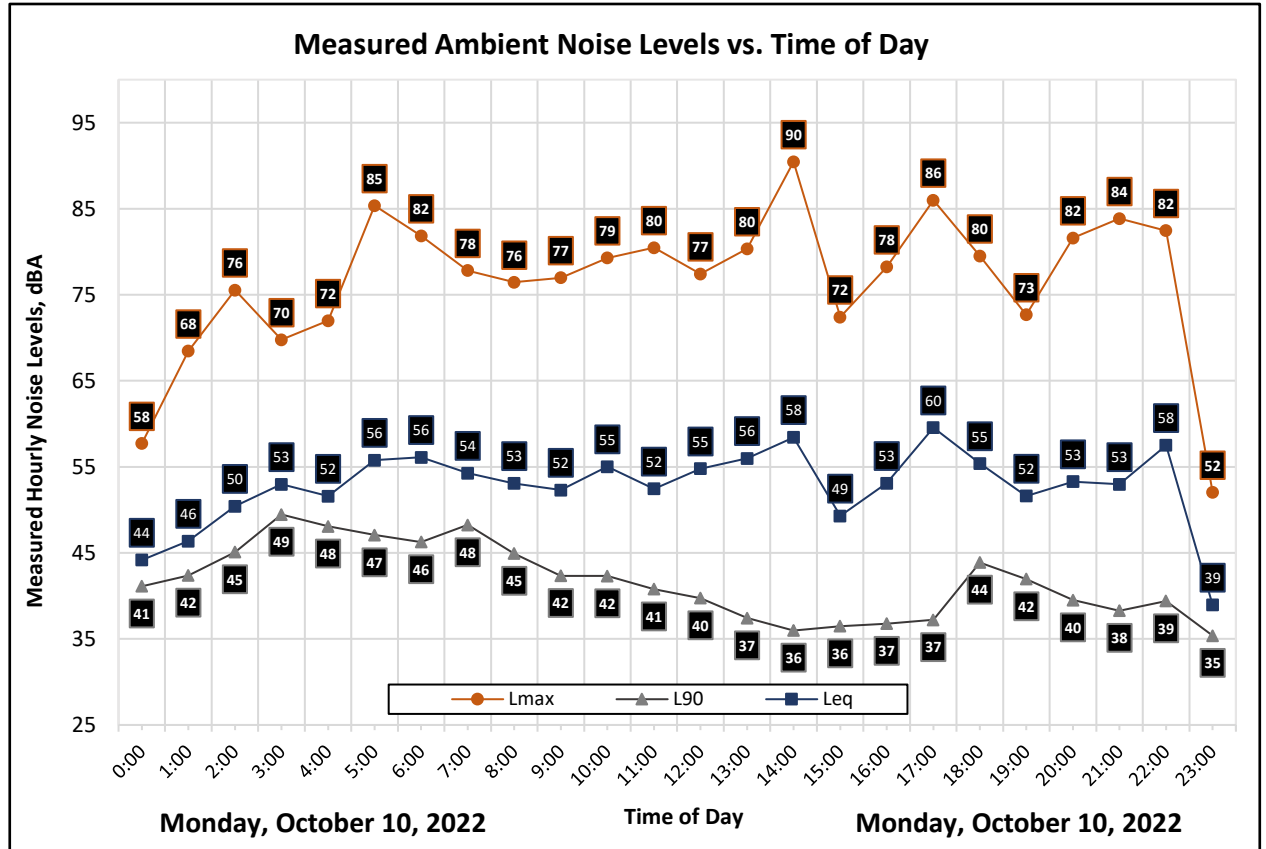
Meter: LDL 820-2

Location: Southwest Residential Receivers

Calibrator: CAL200

Coordinates: (37.830211, -121.299750)

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Monday, October 10, 2022	0:00	44	58	44	41
Monday, October 10, 2022	1:00	46	68	45	42
Monday, October 10, 2022	2:00	50	76	48	45
Monday, October 10, 2022	3:00	53	70	52	49
Monday, October 10, 2022	4:00	52	72	50	48
Monday, October 10, 2022	5:00	56	85	49	47
Monday, October 10, 2022	6:00	56	82	50	46
Monday, October 10, 2022	7:00	54	78	51	48
Monday, October 10, 2022	8:00	53	76	50	45
Monday, October 10, 2022	9:00	52	77	44	42
Monday, October 10, 2022	10:00	55	79	44	42
Monday, October 10, 2022	11:00	52	80	43	41
Monday, October 10, 2022	12:00	55	77	42	40
Monday, October 10, 2022	13:00	56	80	40	37
Monday, October 10, 2022	14:00	58	90	38	36
Monday, October 10, 2022	15:00	49	72	39	36
Monday, October 10, 2022	16:00	53	78	39	37
Monday, October 10, 2022	17:00	60	86	42	37
Monday, October 10, 2022	18:00	55	80	46	44
Monday, October 10, 2022	19:00	52	73	44	42
Monday, October 10, 2022	20:00	53	82	43	40
Monday, October 10, 2022	21:00	53	84	40	38
Monday, October 10, 2022	22:00	58	82	42	39
Monday, October 10, 2022	23:00	39	52	38	35



Statistics	Leq	Lmax	L50	L90
Day Average	55	80	43	40
Night Average	52	72	47	44
Day Low	49	72	38	36
Day High	60	90	51	48
Night Low	39	52	38	35
Night High	56	85	52	49
Ldn	59	Day %		78
CNEL	59	Night %		22



ATTACHMENT G: AIR QUALITY-HEALTH RISK TECHNICAL REPORT PREPARED BY: DE NOVO PLANNING GROUP 7/19/23.

# ANALYSIS OF PUBLIC HEALTH RISKS

FOR THE

LATHROP ASHLEY WAREHOUSE

LATHROP CALIFORNIA

JULY 20, 2023



**PROJECT TITLE**

Lathrop Ashley Warehouse

**PREPARED BY:**

De Novo Planning Group  
 1020 Suncastr Lane Suite 106  
 El Dorado Hills, CA 95762

**CONTACT PERSON AND PHONE NUMBER**

Josh Smith- Senior Planner  
 De Novo Planning Group  
 1020 Suncastr Lane, Suite 106  
 El Dorado Hills, CA 95762  
 jsmith@denovoplanning.com  
 916-805-3231

**CONTENTS**

INTRODUCTION.....	2
PROJECT DESCRIPTION .....	2
SCOPE OF RISK ASSESMENT .....	3
SIGNIFICANCE CRITERIA .....	3
EMISSION SOURCES AND EXPOSURE.....	4
DAILY TRUCK TRIPS AND ROUTES.....	5
EMISSION RATES.....	5
EXPOSURE ASSESSMENT.....	6
RISK ASSESSMENT .....	6
RISK ASSESSMENT RESULTS .....	7
REPORT PREPARERS .....	16
REFERENCES.....	17
<b><u>FIGURES:</u></b>	
FIGURE-1: PROJECT LOCATION.....	9
FIGURE-2: PROJECT SITE PLAN.....	11
FIGURE-3: WIND PATTERNS (STOCKTON AIRPORT - 2013-2017).....	13
FIGURE-4: RESIDENTIAL CANCER RISK (70-YEAR) – 95 <sup>TH</sup> PERCENTILE EXPOSURE RATE.....	14
FIGURE-5: WORKPLACE CANCER RISK (40-YEAR) – 95 <sup>TH</sup> PERCENTILE EXPOSURE RATE.....	15
<b><u>APPENDICES:</u></b>	
APPENDIX 1 EMISSIONS CALCULATIONS	
APPENDIX 2 TRIP GENERATION TECHNICAL MEMORANDUM	
APPENDIX 3 AERMOD OUTPUT FILE	
APPENDIX 4 HARP2 OUTPUT FILE	

## INTRODUCTION

This Health Risk Assessment (HRA) was prepared to assess potential public health risks that may be present at the proposed Lathrop Ashley Warehouse in the city of Lathrop, San Joaquin County, California. This report analyzes the emissions of toxic air pollutants within the project area and their impacts on public health.

## PROJECT DESCRIPTION

### *PROJECT LOCATION*

The Lathrop Ashley Warehouse Project site (proposed Project site) is comprised of approximately 86 acres located in the northwestern portion of the City of Lathrop, west of Interstation 5 (I-5), and adjacent to Manthey Road to the east and Dos Reis Road to the south. Figure 1 shows the Project location.

### *EXISTING SURROUNDING USES*

The Project site is primarily bounded by rural lands, including agricultural, public, and rural residential land uses. There are several clusters of sensitive receptors within the vicinity of the Project site. Specifically, Lathrop High School is located approximately 455 feet to the west of the Project site. Additionally, residences are located at various locations surrounding the Project site. Specifically, residences are located surrounding the Project site as follows:

- A cluster of residences is located adjacent to the southwest portion of the Project site, on the opposite side of Dos Reis Road;
- Several residences are located north of and adjacent to Lathrop High School (approximately 940 feet west of the Project site);
- A rural residence is located northwest of the Project site (approximately 820 feet from the Project site);
- A cluster of residences is located north of the northeast portion of the Project site (approximately 320 feet from the Project site); as well as additional residences located along Manthey Road north of the Project site;
- A high concentration of residences is located along the opposite side of Interstate 5, east of the Project site (approximately 400 feet east and northeast of the Project site).

### *PROJECT CHARACTERISTICS*

The Project proposes to develop the approximately 89.5-acre site to create the proposed Ashley Furniture Warehouse. The warehouse building is anticipated to have a footprint of approximately 1,486,607 square feet, with ample parking for trucks and vehicles. The Project consists of a single building, with a mix of tenant-related uses. The primary mix of uses within the Project building include an up to 100,000 square foot retail showroom, a 24,000 square foot, 2-3 story office space consisting of call center and a regional office for up to 50 people. Warehouse and distribution uses will comprise the balance of the 1,352,347 square feet. The proposed building's height is approximately 50 feet, with architectural features that may extend to approximately 60 feet. Vehicular & heavy-duty truck access to the Project site is proposed via four (4) access drives;

however, only one (1) access drive on Manthey Road at the far northeast corner is dedicated for heavy-duty truck ingress/egress onto and from the Project. Figure 2 provides a site plan.

## SCOPE OF RISK ASSESSMENT

Preparation of risk assessments is a three-step process. The first step is to identify potential contaminants that may lead to public health risks. The second step is to assess the magnitude of contaminants that may reach the public (exposure assessment). The last step is to calculate the magnitude of the health risk as a result of exposure to harmful contaminants on the basis of the toxicology of the contaminants.

The Office of Environmental Health Hazard Assessment, and the San Joaquin Valley Air Pollution Control District (SJVAPCD) provide guidance on the procedures that should be used, including, toxicological data for individual contaminants. This risk assessment is based on the guidance provided within these guidance documents. It should be noted that while this risk assessment uses certain procedures and data from these Guidelines, this assessment is not intended to satisfy the reporting requirements under AB-2588 “Air Toxics” Hot Spots program.

The health risks that are evaluated in this study include:

- Residential Cancer Risk (70-year exposure; start at third trimester);
- Workplace Cancer Risk (40-year exposure; start at age 16); and
- Acute and Chronic Hazard Indices.

The 70-year risk applies to residential areas where exposure may potentially occur 24 hours/day, 365 days/year. The 40-year risk is applicable to workplace exposure and therefore accounts for a reduced exposure for the fact that individuals typically would be exposed 8-hrs per day, 5 days per week, and 50 weeks per year. Non-cancer risks can be described as acute (short-term, exposure) or chronic health impacts.

## SIGNIFICANCE CRITERIA

The following significance criteria shown in Table 1, based on guidance from the SJVAPCD, are used in this report to assess the significance of public health risks.

**TABLE 1 THRESHOLDS OF SIGNIFICANCE FOR PUBLIC HEALTH RISKS**

<i>Risk Metric</i>	<i>Significance Threshold</i>
Residential Cancer Risk	20 per million
Workplace Cancer Risk	20 per million
Chronic and Acute non-cancer hazard Indices	non-cancer health hazard exposure index of 1.0

*SOURCE: SJVAPCD, 2015.*

As shown in Table 1, a project that contributes a cancer risk in excess of 20 new cases in a population of one million persons at identified receptors, or a non-cancer hazard index of greater than or equal to 1.0 would be considered to have a significant project-level impact.



## EMISSION SOURCES AND EXPOSURE

The main source of toxic air pollutants (TACs) by the proposed Project is diesel particulate matter (DPM) from truck idle and mobile emissions. Based on numerous studies by the California Air Resources Board (ARB), DPM represents the largest single contributor to public health risks. Additionally, in its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Emissions from the following project sources were analyzed and are shown in Table 2:

- Truck on-site and off-site mobile emissions
- Truck on-site idling emissions

**TABLE 2: EMISSION SOURCE ASSUMPTIONS**

Source Type / Emission	Configuration	Assumptions
<b>On- and Off-site Mobile Diesel Truck Circulation (DPM)</b>	<p><i>Modeled as line-volume sources</i></p> <p>Release Height = 6 ft            Plume Height = 12 ft            Plume Width = 12 ft (width of a truck)            Line Lengths = based on path of travel</p>	<ul style="list-style-type: none"> <li>• On-site and off-site travel of 680 trucks per day (TJKM, 2023).</li> <li>• Traveling distance based on proposed site plan layout and anticipated ingress/egress routes.</li> <li>• Both on-site and off-site mobile circulation modeled.</li> <li>• Off-site mobile routes modeled by approximately 0.5 miles from project site boundaries.</li> <li>• PM<sub>10</sub> mobile emissions factor provided by EMFAC 2021 (Parameters: San Joaquin County, Annual, Year 2022; emission factor for T7 Tractor Class 8)</li> </ul>
<b>On-site Diesel Truck Idling (DPM)</b>	<p><i>Modeled as point sources</i></p> <p>Release Height = 12 ft            Diameter = 0.1 meter            Velocity = 57.1 m/s @ 1500 rpm            Temperature = 366 K</p>	<ul style="list-style-type: none"> <li>• On-site Idle of 680 trucks per day (TJKM, 2023)</li> <li>• 5 minutes idling per vehicle</li> <li>• PM<sub>10</sub> mobile emissions factor provided by CARB's EMFAC2021 idling emission factors for 2022 HHDT diesel trucks.</li> </ul>

## DAILY TRUCK TRIPS AND ROUTES

The total diesel truck trips generated by the proposed project is based on the *Ashley Warehouse Traffic Impact Analysis Report* prepared for the proposed project prepared by TJKM in July 2023. According to the *Ashley Warehouse Traffic Impact Analysis Report*, the average total daily truck traffic includes 680 heavy-duty truck trips per day. The Technical Memorandum is provided in Appendix 2.

The off-site diesel heavy-duty truck routes were modeled consistent with the trip distribution for heavy trucks as provided in Figure 10 of TJKM's *Ashley Warehouse Traffic Impact Analysis Report* (see Appendix 2 of this report for further detail), as far as approximately 0.5 miles away from the Project site (consistent with San Joaquin Valley Air Pollution Control District guidance, which recommends at least modeling off-site truck routes of at least 0.25 miles from the Project site). As shown in TJKM's *Ashley Warehouse Traffic Impact Analysis Report*, the diesel truck trips would only travel to and from the Project site via the far northeast corner of the Project site. The Project would restrict heavy-duty trucks from using the Lathrop Road/I-5 interchange at all times to alleviate potential congestion on those intersections. Instead, the heavy-duty trucks would use the Roth Road/I-5 interchange via Manthey Road to access the Project site from the ingress/egress point at the far northeast corner of the Project site. Therefore, the modeled off-site routes included the north and south routes along Manthey Road from the Project sites far northeastern ingress/egress point. The heavy-duty trucks would not utilize Lathrop Road nor directly pass Lathrop High school.

Separately, the on-site circulation of trucks was modeled to account for the diesel truck travel throughout the entirety of the internal circulation route. Specifically, on-site circulation was modelled to account for internal Project site travel and the circulation pattern that surrounds the warehouse (for docking and loading/unloading) and the diesel truck parking areas.

## EMISSION RATES

Table 3 provides emissions rates by source and emissions factors. For calculations, data outputs, and reference documents please see Appendix 1.

**TABLE 3: EMISSION RATES BY SOURCE**

Source	Pollutant	Volume/Size	Emission Factor	Emissions Pounds/Year
On-site Diesel Truck (Mobile) Circulation	Diesel Particulate Matter (DPM)	680 truck trips per day traveling 1.61 miles	0.014 g/mile	6.18
Off-site Diesel Truck (Mobile) Circulation	Diesel Particulate Matter (DPM)	680 truck trips per day	0.025 g/mile	8.69
On-site Diesel Truck Idling	Diesel Particulate Matter (DPM)	680 trucks per day idling 5 min	0.25 g/hr -vehicle	0.41

SOURCES: EMFAC 2021; AERMOD; TJKM.

## EXPOSURE ASSESSMENT

Exposure assessment involves translating the emission rate (e.g., lbs/hr, g/hr) of individual toxic air contaminants into the concentration (e.g., grams/cubic meter g /sec m<sup>2</sup> or parts per million) of each toxic air contaminant. The key step in performing an exposure assessment is the application of an air dispersion model. The dispersion model incorporates the local meteorological data (wind speed, wind direction, local temperature, inversions, etc.), stack height, and exhaust flow characteristics, into the dispersion of individual air contaminant. The Lakes Environmental AERMOD Version 11.2.0 dispersion model was employed for this assessment. The AERMOD output file is shown in Appendix 3.

**Modeling Receptors:** Receptors were placed at locations of nearby sensitive receptors, including residential and workplace locations. Residential receptors were located at each of the nearby residential receptors, as previously described, as follows:

- A cluster of residences is located adjacent to the southwest portion of the Project site, on the opposite side of Dos Reis Road;
- Several residences are located north of and adjacent to Lathrop High School (approximately 940 feet west of the Project site);
- A rural residence is located northwest of the Project site (approximately 820 feet from the Project site);
- A cluster of residences is located north of the northeast portion of the Project site (approximately 320 feet from the Project site), as well as additional residences located along Manthey Road north of the Project site;
- A high concentration of residences is located along the opposite side of Interstate 5, east of the Project site (approximately 400 feet east and northeast of the Project site).

Additionally, workplace receptors were placed at various locations within the Project site. This allows for an analysis of the receptors that have the potential to be most affected by the TACs generated by the proposed project.

**Meteorological Data:** Five years of meteorological data was used in the exposure assessment. The meteorological (“Met”) data (wind speed, wind direction, temperature, etc.) were recorded at the Stockton Airport location for the years 2013 through 2017. This location was the closest location MET data was available.

## RISK ASSESSMENT

Once the emissions rates of individual air contaminants have been calculated, and an air dispersion model has been run through AERMOD, the next step in determining health risks is to determine the cancer risk, and acute and chronic incident rates. Period and 1-hour dispersion files we used in combination with HARP-2 risk modelling software to calculate risk scenarios for residential, and workplace cancer rates, as well as acute and chronic incidences. The Hotspots Analysis and Reporting Program (HARP) is a software suite used to assist with the programmatic requirements of the Air Toxics “Hot Spots” Program [Assembly Bill (AB) 2588]. HARP combines the tools needed to implement the requirements of AB 2588, such as reporting a facilities

emissions inventory, determining a facilities prioritization score, conducting air dispersion modeling, and performing a facility health risk assessment. This study utilized the HARP2 Air Dispersion and Risk Tool with dispersion plot files created in AERMOD. After the risk assessment was complete, HARP-2 plot files were then imported back into AERMOD for spatial and visual representation, and analysis of impact areas.

The Intake Rate Percentile sets the intake rate at which a person is exposed to the air pollutant. This study utilized the high-end intake rate to assess risk at the 95th percentile exposure rate for risk scenarios (see Appendix 4 HARP-2 project summary report). Additionally, residential cancer risk is assessed using a 70-year exposure duration starting at the third trimester; workplace cancer risks are assessed at a 40-year exposure duration with age 16 being the first potential exposure year.

## RISK ASSESSMENT RESULTS

The results of the risk analysis indicate that cancer risks vary depending on the exposure scenario (residential or worker) and on location. As would be expected, locations nearest the Project site have the greatest exposure and the associated risks are considerably lower as distance from the project site increases. Table 4 displays the residential and workplace cancer risk, and acute and chronic incidence rate results at nearest receptors. Figure 3 provides wind patterns at the Stockton Airport location where meteorological data was used for the modeling.

**TABLE 4: SUMMARY OF MAXIMUM HEALTH RISKS**

<i>RISK METRIC</i>	<i>MAXIMUM RISK</i>	<i>SIGNIFICANCE THRESHOLD</i>	<i>IS THRESHOLD EXCEEDED?</i>
Residential Cancer Risk (70-year exposure)	7.0	20 per million	No
Workplace Cancer Risk (40-year exposure)	1.3	20 per million	No
Chronic (non-cancer)	<0.01	Hazard Index $\geq 1$	No
Acute (non-cancer) <sup>1</sup>	0	Hazard Index $\geq 1$	No

*SOURCES: AERMOD 11.2.0 (LAKES ENVIRONMENTAL SOFTWARE, 2023); AND HARP-2 AIR DISPERSION AND RISK TOOL.*

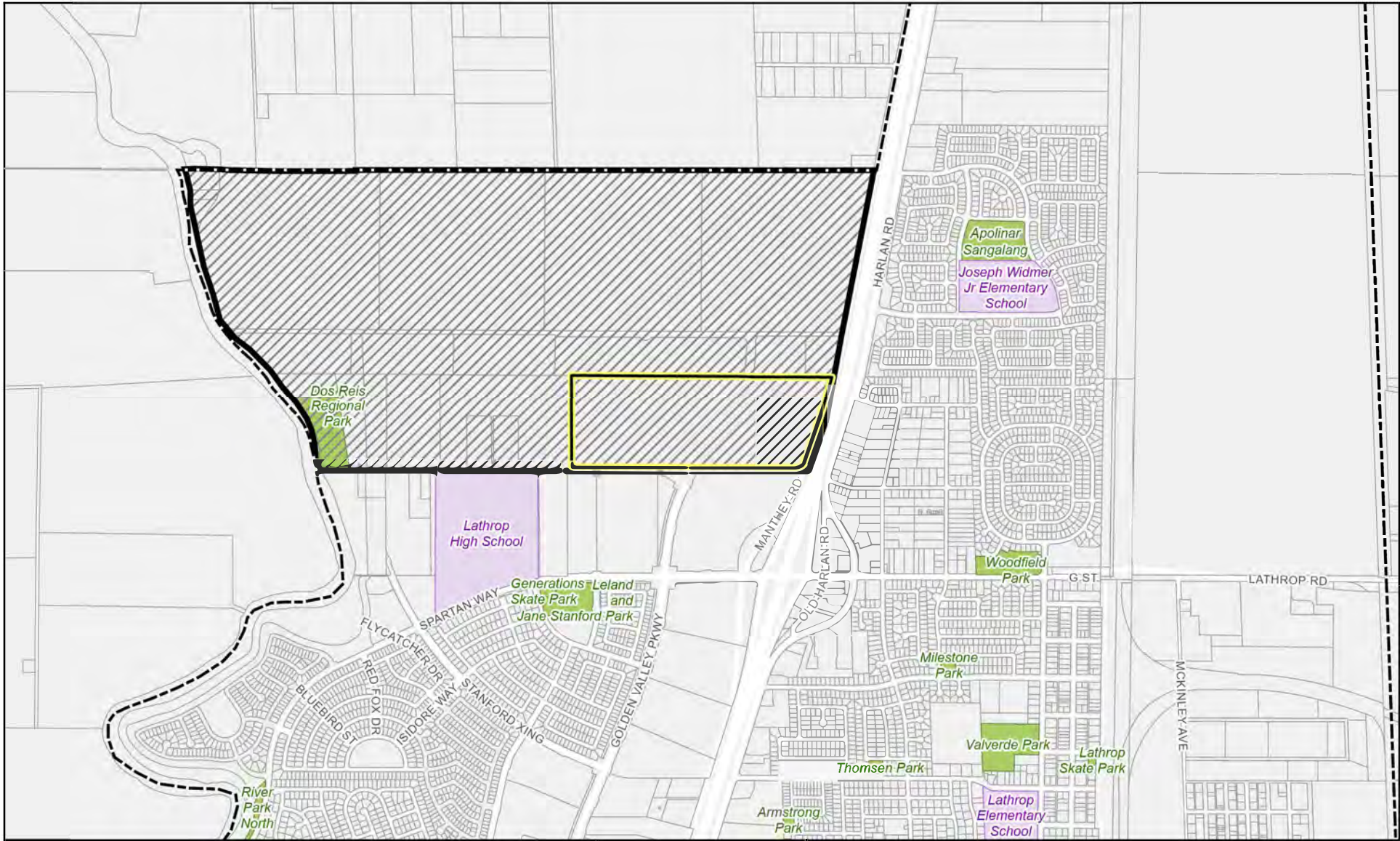
The TAC emissions from the project result from the on-site and off-site truck travel, and on-site idling of diesel-fueled vehicles. The nearest sensitive receptors are those that surround the Project site, to the southwest, west, east, and northeast.

Overall, the results show that residential 70-year cancer risk would remain below the threshold of 20 in a million at areas near the project site that contain residential receptors. As shown in Figure 3, the wind patterns in the area generally blow from the northwest to the southeast. The modeling results show that the residence with the highest risk is the residence located north of the Project site along Manthey Road, at 12965 Manthey Road. However, it is very unlikely any individual would remain at the same location for 70 years; therefore, this result represents a

conservative estimate. Figure 4 provides a visualization of the residential cancer risk isopleths surrounding the Project site.

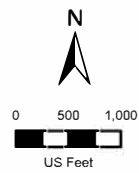
The results also show that 40-year workplace cancer risk would remain below the threshold of 20 in a million (the SJVPACD threshold) at the project site, with a maximum value measured at approximately 1.3 per million (at the location of maximum cancer risk), in the northeastern portion of the Project site. Figure 4 provides the a visualization of the workplace cancer risk isopleths surrounding the Project site.

Chronic or long-term exposures and Acute exposure to DPM can result is non-cancer health effects. Chronic and Acute Non-Cancer Hazards results show that the acute and chronic risk on and near the project site would remain below the hazard index of  $\geq 1$ .



**LEGEND**

- Ashley Warehouse Project Site
- Central Lathrop Specific Plan Phase 2
- City of Lathrop Limits
- Public Schools
- Parks

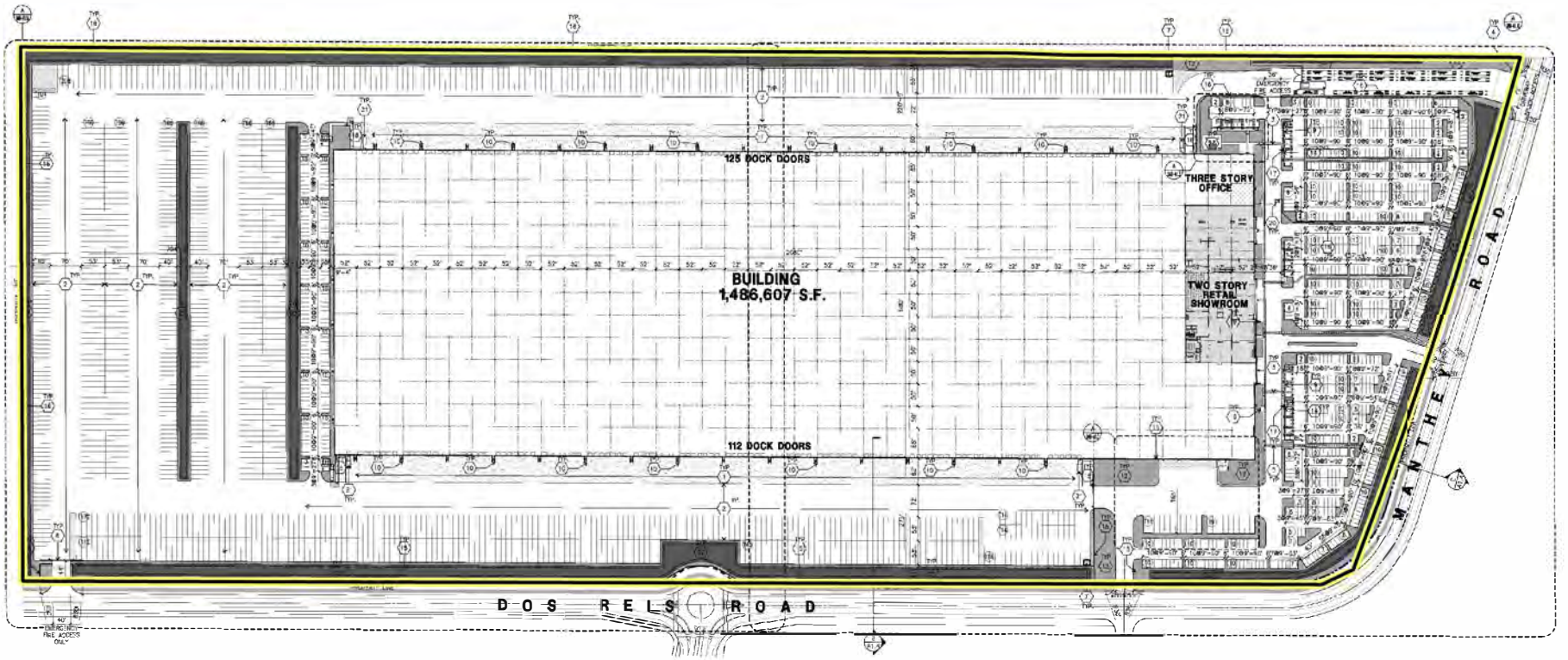


**ASHLEY WAREHOUSE HRA**

**Figure 1. Project Vicinity**

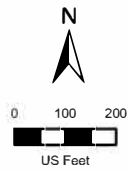
Sources: City of Lathrop; San Joaquin County GIS. Map date: June 1, 2023.

*This page left intentionally blank.*



**LEGEND**

 Ashley Warehouse Project Site



**ASHLEY WAREHOUSE HRA**

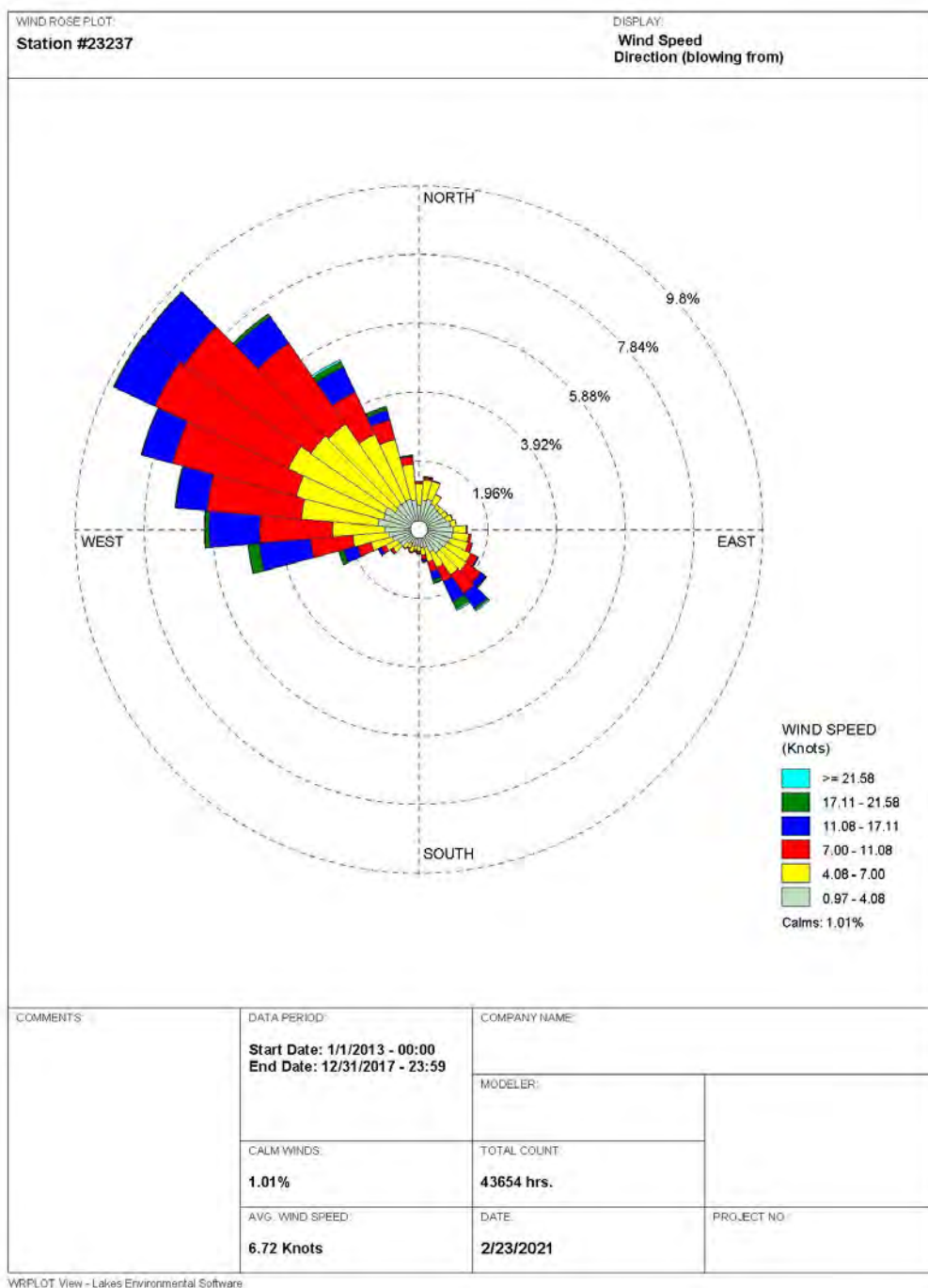
**Figure 2. Site Plan**

Sources: HPA Architecture. Map date: June 1, 2023.



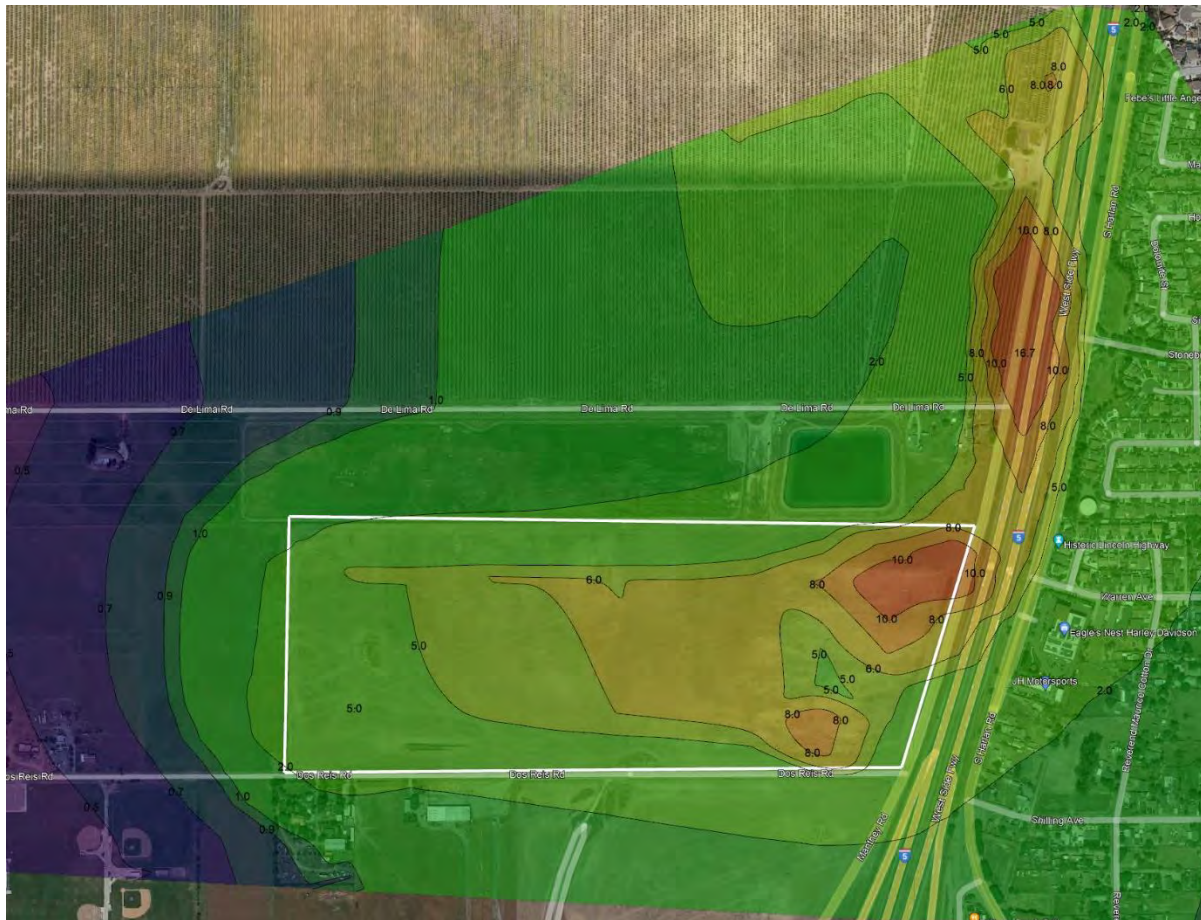
*This page left intentionally blank.*

**FIGURE-3: WIND PATTERNS (STOCKTON AIRPORT - 2013-2017) AIRPORT LOCATION**

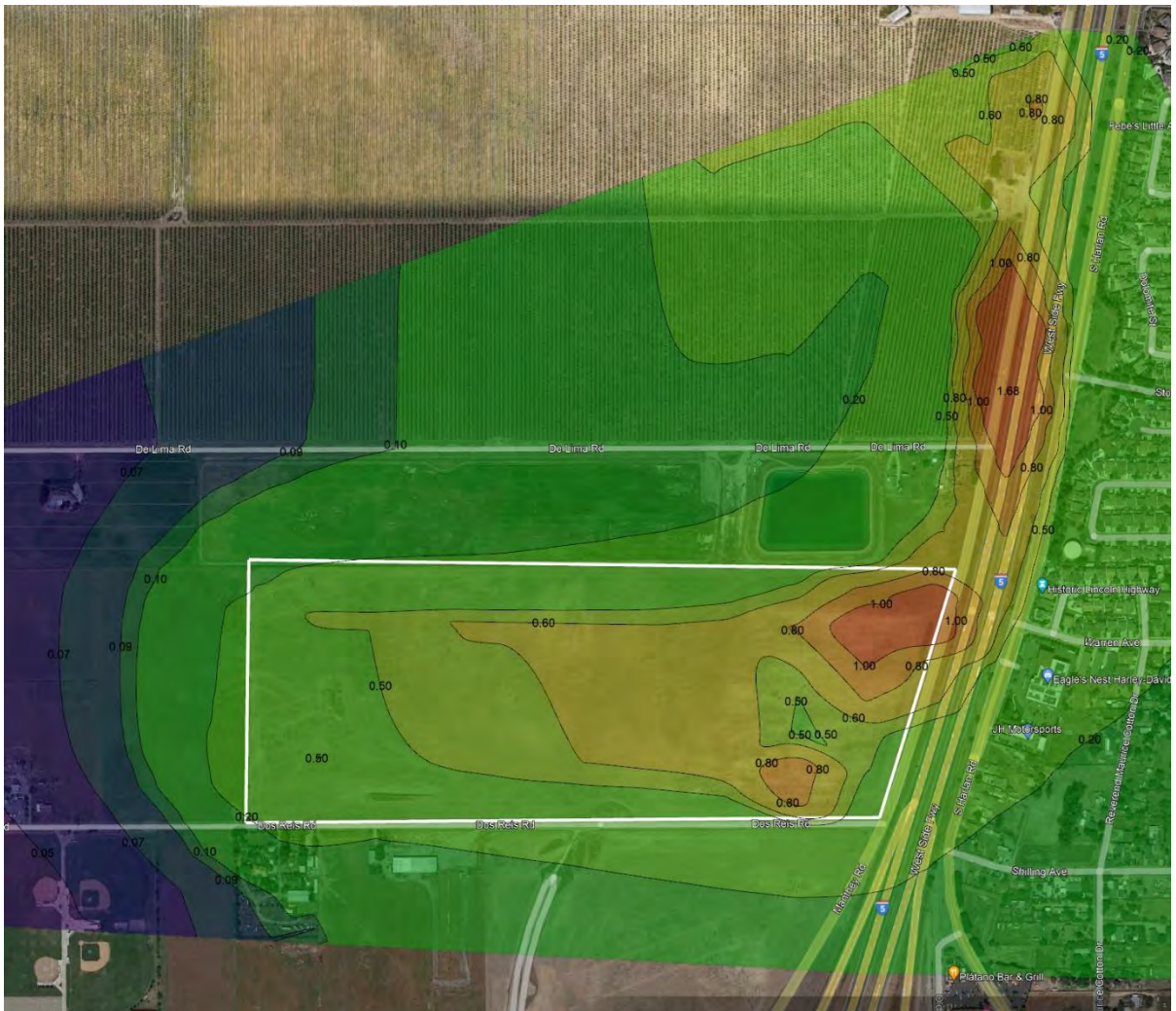


Sources: Prepared by De Novo Planning group (2022); Lakes Environmental AERMOD View 10.2.1

**FIGURE-4: RESIDENTIAL CANCER RISK (70-YEAR) DURING OPERATION – 95<sup>TH</sup> PERCENTILE EXPOSURE RATE**



**FIGURE-5: WORKPLACE CANCER RISK (40-YEAR) DURING OPERATION – 95<sup>TH</sup> PERCENTILE EXPOSURE RATE**



**REPORT PREPARERS**

This document was prepared by De Novo Planning Group, Inc. of El Dorado Hills under the direction of the City of Lathrop. De Novo Planning Group staff participating in document preparation included the following:

- Ben Ritchie, Principal
- Josh Smith, Senior Planner

**REFERENCES**

- California Air Resources Board. 2015. HARP, and AERMOD Course 296 *User's Guide for Health Risk Assessment and Dispersion Modeling*.
- California Air Resources Board. 2021. EMFAC2021 Web Database. PM10 Mobile Emissions Factors.
- California Environmental Protection Agency. 2013. Air Resources Board (ARB) Monitoring and Laboratory Division *Revised Emission Factors for Phase II Vehicle Fueling at California Gasoline Dispensing Facilities December 23, 2013*.
- TJKM. 2023. Ashley Furniture Traffic Impact Analysis Report. December 8, 2021. Revised Aug. 9, 2023.
- Kyle Melching. 2016. San Joaquin Valley Air Pollution Control District (SJVAPCD). (Email Communications on 3/25/2016).
- Leland Vilalvazo, and David Garner. 2015 and 2016. San Joaquin Valley Air Pollution Control District (SJVAPCD). [Discussion of methods and impacts for project HRA] (Personal communications, 9/1/15, 9/21/15, 11/30/15, 1/4/16, 12/13/15, 1/6/15, 1/11/16).
- SJVAPCD. 2002. San Joaquin Valley Air Pollution Control District. 2002. *Guide for Assessing and Mitigating Air Quality Impacts*.
- SJVAPCD. 2010. San Joaquin Valley Air Pollution Control District, *Guidance for Air Dispersion Modeling*.
- SJVAPCD. 2015. San Joaquin Valley Air Pollution Control District. APR – 1906. Framework for Performing Health Risk Assessments.
- Yu Vu. 2020. San Joaquin Valley Air Pollution Control District (SJVAPCD). (Email Communications on 8/27/2020, 8/31/2020, 10/7/2020, 10/8/2020, 10/27/2020).

*This page left intentionally blank.*

---

## **Appendix 1 - Emissions Calculations:**



Source: EMFAC2021 (v1.0.1) Emission Rates

Region Type: County

Region: San Joaquin

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM10_RUNEX
San Joaquin	2022	T7 Tractor Class 8	Aggregate		10 Diesel	<b>0.014003507</b>

Source: EMFAC2021 (v1.0.1) Emission Rates

Region Type: County

Region: San Joaquin

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM10_RUNEX
San Joaquin	2022	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	<b>0.024607949</b>

## Mobile Truck Emissions - On-site Mobile

meters per mile: 1609.34 pounds per gram: 0.002205

### Assumptions:

1. Distance travelled on-site per truck (line segment): 1.61183687 miles
2. # of trucks trips per day (total): 680 trucks
3. Proportion of project site traveled per truck per day: 0.5
3. PM10 Mobile Em. Factor (San Joaquin County, Year 2022, 10 MPH, T7 Tractor Class 8):

### Source:

AERMOD  
TJKM  
Based on site plan and layout.  
**0.014004 g/mile**

### Therefore:

Total daily PM10 On-site Mobile Emissions Generated by the project:

**7.67426518 g/day-all trucks**

0.01691884 lbs/day-all trucks

**6.17537606 lbs/year-all trucks**

### Max Hr Emissions

Two times the average trip generation over the course of 1 hour, based on the given 24-hour daily totals (conservative estimate)

**0.001410 lbs/hour-all trucks**

## Mobile Truck Emissions - Off-site - Manthey Road - North

meters per mile: 1609.34 pounds per gram: 0.002205

### Assumptions:

1. Distance travelled on-site per truck (line segment): 0.6451697 miles
2. # of trucks trips per day (prorated - 2 routes): 340 truck trips
3. PM10 Mobile Em. Factor (San Joaquin County, Year 2022 Aggregate MPH, T7 Tractor Class 8):

### Source:

AERMOD  
TJKM, 2023  
**0.024608 g/mile**

### Therefore:

Total daily PM10 On-site Mobile Emissions Generated:

**5.39794296 g/day-all trucks**  
0.01190041 lbs/day-all trucks  
**4.34365075 lbs/year-all trucks**

### Max Hr Emissions

Two times the average trip generation over the course of 1 hour, based on the given 24-hour daily totals (conservative estimate)

**0.000992 lbs/hour-all trucks**

## Mobile Truck Emissions - Off-site - Manthey Road - South

meters per mile: 1609.34 pounds per gram: 0.002205

### Assumptions:

1. Distance travelled on-site per truck (line segment): 0.6451697 miles
2. # of trucks trips per day (prorated - 2 routes): 340 truck trips
3. PM10 Mobile Em. Factor (San Joaquin County, Year 2022 Aggregate MPH, T7 Tractor Class 8):

### Source:

AERMOD  
TJKM, 2023  
**0.024608 g/mile**

### Therefore:

Total daily PM10 On-site Mobile Emissions Generated:

**5.39794296 g/day-all trucks**  
0.01190041 lbs/day-all trucks  
**4.34365075 lbs/year-all trucks**

### Max Hr Emissions

Two times the average trip generation over the course of 1 hour, based on the given 24-hour daily totals (conservative estimate)

**0.000992 lbs/hour-all trucks**

**Truck Idling**

CARB EMFAC2021 idling emission factors for 2022 HHDT diesel trucks:

PM10	0.25 g/hr-truck	pounds per gram:	0.002205
	0.01041667 g/5 minutes-truck		Note: assuming 5 minutes of active idling per truck
	0.01041667 g/day-truck		
	680 Total # of trucks per day		
	7.08333333 g/day-all trucks		
	2585.41667 g/year-all trucks		
	5.69986129 lbs/year-all trucks		
	0.29513889 g/hr-all trucks		
	0.00491898 g/min-all trucks		
	8.1983E-05 g/sec-all trucks		

As provided by the Kimley Horn Traffic Study (2018):

26.00 Peak hour truck trips (maximum peak hour truck trips is used for the sake of a conservative analysis)

0.27083333 g/5 minutes-26 vehicles  
0.0005971 lbs/5 minutes-26 vehicles

Annual Emissions:  
Max Hr Emissions:

0.40713295 lbs/year-all trucks for each of the 14 idling points  
0.0000426 for each sampling point, for max 1 hr

---

## **Appendix 2 – Trip Generation Technical Memorandum:**

# Traffic Impact Analysis Report

## **Ashley Furniture**

Lathrop, California

December 8, 2021

Revised: July 10, 2023





## Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>1.0 Introduction</b> .....	<b>5</b>
1.1 Project Description .....	5
1.2 Project Purpose.....	5
1.3 Other Analyses .....	5
1.4 Study Area.....	5
1.5 Analysis Scenarios.....	6
<b>2.0 Study Methodology</b> .....	<b>9</b>
2.1 Vehicle Miles Traveled .....	9
2.2 Level of Service Analysis Methodology.....	9
2.3 Level of Service Standards.....	11
<b>3.0 Existing Conditions</b> .....	<b>13</b>
3.1 Existing Setting and Roadway System.....	13
3.2 Existing Pedestrian Facilities .....	14
3.3 Existing Bicycle Facilities.....	14
3.4 Existing Transit Facilities.....	15
3.5 Existing Peak Hour Traffic Volumes And Lane Configurations .....	17
3.6 Intersection Level of Service Analysis – Existing Conditions.....	20
3.7 Freeway Mainline Level of Service – Existing Conditions.....	21
<b>4.0 Baseline Conditions</b> .....	<b>22</b>
4.1 Intersection Level of Service Analysis – Baseline Conditions.....	22
4.2 Freeway Mainline Level of Service – Baseline Conditions.....	23
<b>5.0 Baseline plus Project Conditions</b> .....	<b>26</b>
5.1 Project Trip Generation.....	26
5.2 Project Trip Distribution and Assignment .....	28
5.3 Intersection Level of Service Analysis – Baseline plus Project Conditions.....	33
5.4 Freeway Mainline Level of Service – Baseline plus Project.....	36
<b>6.0 Cumulative Conditions</b> .....	<b>39</b>

6.1 Intersection Level of Service Analysis – Cumulative Conditions .....	39
<b>7.0 Cumulative plus Project Conditions .....</b>	<b>42</b>
7.1 Intersection Level of Service Analysis – Cumulative plus Project Conditions .....	42
<b>8.0 Additional Analyses .....</b>	<b>46</b>
8.1 Vehicle Miles Traveled (VMT) .....	46
8.2 Site Access .....	47
8.3 On-Site Circulation .....	47
8.4 Truck Operations.....	48
8.5 Parking.....	48
8.6 Pedestrian, Bicycle, and Transit impacts .....	48

**Tables**

Table 1: Level of Service Definitions for Signalized Intersections .....	10
Table 2: Level of Service Definitions for Stop Controlled Intersections.....	11
Table 3: LOS Criteria for Basic Freeway Segments .....	12
Table 4: Existing San Joaquin RTD Transit Service .....	15
Table 5: Intersection Level of Service Analysis – Existing Conditions .....	20
Table 6: Freeway Segment Level of Service Analysis – Existing Conditions.....	21
Table 7: Intersection Level of Service – Baseline Conditions.....	22
Table 8: Freeway Segment Level of Service Analysis – Baseline Conditions.....	23
Table 9: Driveway Counts Summary .....	26
Table 10: Driveway Inbound/Outbound Splits .....	26
Table 11: Passenger Vehicle Trip Rates .....	27
Table 12: Heavy Vehicle Trip Rates.....	27
Table 13: Project Trip Generation for Passenger Vehicles .....	27
Table 14: Project Trip Generation for Heavy Trucks .....	27
Table 15: Intersection Level of Service Analysis – Baseline plus Project Conditions .....	34
Table 16: Freeway Segment Level of Service Analysis – Baseline plus Project Conditions .....	36
Table 17: Intersection Level of Service – Baseline Conditions .....	40
Table 18: Intersection Level of Service Analysis – Cumulative plus Project Conditions .....	43

Table 19: Fair Share Analysis..... 45

Table 20: Land Use Changes for Base Year ..... 46

Table 21: VMT per Employee Comparison ..... 47

**Figures**

Figure 1: Vicinity Map ..... 7

Figure 2: Project Site Plan ..... 8

Figure 3: Existing Pedestrian, Bicycle, and Transit Facilities..... 16

Figure 4: Existing Conditions Lane Geometry, Traffic Controls, and Volumes ..... 18

Figure 5: Existing Freeway Mainline Volumes ..... 19

Figure 6: Baseline Conditions Lane Geometry, Traffic Controls, and Volumes ..... 24

Figure 7: Baseline Conditions Freeway Mainline Volumes..... 25

Figure 8: Passenger Vehicle Project Trip Distribution ..... 29

Figure 9: Passenger Vehicle Trip Assignment ..... 30

Figure 10: Heavy Vehicle Project Trip Distribution..... 31

Figure 11: Heavy Vehicle Trip Assignment ..... 32

Figure 12: Baseline plus Project Peak Hour Traffic Volumes..... 37

Figure 13: Baseline plus Project Freeway Mainline Volumes ..... 38

Figure 14: Cumulative Conditions Lane Geometry, Traffic Controls, and Volumes ..... 41

Figure 15: Cumulative plus Project Conditions Lane Geometry, Traffic Controls, and Volumes ..... 44

**Appendices**

Appendix A –Level of Service Methodology

Appendix B – Existing Conditions Level of Service Sheets

Appendix C – Existing Conditions Freeway Level of Service Sheets

Appendix D – Baseline Conditions Level of Service Sheets

Appendix E – Baseline Conditions Freeway Level of Service Sheets

Appendix F – Ashley Driveway Counts

Appendix G – Baseline plus Project Level of Service Sheets

Appendix H – Baseline plus Project Conditions Freeway Level of Service Sheets

Appendix I – Cumulative Conditions Level of Service Sheets

Appendix J – Cumulative plus Project Level of Service Sheets

## **EXECUTIVE SUMMARY**

This report summarizes the results of the Traffic Impact Analysis (TIA) conducted for the proposed Ashley Furniture distribution center in the City of Lathrop, California. The study area is near the Roth Road and Lathrop Road interchanges on I-5, specifically located northwest of the I-5/Lathrop Road interchange.

The project proposes to develop an approximately 1.5+ million square feet building to serve as a distribution center and retail facility. The development is strategically located near the I-5/Lathrop Road interchange. The project will also construct various driveways to serve as entry points for passenger vehicles and heavy trucks. The project also proposes to construct a roundabout at the intersection of Golden Valley Parkway/Dos Reis Road.

The purpose of the Traffic Impact Analysis is to evaluate the impacts on the transportation infrastructure due to the addition of the traffic from the proposed project. The report also includes evaluations and recommendations concerning project site access and on-site circulation for vehicles, bicycles, and pedestrians, and a vehicle miles travelled analysis.

To evaluate the impacts on the transportation infrastructure due to the addition of traffic from the proposed project, 14 study intersection were evaluated during the weekday morning (a.m.) peak hour and evening (p.m.) peak hour under five study scenarios. The study intersections were evaluated under *No Project* and *Plus Project* scenarios for Baseline Conditions and Cumulative Conditions. The study intersections were also evaluated for Existing Conditions. For the purpose of this analysis, potential traffic operational effects from the proposed project are identified based on established operational thresholds for the City of Lathrop and guidance published by the California Office of Planning and Research (OPR).

Of note, this TIA constitutes a second iteration of the report based on feedback received from the City. This iteration includes the addition of the Cumulative and Cumulative plus Project conditions and changes to the site layout. The latter change accounted for the removal of two previous site entrances (Study Intersections #13 and #16); in order to avoid confusion and to keep consistent with the previous TIA, the intersection numbering herein has not be revised.

### ***Project Trip Generation***

Using site specific data, the proposed Ashley Furniture is expected to generate 2,798 daily trips, including 203 a.m. peak hour trips (124 inbound, 79 outbound) and 255 p.m. peak hour trips (110 inbound, 145 outbound) for passenger vehicles.

In addition, the project is expected to generate 680 daily heavy truck trips, including 95 a.m. peak hour trips (14 inbound, 81 outbound) and 45 p.m. peak hour trips (31 inbound, 14 outbound).

### ***Existing Conditions – Intersection Level of Service***

Under this scenario, all of the study intersections operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour.

**Existing Conditions – Freeway Mainline Level of Service**

Under this scenario, all of the study freeway segments operate at acceptable levels of service (LOS D or better) during the a.m. and p.m. peak hour.

**Baseline Conditions – Intersection Level of Service**

Baseline conditions include all approved growth expected to be constructed between the year 2020 and the year 2022. Under this scenario, all of the study intersections operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour, except for Lathrop Rd/I-5 NB Ramps (Intersection #2) during the p.m. peak hour, which is projected to operate at LOS E (average delay of 70.4 seconds).

**Baseline Conditions – Freeway Mainline Level of Service**

Under this scenario, all of the study freeway segments are projected to operate at acceptable levels of service (LOS D or better) during the a.m. and p.m. peak hour.

**Baseline plus Project Conditions – Intersection Level of Service**

Under this scenario, all but three of the study intersections would continue to operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour. The following intersection already operates at unacceptable level of service without the addition of project traffic.

- Lathrop Rd/I-5 NB Ramps (Intersection #2) degrades to LOS F in the p.m. peak hour, with an increase in average delay of 19.1 seconds.
  - With the recommended improvements described in Section 5.3.1, the intersection is projected to improve to LOS C in the a.m. and p.m. peak hours, with a delay of 20.2 seconds and 34.8 seconds, respectively.

The following two intersections would degrade from acceptable to unacceptable level of service with the addition of project traffic:

- Lathrop Rd-Spartan Way/I-5 SB Ramps (Intersection #3) would degrade from LOS D to LOS E in the a.m. and p.m. peak hour, a *substantial degradation*.
  - With the recommended improvements described in Section 5.3.1, the intersection is projected to improve to LOS D in the a.m. and p.m. peak hours, with a delay of 54.5 seconds and 54.9 seconds, respectively.
- Spartan Way/Golden Valley Pkwy (Intersection #4) would degrade from LOS C to LOS E in the a.m. peak hour and LOS D to LOS F in the p.m. peak hour, a *substantial degradation*.
  - With the recommended improvements described in Section 5.3.1, the intersection is projected to improve to LOS D in the a.m. and p.m. peak hours, with a delay of 48.5 seconds and 52.9 seconds, respectively.

**Baseline plus Project Conditions – Freeway Mainline Level of Service**

Under this scenario, all of the study freeway segments are projected to operate at acceptable levels of service (LOS D or better) during the a.m. and p.m. peak hour.

**Cumulative Conditions – Intersection Level of Service**

Under this scenario, seven of the study intersections are projected to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours.

**Cumulative plus Project Conditions – Intersection Level of Service**

Under this scenario, seven of the study intersections are projected to continue to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours. At the seven intersections operating below jurisdictional standards, added project traffic would either degrade the level of service from acceptable to unacceptable, or increase average delay by more than 5.0 seconds, constituting *substantial inconsistencies* with the City of Lathrop standards.

A fair share analysis was conducted at the Lathrop Road/I-5 interchange and the Roth Road/I-5 interchange. At the Lathrop Road/I-5 interchange, individual intersection fair share percentages range from approximately one percent to six percent (or 5.1 percent overall). At the Roth Road/I-5 interchange, individual intersection fair share percentages range from approximately one percent to nine percent (or 4.5 percent overall).

**VMT Impacts**

The proposed project was evaluated based on guidance from the Governor’s Office of Planning and Research (OPR) and San Joaquin County Transportation Analysis Guidelines. Since the project is not screened out from the maps in the County Guidelines, TJKM inserted the proposed project into the San Joaquin COG 2018 RTP model and performed a base year plus project model run.

The project’s 15.43 daily VMT per employee is lower than the San Joaquin County VMT threshold of 16.2. VMT impacts for the Ashley Furniture Homestore project are found to be **less-than-significant** for the base year, and thus no mitigation is required for VMT impacts attributable to this project.

**Site Access & On-Site Circulation**

The project would be accessed by a total of four driveways. All driveways are full access driveways. Heavy trucks (larger than SU-30) will generally be restricted to only using the northern driveway on Manthey Road and the I-5/Roth Road interchange. Drive aisles for passenger vehicles vary between 26-36 feet wide, while drive aisles for heavy trucks are 60-72 feet wide. Any proposed landscaping should be maintained to provide adequate sight distance. The proposed driveway locations, design, and sight distance are all **adequate**.

The site plan shows all proposed pedestrian facilities on the project frontage and connectivity from Manthey Road to the retail showroom entrance. The project site plan does show four crosswalks connecting the passenger vehicle parking lot to the retail showroom. The site plan shows two bike rack locations, one on the south side of the building and one on the east side. Sidewalks are planned to be provided within the passenger vehicle parking lot and along the eastern frontage of the building. Additionally, it appears that

one sidewalk will front the Intersection #15 entrance (on the north side) that will connect the showroom to Manthey Road. The internal circulation on the project site is considered **adequate**.

**Truck Operations**

The proposed Ashley furniture is proposing to restrict heavy trucks (larger than SU-30) from using the Lathrop Road/I-5 interchange at all times to alleviate potential congestion on those intersections. Instead, trucks will be using the Roth Road/I-5 interchange via Manthey Road to access the Ashley Furniture site via the northernmost driveway only. Only local delivery trucks would be permitted on Dos Reis Boulevard and Golden Valley Parkway. Based on the level of service analysis, additional truck traffic on the Roth Road intersections is not expected to degrade the LOS to unacceptable operations.

**Parking**

Based on City of Lathrop parking requirements, the project is required to provide 893 stalls. Based on the site plan, the project is proposing to provide 942 stalls, satisfying City requirements. The project will provide 1,104 trailer stalls for company operations.

**Pedestrian Impacts**

Pedestrian access to the project site is facilitated by new sidewalks along Dos Reis Road and Manthey Road, and paved walkways within the parking lot and crosswalks. The proposed development project does not conflict with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is **less than significant**.

**Bicycle Impacts**

As shown in **Figure 3**, there are no existing bicycle facilities on De Lima Road, Manthey Road and Dos Reis Road. If the project proposes bicycle facilities, it should show them on future site plans. The project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is **less than significant**.

**Transit Impacts**

The project site is within a 3/4 mile of two San Joaquin RTD bus stops, located on the northwest corner of Lathrop Road/Harlan Road and in front of the Save Mart. Due to the lack of development north of Spartan Way, there are sidewalk gaps from the proposed project site to the bus stops. As development in the area increases, sidewalks should be installed to close the gap in pedestrian facilities. Impacts to transit service are expected to be **less than significant**.

## 1.0 INTRODUCTION

This report summarizes the results of the Traffic Impact Analysis (TIA) for the proposed Ashley Furniture distribution center located north of the Spartan Way and Golden Valley Parkway intersection in the City of Lathrop, California. The location is northwest of the I-5/Lathrop Road interchange.

### 1.1 PROJECT DESCRIPTION

The project proposes to develop a 1.5+ million square foot building to serve as a distribution center and retail facility. The development is strategically located near the I-5/Lathrop Road interchange, although heavy trucks will be restricted to only using the I-5/Roth Road interchange to the north. The project will include various driveways to serve as entry points for passenger vehicles and heavy trucks. The project also proposes to construct a roundabout at the intersection of Golden Valley Parkway/Dos Reis Road.

The following section discusses the TIA's purpose, study intersections, and analysis scenarios.

### 1.2 PROJECT PURPOSE

The purpose of the Traffic Impact Analysis is to evaluate the impacts on the transportation infrastructure due to the addition of the traffic from the proposed project. The report also includes evaluations and recommendations concerning project site access and on-site circulation for vehicles, bicycles, and pedestrians, queuing analysis at the study intersections, and parking supply.

### 1.3 OTHER ANALYSES

The City of Lathrop has recently updated its General Plan. The Lathrop City Council voted to adopt the General Plan Update and certify the Final Environmental Impact Report (FEIR) on September 19, 2022.

### 1.4 STUDY AREA

The study area is located within the city limits of Lathrop, within the Central Lathrop Specific Plan Phase 2 area. The impacts of the proposed project were evaluated for the intersections discussed below.

#### 1.4.1 Study Intersections

TJKM evaluated traffic conditions at 14 study intersections during the a.m. and p.m. peak hours for a typical weekday. The study intersections were selected in consultation with the City of Lathrop staff. The peak periods in the City of Lathrop are between 6-9 a.m. and 3-6 p.m. The study intersections and associated traffic controls are as follows:

1. Lathrop Rd/Harlan Rd (Signal)
2. Lathrop Rd/I-5 NB Ramps\* (Signal)
3. Lathrop Rd-Spartan Way/I-5 SB Ramps\* (Signal)
4. Spartan Way/Golden Valley Pkwy (Signal)
5. Manthey Rd/De Lima Rd (One-Way Stop)
6. Manthey Rd/Dos Reis Rd (One-Way Stop)
7. Golden Valley Rd/Dos Reis Rd (Intersection does not currently exist)
8. Manthey Rd/Roth Rd (One-Way Stop)
9. Roth Rd/I-5 SB Ramps\* (One-Way Stop)



10. Roth Rd/I-5 NB Ramps\* (One-Way Stop)
11. Roth Rd/Harlan Rd (All-Way Stop)
12. Dos Reis Rd/Ashley Driveway #1 (One-Way Stop)
14. Manthey Rd/Ashley Driveway #3 (One-Way Stop)
15. Manthey Rd/Ashley Driveway #4 (One-Way Stop)

Notes:

*(\*) indicates that a intersection is owned and operated by Caltrans*

*In a previous version of this TIA, there were 16 study intersections. Intersections #13 (Manthey Rd/Ashley Driveway #2) and #16 (De Lima Rd/Ashley Truck Driveway) have been removed as per the latest plan update.*

**Figure 1** illustrates the study intersections and the vicinity map of the proposed project. **Figure 2** shows the proposed project site plan, dated March 29, 2023.

#### **1.4.2 Study Freeway Segments**

TJKM also evaluated freeway mainline operations for the a.m. and p.m. peak hours for a typical weekday. The following freeway segments were selected in consultation with the City of Lathrop staff:

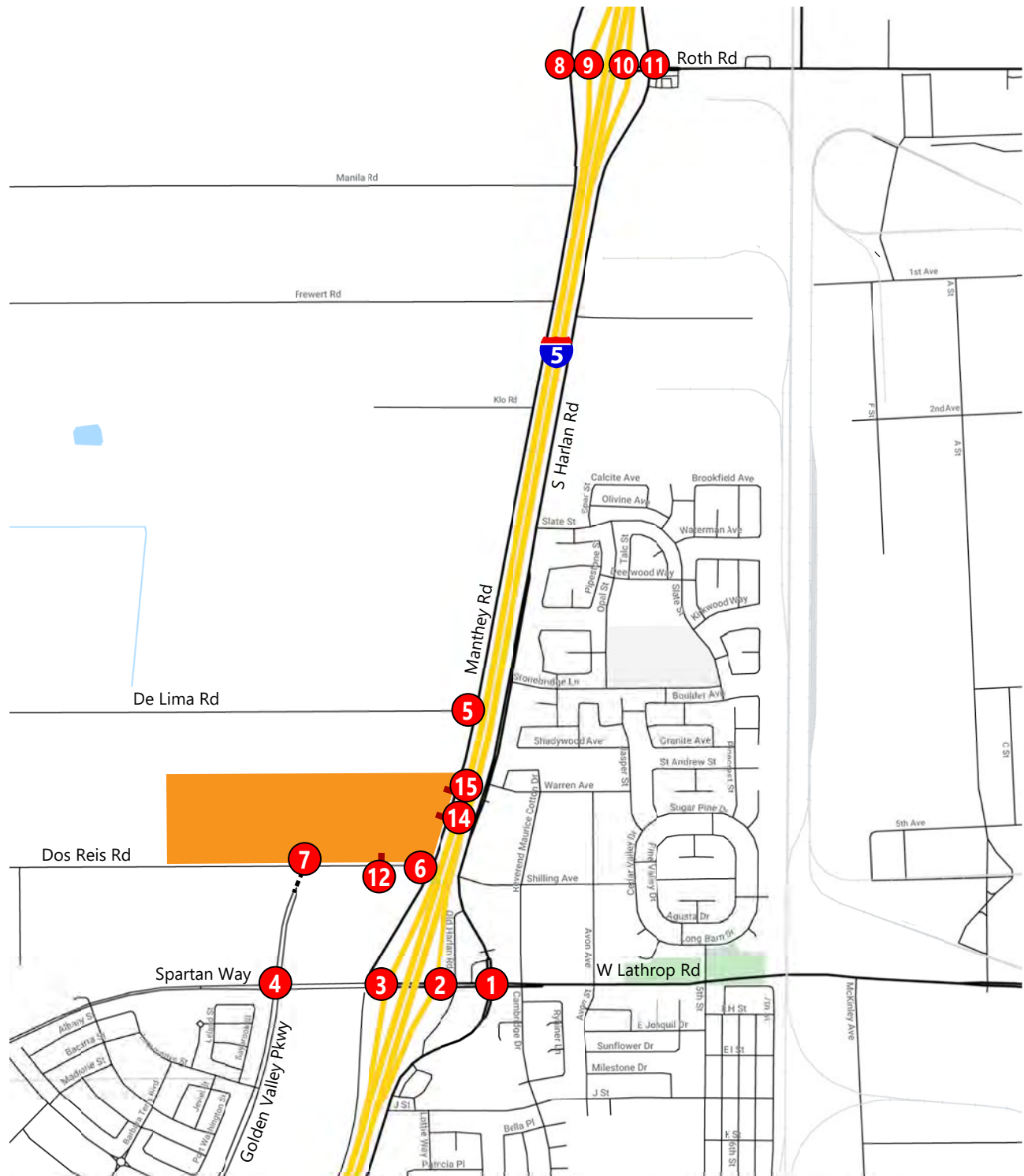
1. Interstate 5, north of Roth Road (northbound and southbound directions)
2. Interstate 5, between Roth Road and Lathrop Road (northbound and southbound directions)
3. Interstate 5, south of Lathrop Road (northbound and southbound directions)

### **1.5 ANALYSIS SCENARIOS**

This study addresses the following five traffic scenarios:

- Existing Conditions;
- Existing plus Approved Projects (Baseline);
- Baseline plus Ashley Furniture Project;
- Cumulative Conditions; and
- Cumulative plus Ashely Furniture Project.

Figure 1: Vicinity Map

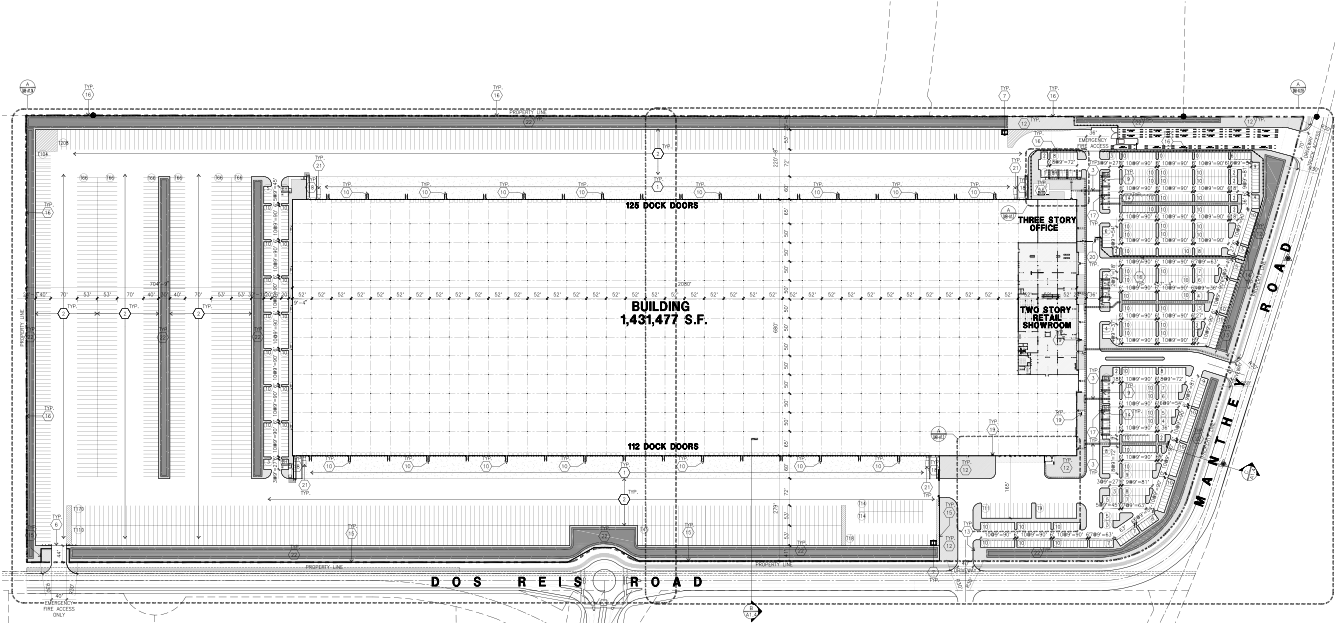


LEGEND

- Project Site
- Project Driveway
- X Study Intersection
- Future Road



Figure 2: Site Plan



## 2.0 STUDY METHODOLOGY

Traffic impacts related to the proposed project were evaluated for both compliance with applicable regulatory documents and environmental significance as defined in the California Environmental Quality Act (CEQA). In accordance with the *Technical Advisory* published by the Governor's Office of Planning and Research (OPR), a qualitative VMT analysis forms the basis of the CEQA analysis for the proposed project. As of July 1, 2020, intersection level of service (LOS) can no longer be used to determine significant impacts for CEQA purposes. The City of Lathrop adopted VMT thresholds and screening criteria on September 14, 2020.

### 2.1 VEHICLE MILES TRAVELED

This study includes a quantitative analysis of VMT generated by the proposed project. SB 743 is intended to reduce greenhouse gas emissions and particulates, encourage infill development and a diversity of uses instead of sprawl; and promote multi-modal transportation networks.

The San Joaquin COG 2018 RTP Model was used to evaluate changes in VMT due to land use developments. For the purposes of this study, the screening guidelines and significance thresholds that are contained in the City's VMT guidelines are utilized. If a project does not meet any screening criteria, the draft guidelines specify use of the San Joaquin COG RTP Travel Demand Model to identify the appropriate project VMT.

#### City of Lathrop Screening Criteria

The adopted guidelines include the following screening criteria for identifying projects that can be presumed to have a less-than-significant impact:

- Small projects;
- Projects located in low VMT areas;
- Projects in proximity to a major transit stop;
- Affordable housing
- Local serving retail; and
- Transportation projects

#### Significance Standards

The state of California provides lead agencies latitude in adopting standards of significance for evaluating VMT impacts associated with land use projects. For this project, the San Joaquin County Transportation Analysis Guidelines were used to analyze the proposed project since the City of Lathrop VMT guidelines do not specify VMT thresholds.

### 2.2 LEVEL OF SERVICE ANALYSIS METHODOLOGY

Level of Service (LOS) is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The LOS generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience and safety. The operational LOS are given letter designations from A to F, with A representing the free-flow operating conditions and F representing the severely congested flow with high delays.

Typically, LOS C is considered as an ideal condition as it represents stable flow and efficient use of the transportation facility. Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets. The following sections provide detailed study methodology based on the type of intersections.

**Signalized Intersections**

The study intersections under traffic signal control were analyzed using the Highway Capacity Manual (HCM 6<sup>th</sup> Edition) methodology for signalized intersections described in Chapter 19. This methodology determines LOS based on average control delay per vehicle for the overall intersection during peak hour intersection operating conditions. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 1** summarizes the relationship between the control delay and LOS for signalized intersections. The LOS assessment under all scenarios is based on current traffic controls and optimized signal timing unless otherwise noted. The LOS methodology for Signalized intersections is described in detail in **Appendix A**.

**Table 1: Level of Service Definitions for Signalized Intersections**

<i>Level of Service</i>	<i>Description</i>
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: Highway Capacity Manual 6<sup>th</sup> Edition

**Stop-Controlled Intersections**

The study intersections under one/two-way stop control and all-way stop control were analyzed using the HCM 6<sup>th</sup> Edition Operations Methodology described in Chapter 20 and 21, respectively. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At one- or two-way stop controlled intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The weighted average delay for the entire intersections is presented for all-way stop controlled intersections. **Table 2** summarizes the relationship between delay and LOS for stop-controlled intersections. The delay ranges for unsignalized intersections are lower than for signalized intersections, as drivers expect less delay at stop-controlled intersections.

Each of the study intersections was analyzed using *Synchro* software and HCM 6<sup>th</sup> Edition. The LOS assessment under all scenarios is based on current traffic controls unless otherwise noted. The LOS methodology for stop-controlled intersections is described in detail in **Appendix A**.

**Table 2: Level of Service Definitions for Stop Controlled Intersections**

<i>Level of Service</i>	<i>Description</i>
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: Highway Capacity Manual 6<sup>th</sup> Edition

**2.3 LEVEL OF SERVICE STANDARDS**

Although level of service is no longer used for identifying impacts under CEQA, level of service analysis is still used for determining consistency with adopted agency plans and standards. Where standards refer to significant environmental impacts, this analysis instead identifies these as significant inconsistencies with adopted plans.

**Signalized and Stop Controlled Intersections**

The City of Lathrop LOS standard is LOS D. Intersections that are expected to operate below LOS D are considered as impacted and should be considered for improvement.

While the City of Lathrop does not have specific impact criteria for intersections, a project impact would be considered substantial if:

- The project traffic added to existing conditions would result in the level of service deteriorating below the City standard. The City’s current level of service standard is LOS D.
- For intersections that already operate at unacceptable levels of service (E or F), project impacts can be considered substantial if the project trips result in an increase in delay by 5.0 seconds or more.

**Caltrans Facilities**

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on all State highway facilities. Based on standard industry practice, the project is considered to trigger a substantial impact to Caltrans Facilities if the project would:

- Result in a facility that will operate at an acceptable LOS in the base (pre-project or no project) condition to deteriorate to unacceptable LOS in the “Plus Project” condition; or
- Project traffic increases the density by five percent or more at a facility that will operate at an unacceptable LOS in the base (pre-project or no project) condition.

**Table 3** summarizes the HCM 6<sup>th</sup> Edition LOS criteria for basic freeway segments. *Highway Capacity Software* (HCS7) was used to calculate the level of service along freeway segments for all scenarios. For this analysis, LOS D is the acceptable threshold.

**Table 3: LOS Criteria for Basic Freeway Segments**

<i>Freeway Facility LOS</i>	<i>Freeway Facility Density (pc/mi/ln)</i>
A	≤11
B	>11-18
C	>18-26
D	>26-35
E	>35-45
F	>45 or v/c > 1.0

Source: HCM 6<sup>th</sup> Edition

## 3.0 EXISTING CONDITIONS

This section describes existing conditions in the immediate project site vicinity, including roadway facilities, bicycle and pedestrian facilities, and available transit service. In addition, existing traffic volumes and operations are presented for the study intersections, including the results of LOS calculations.

### 3.1 EXISTING SETTING AND ROADWAY SYSTEM

Access to the proposed project is provided via Lathrop Road/Spartan Way, Manthey Road, Golden Valley Parkway, Dos Reis Road and De Lima Road.

**Lathrop Road/Spartan Way** is primarily a four to six lane divided arterial from its western terminus at Barbara Terry Boulevard and its eastern terminus at Austin Road in Manteca. In the project vicinity, the majority of land uses will be primarily single family homes and educational facilities. The posted speed limit on Lathrop Road/Spartan Way is 35 miles per hour (mph).

**Manthey Road** is primarily a two lane undivided, rural road from Lathrop Road/Spartan Way to Carolyn Weston Boulevard in south Stockton. In the immediate project vicinity, the majority of land uses are open space/agricultural with a few single family home along the roadway. The posted speed limit ranges from 40-45 mph.

**Golden Valley Parkway** is primarily a six lane divided arterial from Spartan Way to its southern terminus at Brookhurst Boulevard. Golden Valley Parkway will primarily serve as the primary north-south arterial for residents in Central Lathrop. While much of the land surrounding Golden Valley Parkway is undeveloped, Golden Valley Parkway provides access to single family homes and Lathrop Marketplace. In the project vicinity, the posted speed limit is 45 mph.

**Dos Reis Road** is a two lane rural road from Manthey Road to its western terminus at the San Joaquin River. Dos Reis Road will provide access driveways to the proposed project. Most of the land uses are open space/agriculture. However, there is access to the athletic facilities of Lathrop High School. The speed limit on Dos Reis Road is 35 mph.

**De Lima Road** is a two lane rural road from Manthey Road to its western terminus at the San Joaquin River. De Lima Road will also provide access driveways to the proposed project. The land uses surrounded De Lima Road are mostly open space and agricultural. The speed limit along De Lima Road is 35 mph.



### 3.2 EXISTING PEDESTRIAN FACILITIES

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal “walkable” community includes wide sidewalks, a mix of land uses such as residential, employment, and shopping opportunities, a limited number of conflict points with vehicle traffic, easy access to transit facilities and services and a network of pedestrian facilities.

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access the destinations such as institutions, businesses, public transportation, and recreation facilities.

Near the proposed project site, the approximate width of the sidewalk is eight feet. This sidewalk width applies to segments of Spartan Way. There are currently no sidewalks along Golden Valley Parkway (north of Spartan Way), Dos Reis Road, Manthey Road, and De Lima Road. The project proposes to develop sidewalks along Dos Reis Road and the west side of Manthey Road.

The signalized intersections provide marked crosswalks and pedestrian push buttons and signal heads.

The existing pedestrian facilities in the study area are shown in **Figure 3**.

### 3.3 EXISTING BICYCLE FACILITIES

The 1995 City of Lathrop Bicycle Transportation Plan outlines policies and objectives to improve the current active bicycle facilities. The various bicycle facilities are described below. Existing bicycle facilities are illustrated in **Figure 3**.

- **Class I Bikeways (Bike Paths or Shared-Use Path):** Class I Bikeways provides a completely separated right of way for bicycles and pedestrians with minimal crossflow by motorized vehicles. Bike paths provide a recreational opportunity or can serve as commute routes. In the project area, there are no Class I facilities.
- **Class II Bike Lanes:** Class II bike lanes are striped bike lanes immediately adjacent to a traffic lane. Bike lanes provide a separate pavement area from vehicular traffic and improve conditions for bicycles on roadways. In the project vicinity, Class II Bike Lanes are provided on Lathrop Road and Harlan Road.
- **Class III Bike Routes:** Class III Bike Routes provide shared use of the roadway, designated by signs or permanent markings and shared with other vehicular traffic. There are no Class III Bike Routes in the project vicinity.
- **Class IV Separated Bikeways or Cycle Tracks:** Cycle tracks are separated bikeways for the exclusive use of bicycles. Cycle tracks are usually located along the roadway, but require separation from the vehicular travel lane in the form of grade separation, planters, flexible posts, or on-street parking. There are no Class IV bikeways in the project vicinity.

### 3.4 EXISTING TRANSIT FACILITIES

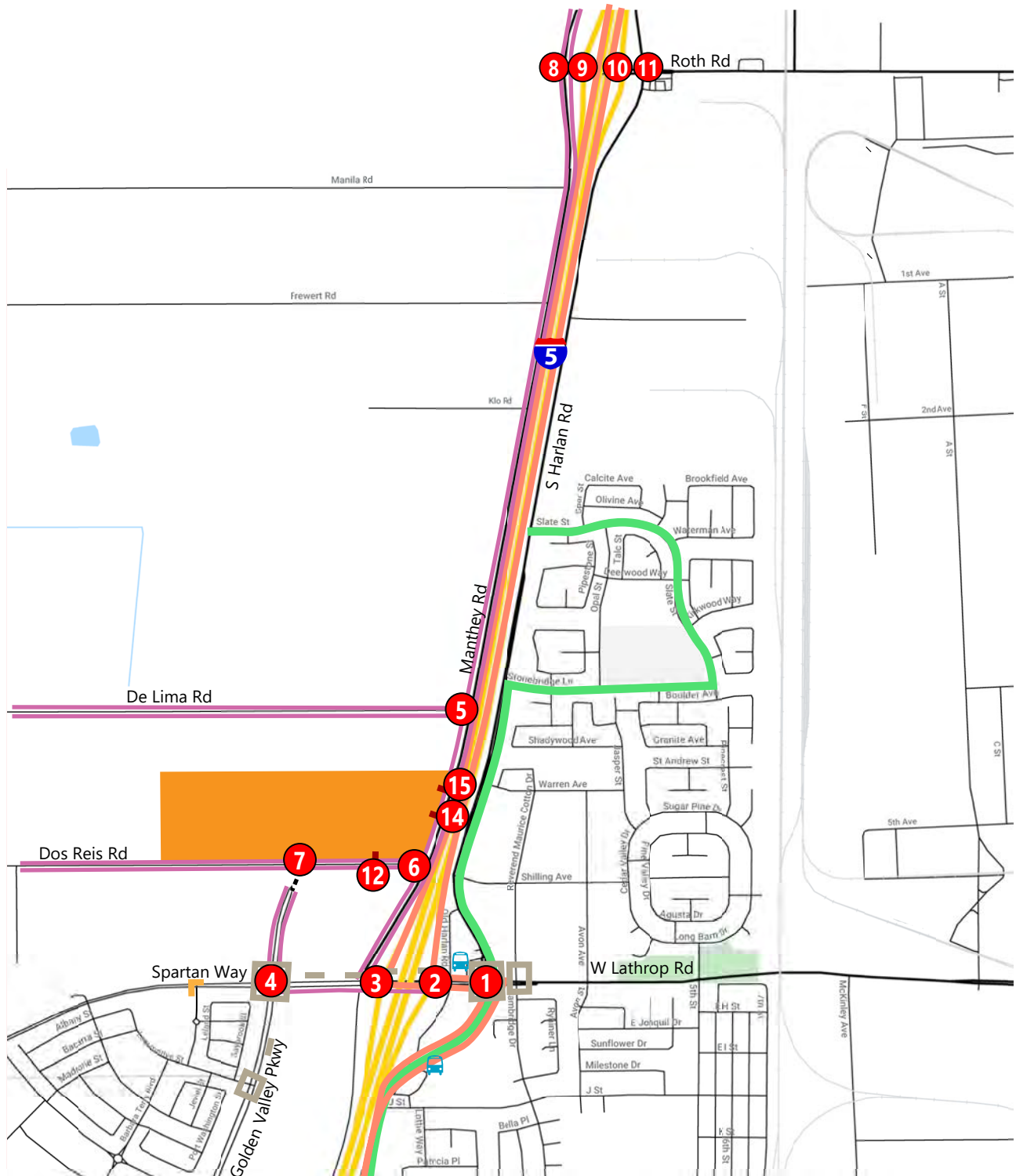
San Joaquin Regional Transit District (RTD) provides transit service throughout the San Joaquin County. **Table 4** summarizes the existing San Joaquin RTD Transit service and **Figure 3** illustrates the existing transit facilities in the study area.

**Table 4: Existing San Joaquin RTD Transit Service**

<i>Route</i>	<i>From</i>	<i>To</i>	<i>Weekdays</i>		<i>Weekends</i>	
			<i>Operating Hours</i>	<i>Headway (hours)</i>	<i>Operating Hours</i>	<i>Headway (minutes)</i>
90	Tracy Transit Station	Stockton Downtown Transit Center	9:20 a.m. – 5:11 p.m.	6	N/A	N/A

Source: San Joaquin RTD Transit Website

Figure 3: Existing Pedestrian, Bicycle, and Transit Facilities



LEGEND

- Project Site
- Project Driveway
- Class II Bike Lane
- Sidewalk Gap
- Study Intersection
- Future Road
- Route 90
- Striped Crosswalk
- Bus Stop
- Striped School Crosswalk

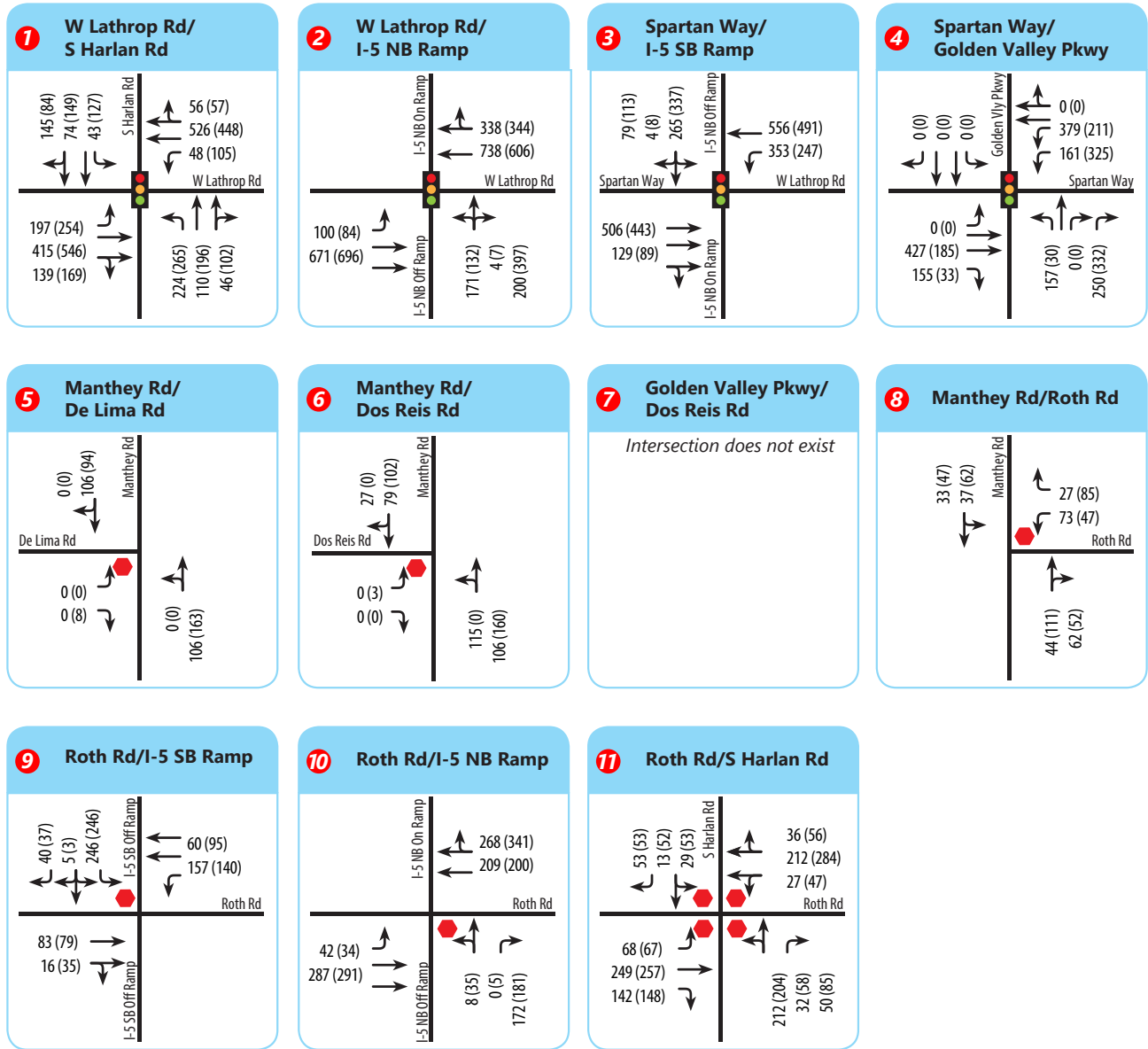


### 3.5 EXISTING PEAK HOUR TRAFFIC VOLUMES AND LANE CONFIGURATIONS

The existing operations of the study intersections were evaluated for the highest one-hour volumes during weekday morning and evening peak periods. Due to COVID-19 conditions, the ability to collect accurate new traffic counts is limited. The City of Lathrop approved the use of the projected 2020 intersection turning movement counts from the *2018 Traffic Monitoring Program for The City of Lathrop* for the existing conditions scenario. 2020 freeway mainline volumes were obtained from Caltrans Performance Measurement System (PeMS).

**Figure 4** illustrates the existing lane geometry, traffic controls, and volumes at the study intersections. **Figure 5** illustrates the existing a.m. and p.m. peak hour freeway mainline volumes.

Figure 4: Existing Lane Geometry, Traffic Controls, and Volumes



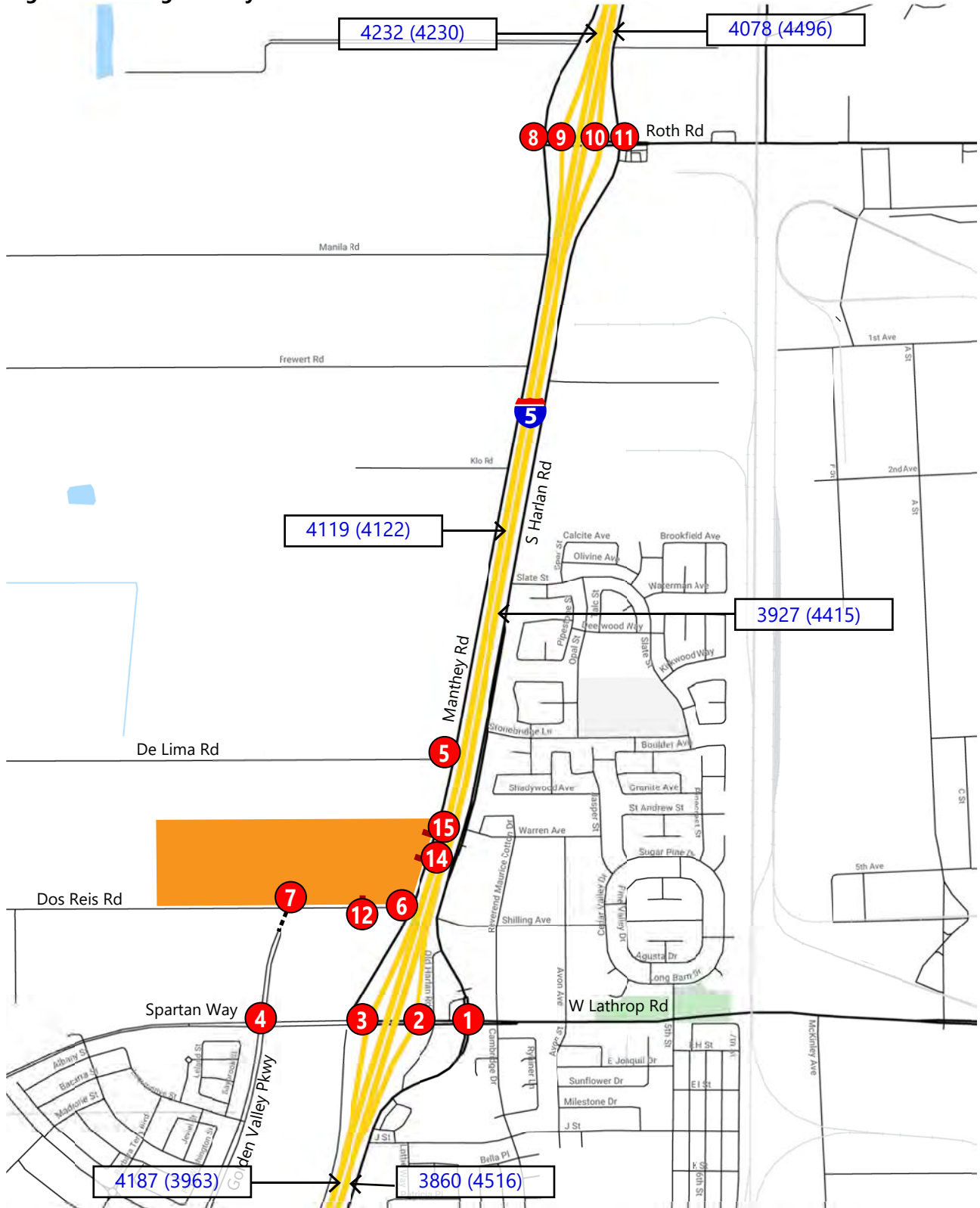
LEGEND

xx AM Peak Hour Volume  
 (xx) PM Peak Hour Volume

● Stop Sign  
 🚦 Traffic Signal



Figure 5: Existing Freeway Mainline Volumes



LEGEND

- Project Site
- Project Driveway
- Future Road
- Study Intersection
- xxxx AM Volume
- (xxxx) PM Volume



3.6 INTERSECTION LEVEL OF SERVICE ANALYSIS – EXISTING CONDITIONS

Existing intersection lane configurations and turning movement volumes are used to calculate the level of service for the study intersections during each peak hour. Existing signal timings at the signalized study intersections were used. The results of the level of service analysis using the Synchro software program for Existing Conditions are summarized in **Table 5**. LOS worksheets are provided in **Appendix B**.

Under this scenario, all of the study intersections operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour.

**Table 5: Intersection Level of Service Analysis – Existing Conditions**

#	Intersection	Control	Peak Hour <sup>1</sup>	Existing Conditions Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	30.6	C
			PM	40.0	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	23.9	C
			PM	26.5	C
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	29.7	C
			PM	17.3	B
4	Spartan Way/Golden Valley Parkway	Signal	AM	15.5	B
			PM	13.8	B
5	Manthey Rd/De Lima Rd	One-Way	AM	0.0	A
		Stop	PM	8.8	A
6	Manthey Rd/Dos Reis Rd	One-Way	AM	7.7	A
		Stop	PM	10.1	B
7	Golden Valley Rd/Dos Reis Rd	-	AM	N/A	N/A
			PM	N/A	N/A
8	Manthey Rd/Roth Rd	One-Way	AM	11.0	B
		Stop	PM	11.7	B
9	Roth Rd/I-5 SB Ramps	One-Way	AM	18.4	C
		Stop	PM	19.1	C
10	Roth Rd/I-5 NB Ramps	One-Way	AM	13.0	B
		Stop	PM	13.4	B
11	Roth Rd/Harlan Rd	All-Way	AM	16.5	C
		Stop	PM	21.1	C
12	Dos Reis Rd/Ashley Dwy #1	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
14	Manthey Rd/Ashley Dwy #3	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
15	Manthey Rd/Ashley Dwy #4	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A

Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable LOS and Delay.

3.7 FREEWAY MAINLINE LEVEL OF SERVICE – EXISTING CONDITIONS

The results of the freeway mainline segments level of service along Interstate 5 is summarized in **Table 6**. HCS7 freeway segment reports are attached in **Appendix C**. Under Existing Conditions, all freeway mainline segments operate at LOS D or better during both peak hours.

**Table 6: Freeway Segment Level of Service Analysis – Existing Conditions**

#	Segment Name	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-5 Northbound					
1	North of Roth Rd	24.4	C	26.6	D
2	Between Roth Rd and Lathrop Rd	24.0	C	27.5	D
3	South of Lathrop Rd	23.1	C	27.5	D
I-5 Southbound					
1	North of Roth Rd	25.4	C	25.9	C
2	Between Roth Rd and Lathrop Rd	24.2	C	23.8	C
3	South of Lathrop Rd	25.4	C	24.9	C



## 4.0 BASELINE CONDITIONS

This section presents the results of the level of service calculations under Baseline Conditions without the project. Level of service analysis at the study intersections were conducted for Baseline Conditions to establish a baseline to evaluate the impacts due to the addition of traffic from the proposed project. Baseline volumes for the study intersections were referenced from the *2018 Traffic Monitoring Program for The City of Lathrop*. The expected growth in the City of Lathrop between the year 2020 and the year 2022 includes:

- 1,210 new single family residences
- 2,790,350 additional square feet of warehouse/distribution facilities
- 196 hotel rooms
- 326,195 additional square feet of commercial uses

Figure 6 illustrates the Baseline Conditions intersection volumes.

### 4.1 INTERSECTION LEVEL OF SERVICE ANALYSIS – BASELINE CONDITIONS

The intersection LOS analysis results for Baseline Conditions are summarized in **Table 7**. Detailed calculation sheets for Baseline Conditions are contained in **Appendix D**.

All of the study intersections are projected to operate within the applicable jurisdictional standards during the a.m. and p.m. peak hour except for Lathrop Rd/I-5 NB Ramps during the p.m. peak hour, which is projected to operate at LOS E.

**Table 7: Intersection Level of Service – Baseline Conditions**

#	Intersection	Control	Peak Hour <sup>1</sup>	Baseline Conditions Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	32.5	C
			PM	53.5	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	40.4	D
			PM	<b>70.4</b>	<b>E</b>
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	48.3	D
			PM	44.3	D
4	Spartan Way/Golden Valley Parkway	Signal	AM	31.0	C
			PM	37.8	D
5	Manthey Rd/De Lima Rd	One-Way Stop	AM	0.0	A
			PM	9.7	A
6	Manthey Rd/Dos Reis Rd	One-Way Stop	AM	10.7	B
			PM	13.0	B
7	Golden Valley Rd/Dos Reis Rd	-	AM	9.3	A
			PM	16.3	C
8	Manthey Rd/Roth Rd	One-Way Stop	AM	11.1	B
			PM	13.4	B
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM	17.8	C
			PM	19.9	C
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM	10.8	B
			PM	11.4	B
11	Roth Rd/Harlan Rd	All-Way Stop	AM	19.0	C
			PM	24.7	C

#	Intersection	Control	Peak Hour <sup>1</sup>	Baseline Conditions	
				Delay <sup>2</sup>	LOS <sup>3</sup>
12	Dos Reis Rd/Ashley Dwy #1	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
14	Manthey Rd/Ashley Dwy #3	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
15	Manthey Rd/Ashley Dwy #4	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A

Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable LOS and Delay.

#### 4.2 FREEWAY MAINLINE LEVEL OF SERVICE – BASELINE CONDITIONS

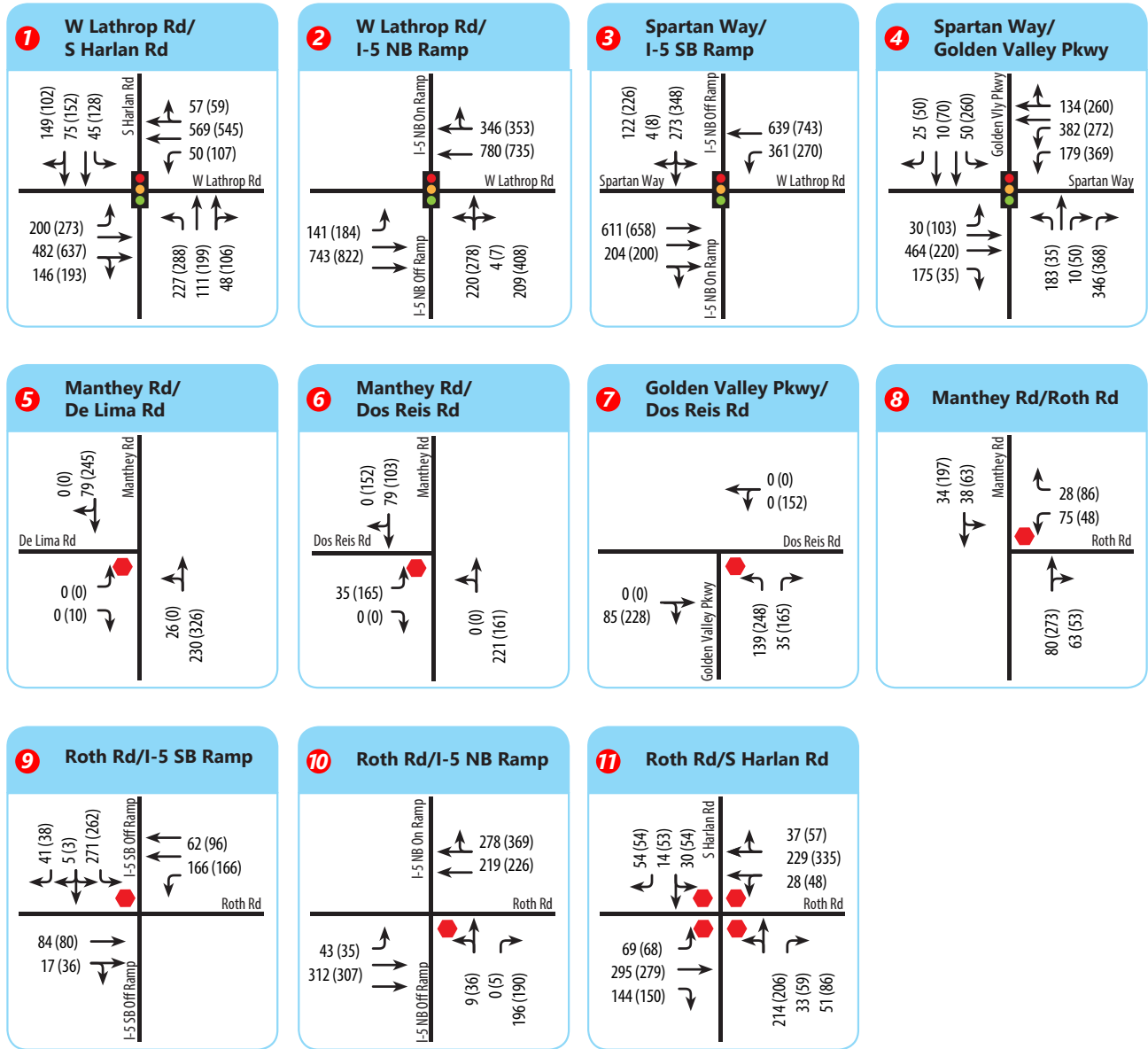
To project the freeway volumes for Baseline Conditions, TJKM used the San Joaquin Council of Governments (SJCOG) Travel Demand Model to develop a.m. and p.m. peak hour growth rates along Interstate 5 in the project vicinity. The growth rates were applied to Existing mainline volumes to project Baseline Conditions. **Figure 7** illustrates the freeway mainline volumes for Baseline Conditions.

The results of the freeway mainline segments levels of service along Interstate 5 are summarized in **Table 8**. HCS7 freeway segment reports are attached in **Appendix E**. Under Baseline Conditions, all freeway mainline segments operate at LOS D or better during both peak hours.

**Table 8: Freeway Segment Level of Service Analysis – Baseline Conditions**

#	Segment Name	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-5 Northbound					
1	North of Roth Rd	25.3	C	27.3	D
2	Between Roth Rd and Lathrop Rd	25.0	C	28.2	D
3	South of Lathrop Rd	24.0	C	28.3	D
I-5 Southbound					
1	North of Roth Rd	26.5	D	26.6	D
2	Between Roth Rd and Lathrop Rd	25.1	C	24.4	C
3	South of Lathrop Rd	26.4	D	25.6	C

Figure 6: Baseline Conditions Lane Geometry, Traffic Controls, and Volumes

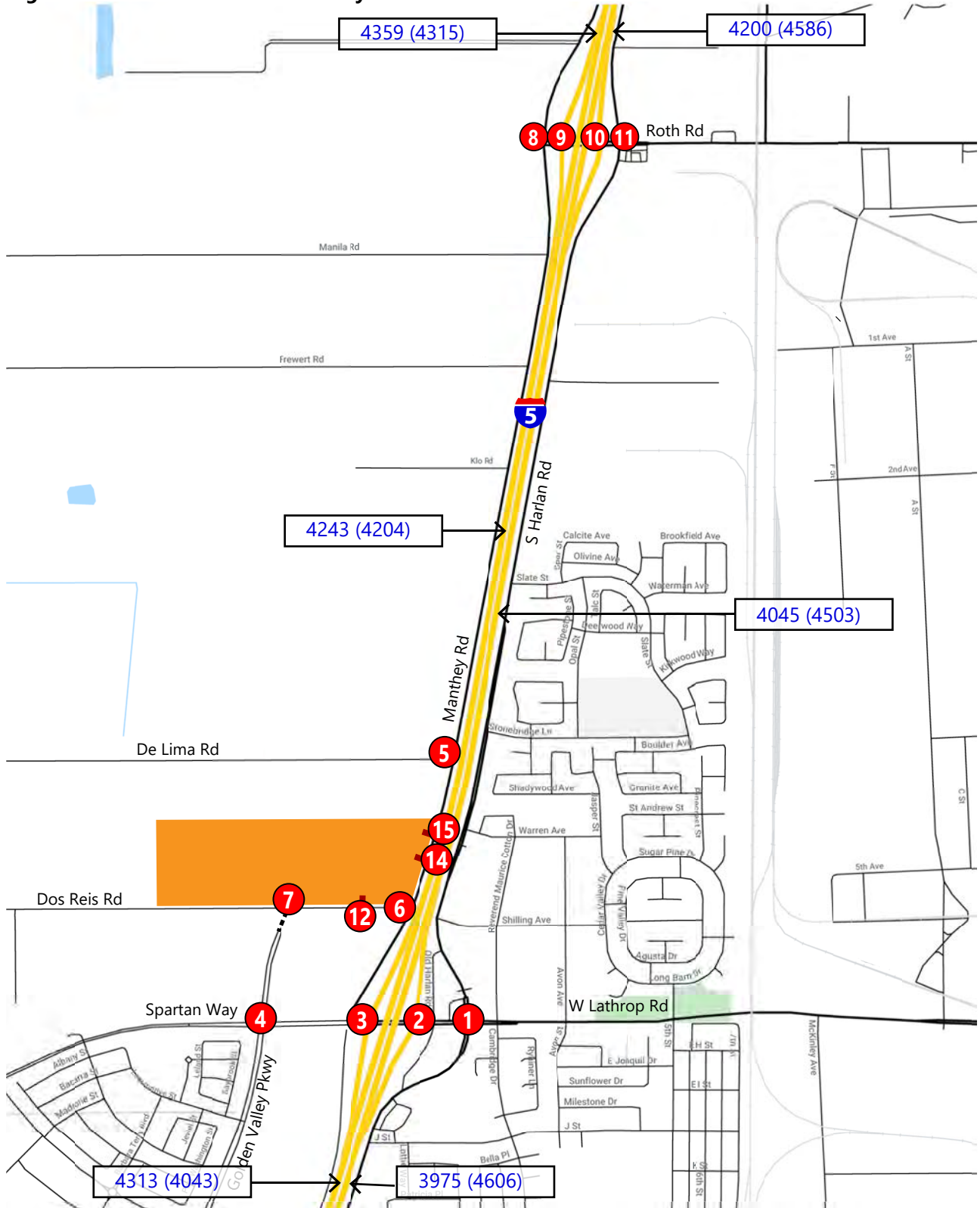


LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal



Figure 7: Baseline Conditions Freeway Mainline Volumes



LEGEND

- Project Site
- Project Driveway
- Future Road
- x Study Intersection
- xxxx AM Volume
- (xxxx) PM Volume



## 5.0 BASELINE PLUS PROJECT CONDITIONS

This section describes the operational impacts of the proposed project on the transportation system in the immediate project site vicinity. Baseline plus Project Conditions consist of baseline traffic volumes and roadway facilities, plus new traffic generated by the proposed project.

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process.

- Trip Generation – Estimates the amount of traffic added to the roadway network,
- Trip Distribution – Estimates the direction of travel to and from the project site,
- Trip Assignment – The new trips are assigned to specific street segments and intersection turning movements.

### 5.1 PROJECT TRIP GENERATION

To determine the amount of peak hour and daily trips generated by the Ashley Furniture Homestore, 24 hour driveway counts were conducted at an existing Ashley Furniture facility located at 18290 S. Harlan Road in Lathrop. The two driveways are exclusively used by customers, employees, and delivery trucks of the Ashley furniture facility. **Appendix F** contains the traffic data collection sheets. **Tables 9** and **10** summarize the trips by passenger vehicles/heavy trucks and the inbound/outbound splits for the existing Ashley facility, respectively.

**Table 9: Driveway Counts Summary**

<i>Time Period</i>	<i>Cars</i>			<i>Heavy Trucks</i>		
	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
AM Peak Hour	43	28	71	5	28	33
PM Peak Hour	38	51	89	11	5	16
Daily	488	491	979	122	116	238

**Table 10: Driveway Inbound/Outbound Splits**

<i>Time Period</i>	<i>Cars</i>		<i>Trucks</i>	
	<i>In</i>	<i>Out</i>	<i>In</i>	<i>Out</i>
AM Peak Hour	61%	39%	15%	85%
PM Peak Hour	43%	57%	69%	31%
Daily	50%	50%	51%	49%

The approximate square footage of the existing Ashley facility is 525,000 square foot. With this information and data collection, approximate trip rates were developed for passenger vehicles and heavy trucks. **Table 11** summarizes the daily, a.m. peak hour, and p.m. peak hour trip rates for passenger vehicles. **Table 12** summarizes the daily a.m. peak hour, and p.m. peak hour trip rates for heavy trucks.

**Table 11: Passenger Vehicle Trip Rates**

<i>Time Period</i>	<i>Rate (Trips/1000 s.f.)</i>
Daily Passenger Vehicles	1.865
AM Peak Hour Passenger Vehicles	0.135
PM Peak Hour Passenger Vehicles	0.170

**Table 12: Heavy Vehicle Trip Rates**

<i>Time Period</i>	<i>Rate (Trips/1000 s.f.)</i>
Daily Heavy Trucks	0.453
AM Peak Hour Heavy Trucks	0.063
PM Peak Hour Heavy Trucks	0.030

The proposed Ashley Furniture is projected to generate 2,798 daily passenger vehicles, 203 a.m. peak hour passenger vehicles, and 255 p.m. peak hour passenger vehicles. The proposed Ashley Furniture is projected to generate 680 daily heavy trucks, 95 a.m. peak hour trucks, and 45 p.m. peak hour trucks. It should be noted that the current plan is to restrict heavy truck operations by requiring trucks to use the Roth Road interchange at all times. **Table 13** and **Table 14** summarizes the trip generation for passenger vehicles and heavy trucks, respectively.

**Table 13: Project Trip Generation for Passenger Vehicles**

	Size	Daily		A.M. Peak				P.M. Peak					
		Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
<b>Proposed Uses</b>													
Ashley Furniture	1,500 ksf	1.87	2,798	0.135	61:39	124	79	203	0.170	43:57	110	145	255
<b>Net Trips</b>			<b>2,798</b>			<b>124</b>	<b>79</b>	<b>203</b>			<b>110</b>	<b>145</b>	<b>255</b>

**Table 14: Project Trip Generation for Heavy Trucks**

Land Use	Size	Daily		A.M. Peak				P.M. Peak					
		Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
<b>Proposed Uses</b>													
Ashley Furniture	1,500 ksf	0.453	680	0.063	15:85	14	81	95	0.030	69:31	31	14	45
<b>Net Trips</b>			<b>680</b>			<b>14</b>	<b>81</b>	<b>95</b>			<b>31</b>	<b>14</b>	<b>45</b>

## 5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution is a process of developing study assumptions that estimates the direction vehicular trips will arrive and depart the study site. Trip assignment estimates specific streets and turning movements at study intersections for project-related or site traffic. Trip distribution assumptions for the proposed project are developed based existing travel patterns and knowledge of the study area. **Figure 8** and **Figure 9** illustrate the trip distribution and trip assignment for passenger vehicles, respectively. **Figure 10** and **Figure 11** illustrate the trip distribution and trip assignment for heavy trucks, respectively.

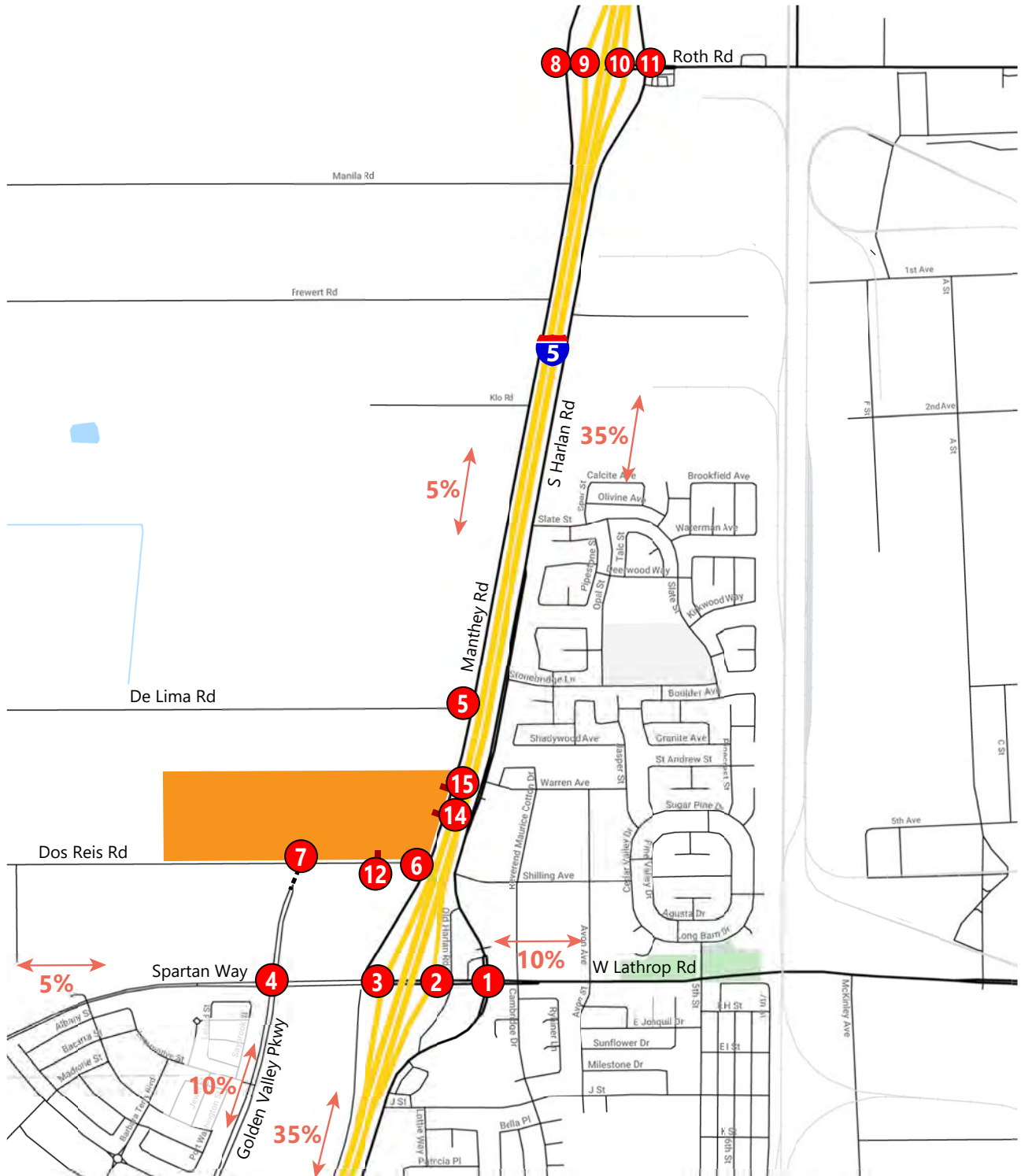
Trip distribution for passenger vehicles is as follows:

- 35 percent to/from Interstate 5, south of Lathrop Road;
- 35 percent to/from Interstate 5 north of Lathrop Road;
- 10 percent to/from Lathrop Road, east of Interstate 5;
- 10 percent to/from Golden Valley Parkway, south of Spartan Way;
- 5 percent to/from Spartan Way, west of Golden Valley Parkway; and
- 5 percent to/from Manthey Road, north of project site.

Trip distribution for heavy trucks is as follows:

- 45 percent to/from Interstate 5, north of Roth Road;
- 45 percent to/from Interstate 5, south of Roth Road; and
- 10 percent to/from Roth Road, east of Interstate 5.

Figure 8: Passenger Vehicle Project Trip Distribution



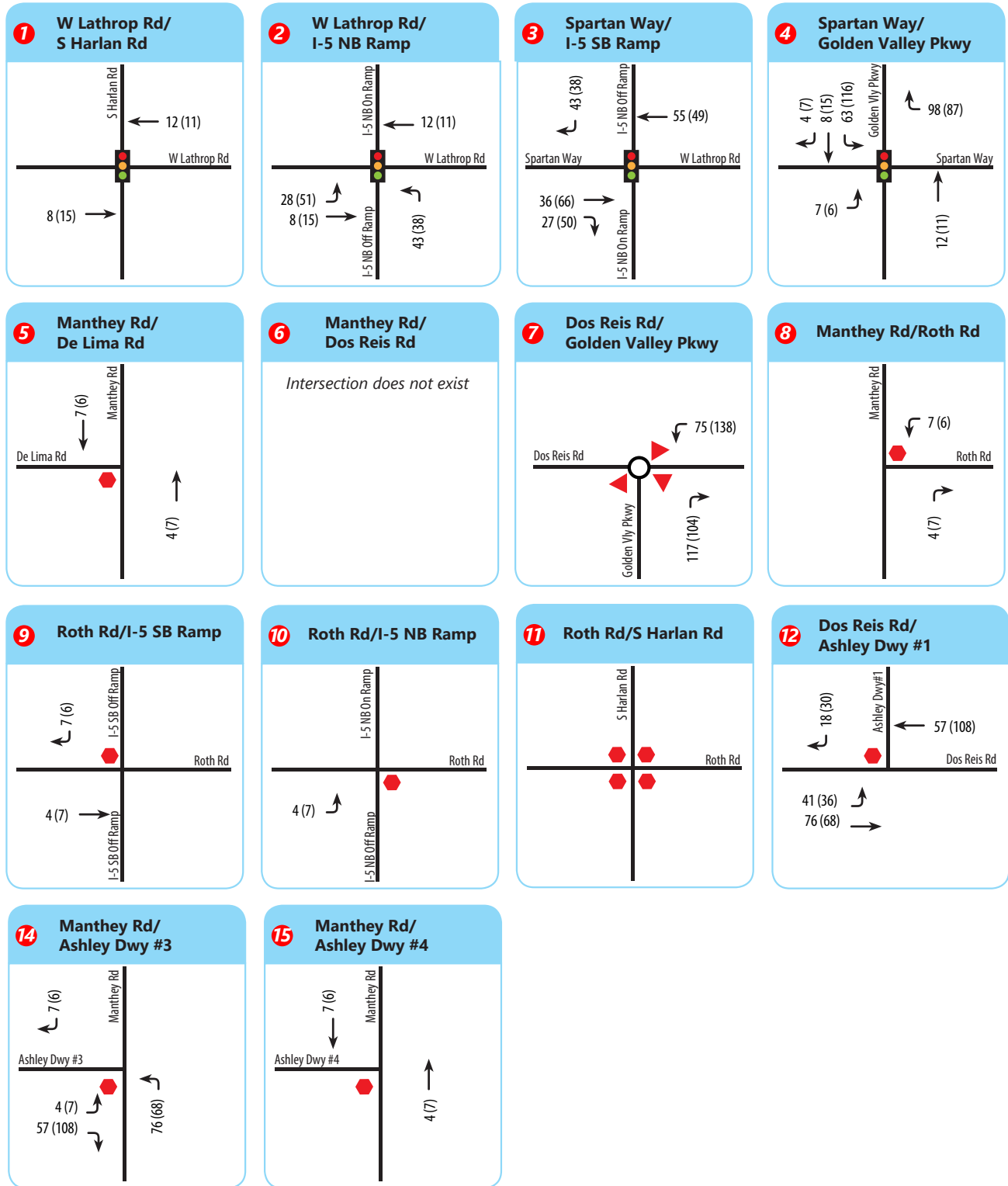
LEGEND

- Project Site
- Project Driveway
- X Study Intersection
- Future Road
- XX%** Trip Distribution





Figure 9: Passenger Vehicle Trip Assignment

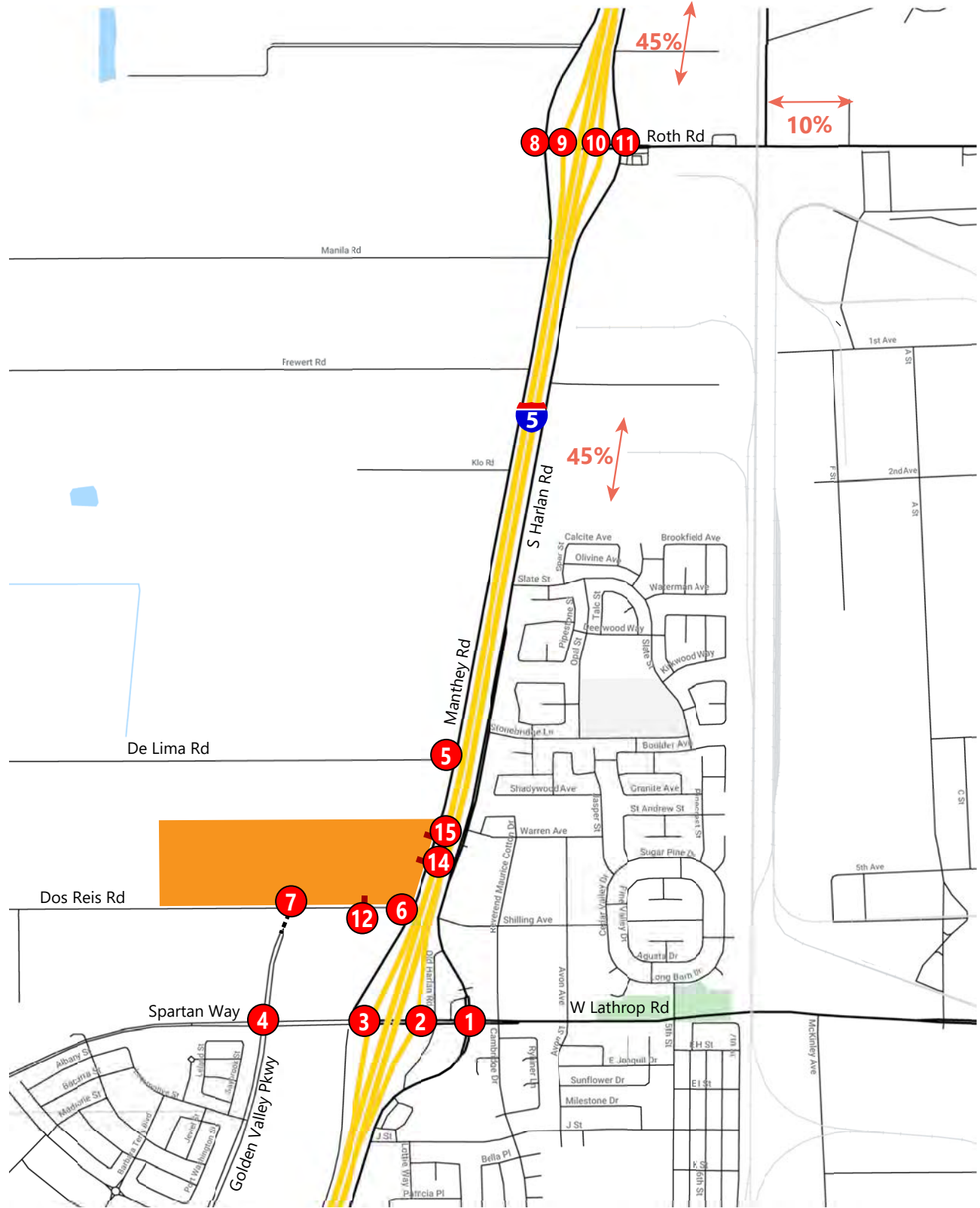


LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal
- ▼ Yield Sign



Figure 10: Heavy Vehicle Project Trip Distribution

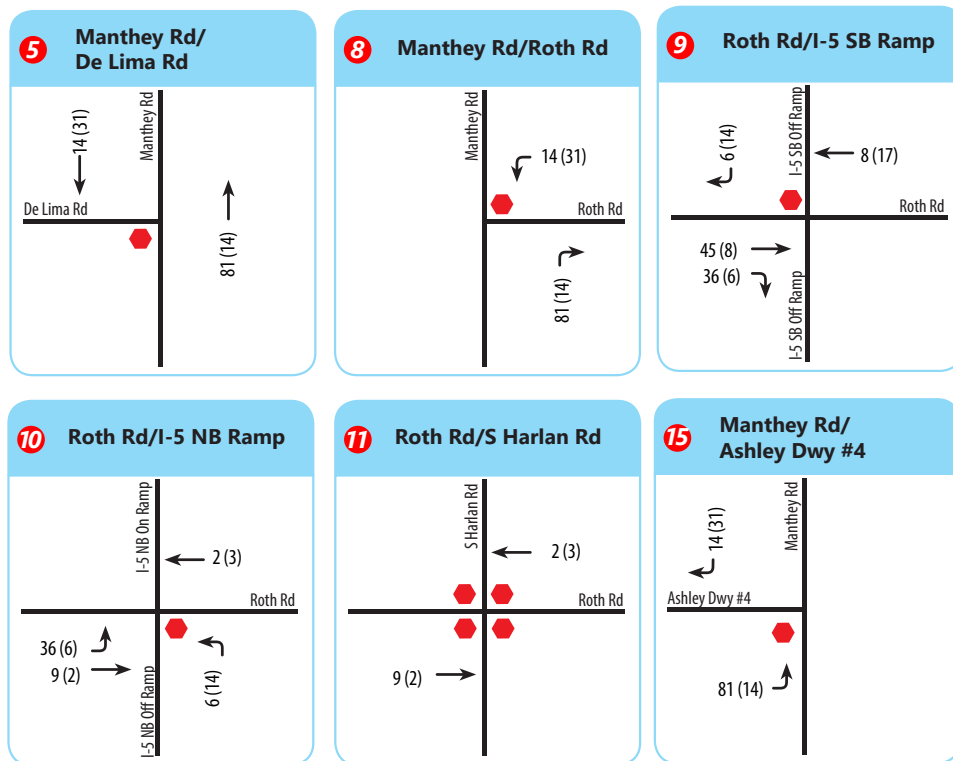


LEGEND

- Project Site
- Project Driveway
- Study Intersection
- Future Road
- XX% Trip Distribution



Figure 11: Heavy Vehicle Trip Assignment



LEGEND

xx AM Peak Hour Volume  
 (xx) PM Peak Hour Volume

● Stop Sign  
 🚦 Traffic Signal



### 5.3 INTERSECTION LEVEL OF SERVICE ANALYSIS – BASELINE PLUS PROJECT CONDITIONS

The intersection level of service analysis results for Baseline plus Project Conditions are summarized in **Table 15**. The results for Baseline Conditions are included for comparison purposes. Detailed calculation sheets for Baseline Plus Project Conditions are contained in **Appendix G. Figure 12** displays projected peak hour turning movement volumes at all of the study intersections for Baseline plus Project Conditions.

Under this scenario, all but three of the study intersections would continue to operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour. The following intersection already operates at unacceptable level of service without the addition of project traffic.

- Lathrop Rd/I-5 NB Ramps (Intersection #2) degrades to LOS F in the p.m. peak hour, with an increase in average delay of 19.1 seconds.

The following two intersections would degrade from acceptable to unacceptable level of service with the addition of project traffic:

- Lathrop Rd-Spartan Way/I-5 SB Ramps (Intersection #3) would degrade from LOS D to LOS E in the a.m. and p.m. peak hour, a *substantial degradation*.
- Spartan Way/Golden Valley Pkwy (Intersection #4) would degrade from LOS C to LOS E in the a.m. peak hour and LOS D to LOS F in the p.m. peak hour, a *substantial degradation*.

At the three intersections listed above, added project traffic would either degrade the level of service from acceptable to unacceptable, or increase average delay by more than 5.0 seconds, constituting *inconsistencies* with the City of Lathrop standards.

Table 15: Intersection Level of Service Analysis – Baseline plus Project Conditions

#	Study Intersections	Control	Peak Hour <sup>1</sup>	Baseline Conditions		Baseline Plus Project Conditions	
				Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	32.5	C	32.8	C
			PM	53.5	D	54.1	D
2	Lathrop Rd/I-5 NB Ramps <i>Improvement: widen off-ramp</i>	Signal	AM	40.4	D	53.1	D
			PM	<b>70.4</b>	<b>E</b>	<b>89.5</b>	<b>F</b>
			AM			20.2	C
			PM			34.8	C
3	Lathrop Rd-Spartan Way/I-5 SB Ramps <i>Improvement: signal timing adjustments</i>	Signal	AM	48.3	D	<b>60.5</b>	<b>E</b>
			PM	44.3	D	<b>55.3</b>	<b>E</b>
			AM			54.5	D
			PM			54.9	D
4	Spartan Way/Golden Valley Parkway <i>Improvement: restriping</i>	Signal	AM	31.0	C	<b>70.2</b>	<b>E</b>
			PM	37.8	D	<b>172.7</b>	<b>F</b>
			AM			48.5	D
			PM			52.9	D
5	Manthey Rd/De Lima Rd	One-Way Stop	AM	0.0	A	0.0	A
			PM	9.7	A	10.0	B
6	Manthey Rd/Dos Reis Rd	One-Way Stop /Does not Exist with Project	AM	10.7	B	N/A	N/A
			PM	13.0	B	N/A	N/A
7	Golden Valley Rd/Dos Reis Rd	One-Way Stop/Roundabout	AM	9.3	A	2.0	A
			PM	16.3	C	4.6	A
8	Manthey Rd/Roth Rd	One-Way Stop	AM	11.1	B	12.8	B
			PM	13.4	B	17.2	C
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM	17.8	C	19.2	C
			PM	19.9	C	20.6	C
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM	10.8	B	11.4	B
			PM	11.4	B	12.1	B
11	Roth Rd/Harlan Rd	All-Way Stop	AM	19.0	C	19.6	C
			PM	24.7	C	25.0	C
12	Dos Reis Rd/Ashley Dwy #1	One-Way Stop	AM	N/A	N/A	9.1	A
			PM	N/A	N/A	10.8	B
14	Manthey Rd/Ashley Dwy #3	One-Way Stop	AM	N/A	N/A	9.3	A
			PM	N/A	N/A	11.2	B
15	Manthey Rd/Ashley Dwy #4	One-Way Stop	AM	N/A	N/A	14.5	B
			PM	N/A	N/A	17.4	C

## Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable Level of Service.

### **5.3.1 Baseline plus Project Recommended Improvements**

The City of Lathrop is in the process of planning the improvement of the Lathrop Road/I-5 Interchange by widening Lathrop Road to three lanes in each direction, constructing new southbound loop on-ramps, and widening off-ramps with new signalized intersections. This major improvement project is not funded or scheduled at this time, although it is included in the current Capital Improvement Plan (CIP). The Ashley project is expected to fund its fair share of the project by payment of local and regional development fees, as discussed further in Section 7.1.1, consistent with the City of Lathrop General Plan and the City's efforts to achieve an acceptable level of service at the Lathrop Road/I-5 Interchange.

While the Lathrop Road Interchange project can be considered a cumulative improvement, the City of Lathrop is considering widening the northbound off-ramp to provide an additional turn lane as an interim measure as of the 2022 Transportation Monitoring Plan (TMP). For the Lathrop Road/I-5 NB Ramps, the addition of a separate right-turn lane for the off-ramp and signal timing optimization will improve the intersection operation to LOS C in the a.m. and p.m. peak hours, which is consistent with the City of Lathrop General Plan. Based on 95<sup>th</sup> percentile queue lengths, the new lane should provide at least 400 ft. of storage.

In order to assess the feasibility of widening the northbound off-ramp as proposed, TJKM reviewed the future configuration of the Lathrop Road interchange as shown in the current CIP. Based on the CIP, it appears that although the southbound ramps would be repositioned and reconfigured, the northbound off-ramp would only be widened. It may be possible to construct an interim widening of this ramp, as proposed here and in the TMP, while remaining consistent with the ultimate configuration.

For the Lathrop Road/I-5 SB Ramps, signal timing adjustments will improve the intersection operation to LOS D in the a.m. and p.m. peak hour, which is consistent with the City of Lathrop General Plan and the City's efforts to achieve an acceptable level of service at the Lathrop Road/I-5 Interchange. Widening is not necessary for Baseline plus Project Conditions at the southbound off-ramp, although it is recommended in the 2022 TMP.

For Spartan Way/Golden Valley Parkway, the following lane geometry is recommended:

- NB approach: one left-turn lane, one through lane, two right-turn lanes.
- SB approach: two left-turn lanes, two through lanes, one right-turn lane.
- EB approach: one left-turn lane, two through lanes, one right-turn lane.
- WB approach: two left-turn lanes, two through lanes, one right-turn lane.

These changes can be accomplished through restriping existing pavement. Also, optimizing the signal timings at the intersection is projected to improve operations to LOS D in the a.m. and p.m. peak hours, with a delay of 48.5 seconds and 52.9 seconds, respectively, which is consistent with the City of Lathrop General Plan. The intersection LOS sheets with recommendations are included in **Appendix G**.

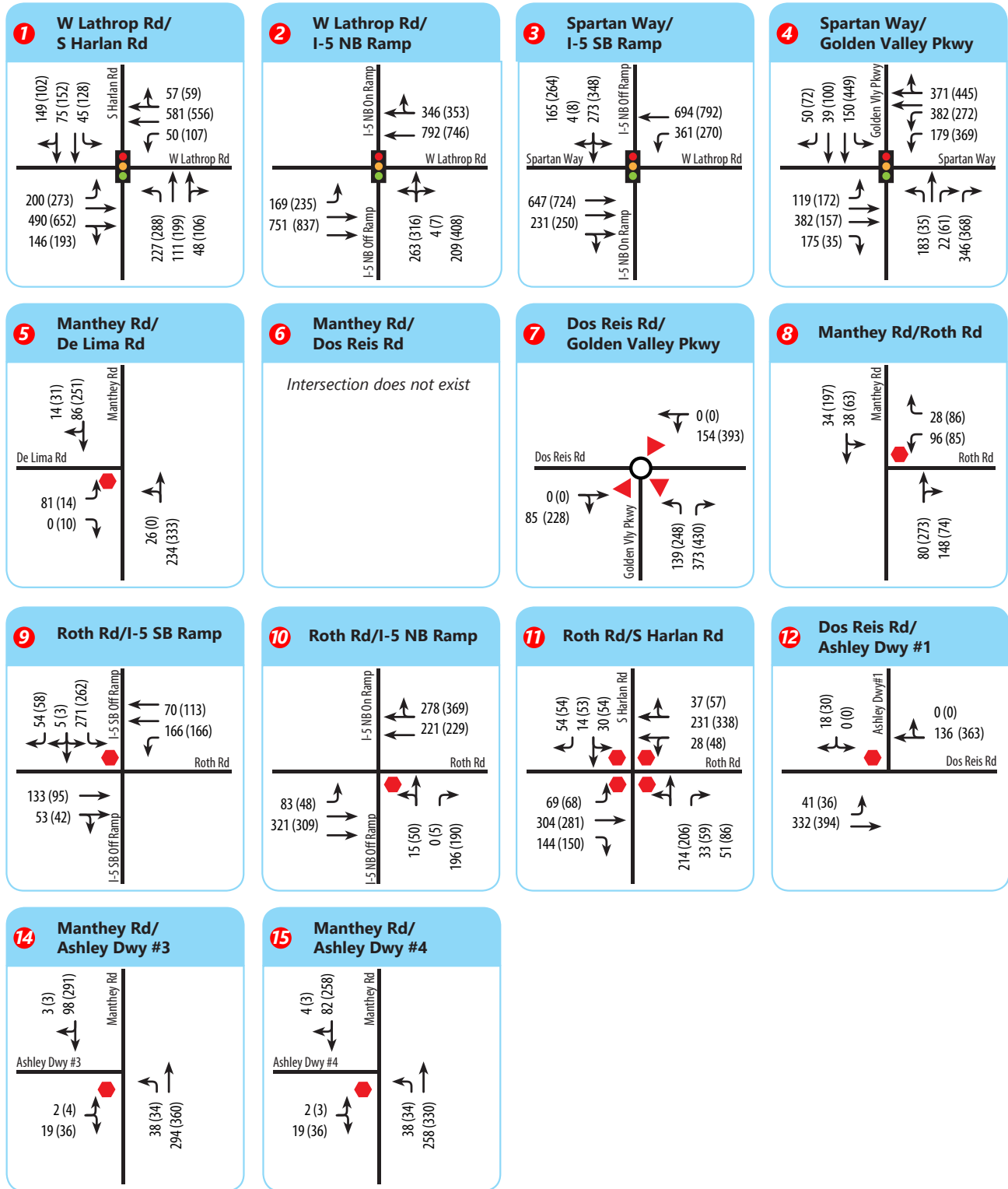
5.4 FREEWAY MAINLINE LEVEL OF SERVICE – BASELINE PLUS PROJECT

The results of the freeway mainline segments level of service along Interstate 5 is summarized in **Table 16**. HCS7 freeway segment reports are attached in **Appendix H**. **Figure 13** illustrates the Baseline plus Project freeway mainline volumes. Under Baseline plus Project Conditions, all freeway mainline segments operate at LOS D or better during both peak hours.

**Table 16: Freeway Segment Level of Service Analysis – Baseline plus Project Conditions**

#	Segment Name	Baseline Conditions				Baseline plus Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-5 Northbound									
1	North of Roth Rd	24.4	C	26.6	D	25.8	C	27.8	D
2	Between Roth Rd and Lathrop Rd	24.0	C	27.5	D	25.2	C	28.8	D
3	South of Lathrop Rd	23.1	C	27.5	D	24.3	C	28.7	D
I-5 Southbound									
1	North of Roth Rd	25.4	C	25.9	C	26.8	D	26.9	D
2	Between Roth Rd and Lathrop Rd	24.2	C	23.8	C	25.7	C	24.7	C
3	South of Lathrop Rd	25.4	C	24.9	C	26.9	D	26.0	C

Figure 12: Baseline Plus Project Lane Geometry, Traffic Controls, and Volumes



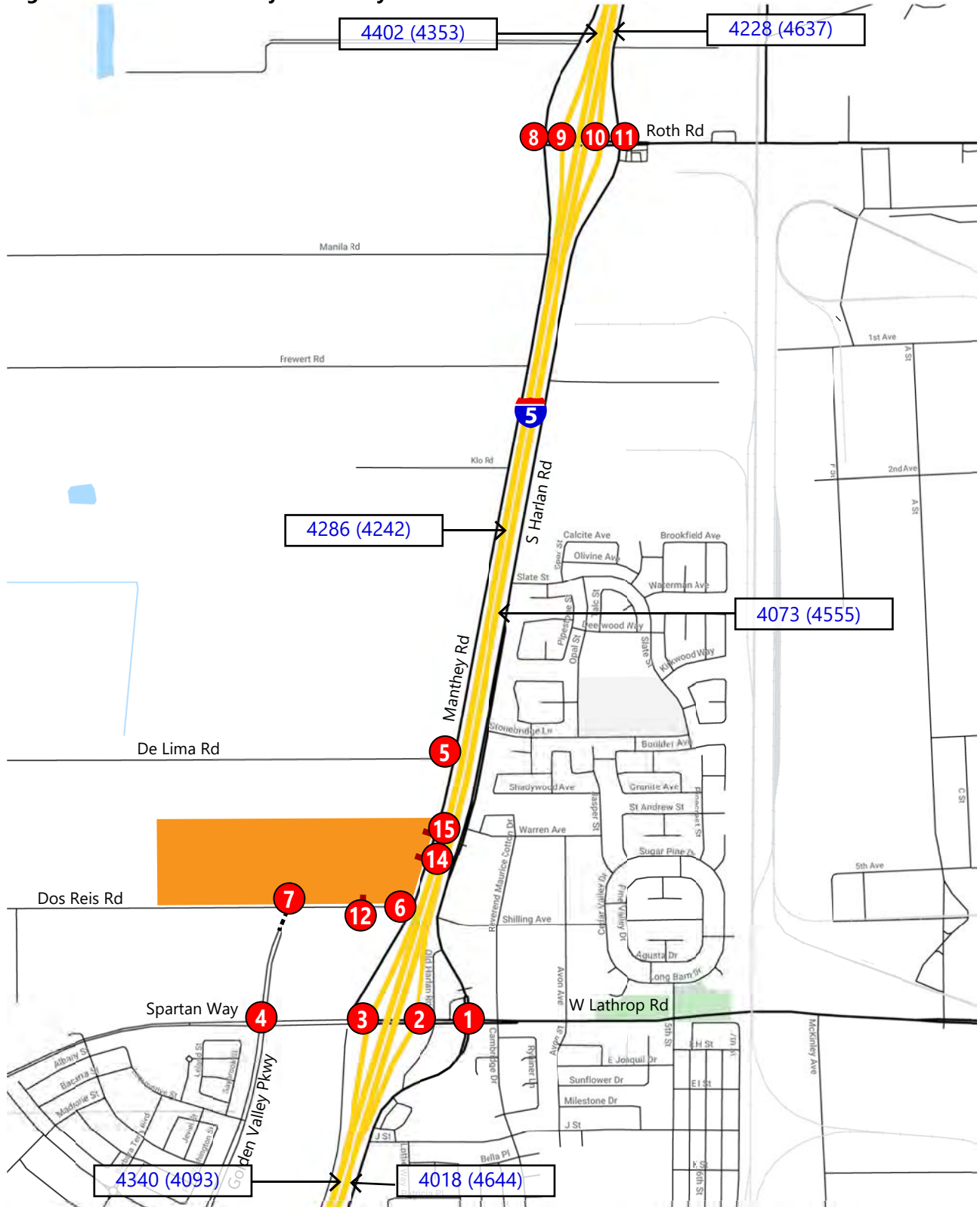
LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal
- ▼ Yield Sign





Figure 13: Baseline Plus Project Freeway Mainline Volumes



LEGEND

- Project Site
- Project Driveway
- Future Road
- X Study Intersection
- xxxx AM Volume
- (xxxx) PM Volume



## 6.0 CUMULATIVE CONDITIONS

This section presents the results of the level of service calculations under Cumulative Conditions without the project. Cumulative plus Project Conditions traffic volumes were modeled by Fehr & Peers as part of the *Roth Road Improvement Study*, currently in progress, in coordination with City of Lathrop staff. The volumes from the *Roth Road Improvement Study* accounted for future conditions with the construction of the Ashley project. As such, Project trips were deducted to estimate Cumulative (no project) Conditions. Cumulative Conditions represent estimated 2040 traffic volumes. Although improvements are planned on Roth Road and Lathrop Road, for the purposes of this analysis, lane geometry, traffic controls, and other parameters are identical to Baseline Conditions. A peak hour factor of 1.0 is assumed for all intersections.

### 6.1 INTERSECTION LEVEL OF SERVICE ANALYSIS – CUMULATIVE CONDITIONS

The intersection LOS analysis results for Cumulative Conditions are summarized in **Table 17**. Detailed calculation sheets for Baseline Conditions are contained in **Appendix I**. **Figure 14** displays projected peak hour turning movement volumes at all of the study intersections for Cumulative Conditions.

Under this scenario, seven of the study intersections are projected to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours.

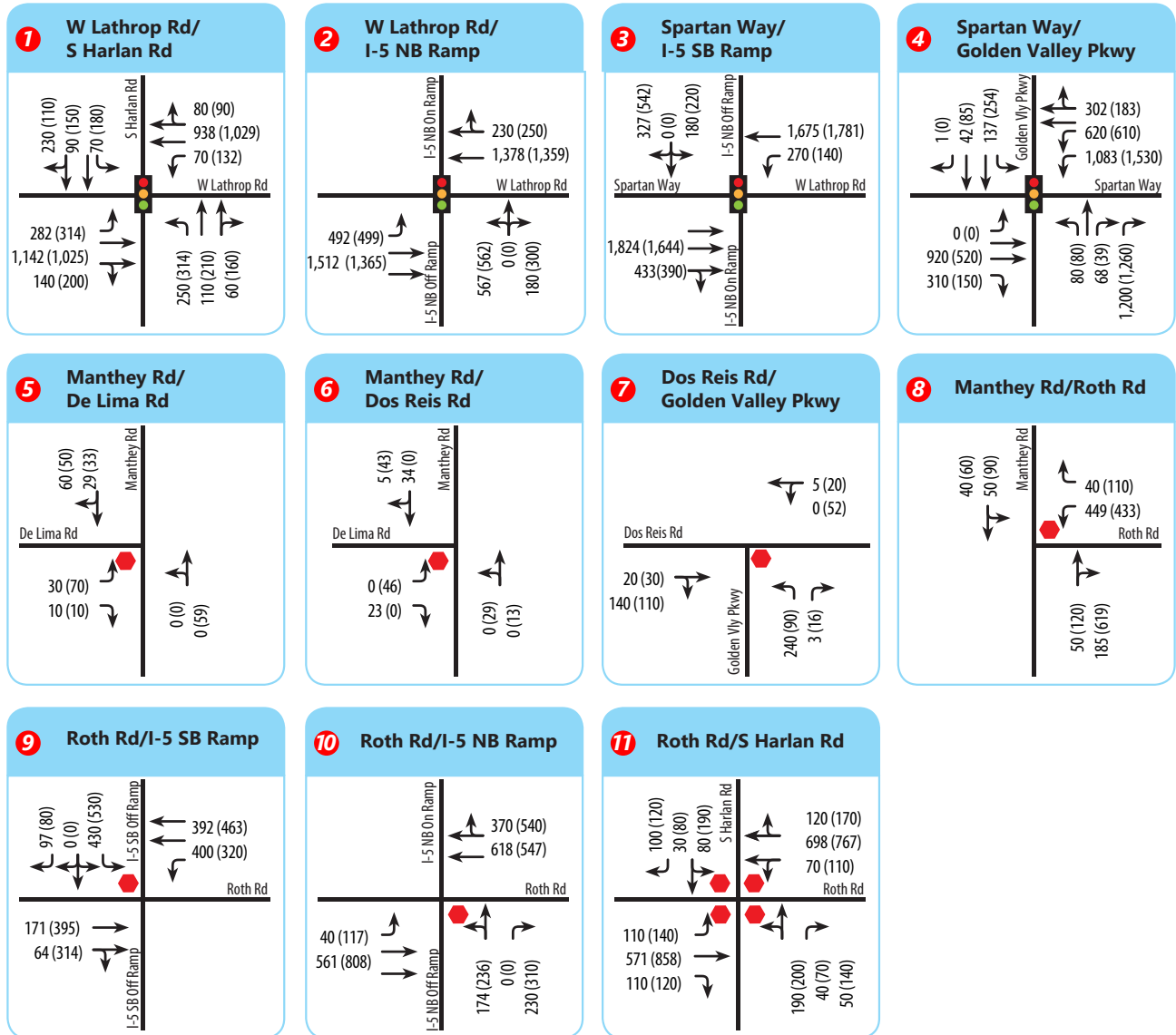
**Table 17: Intersection Level of Service – Baseline Conditions**

#	Intersection	Control	Peak Hour <sup>1</sup>	Cumulative Conditions Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM PM	45.6 48.1	D D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM PM	<b>135.5</b> <b>160.1</b>	<b>F</b> <b>F</b>
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM PM	<b>170.3</b> <b>206.2</b>	<b>F</b> <b>F</b>
4	Spartan Way/Golden Valley Parkway	Signal	AM PM	<b>382.4</b> <b>643.7</b>	<b>F</b> <b>F</b>
5	Manthey Rd/De Lima Rd	One-Way Stop	AM PM	8.8 9.4	A A
6	Manthey Rd/Dos Reis Rd	One-Way Stop	AM PM	8.6 9.3	A A
7	Golden Valley Rd/Dos Reis Rd	-	AM PM	10.4 10.2	B B
8	Manthey Rd/Roth Rd	One-Way Stop	AM PM	19.1 <b>102.7</b>	C <b>F</b>
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM PM	<b>528.2</b> <b>890.1</b>	<b>F</b> <b>F</b>
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM PM	28.6 <b>229.9</b>	D <b>F</b>
11	Roth Rd/Harlan Rd	All-Way Stop	AM PM	<b>127.3</b> <b>365.3</b>	<b>F</b> <b>F</b>
12	Dos Reis Rd/Ashley Dwy #1	One-Way Stop	AM PM	N/A N/A	N/A N/A
14	Manthey Rd/Ashley Dwy #3	One-Way Stop	AM PM	N/A N/A	N/A N/A
15	Manthey Rd/Ashley Dwy #4	One-Way Stop	AM PM	N/A N/A	N/A N/A

Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable LOS and Delay.

Figure 14: Cumulative Conditions, Lane Geometry, Traffic Controls, and Volumes



LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal



## 7.0 CUMULATIVE PLUS PROJECT CONDITIONS

This section presents the results of the level of service calculations under Cumulative Conditions. Cumulative plus Project Conditions traffic volumes were modeled by Fehr & Peers as part of the *Roth Road Improvement Study*, currently in progress, in coordination with City of Lathrop staff. Although improvements are planned on Roth Road and Lathrop Road, for the purposes of this analysis, lane geometry, traffic controls, and other parameters are identical to Baseline Conditions. A peak hour factor of 1.0 is assumed for all intersections.

### 7.1 INTERSECTION LEVEL OF SERVICE ANALYSIS – CUMULATIVE PLUS PROJECT CONDITIONS

The intersection level of service analysis results for Cumulative plus Project Conditions are summarized in **Table 18**. The results for Cumulative Conditions are included for comparison purposes. Detailed calculation sheets for Cumulative Plus Project Conditions are contained in **Appendix J. Figure 15** displays projected peak hour turning movement volumes at all of the study intersections for Cumulative plus Project Conditions.

Under this scenario, seven of the study intersections are projected to continue to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours.

At the seven intersections operating below jurisdictional standards, added project traffic would either degrade the level of service from acceptable to unacceptable, or increase average delay by more than 5.0 seconds, constituting *inconsistencies* with the City of Lathrop standards.

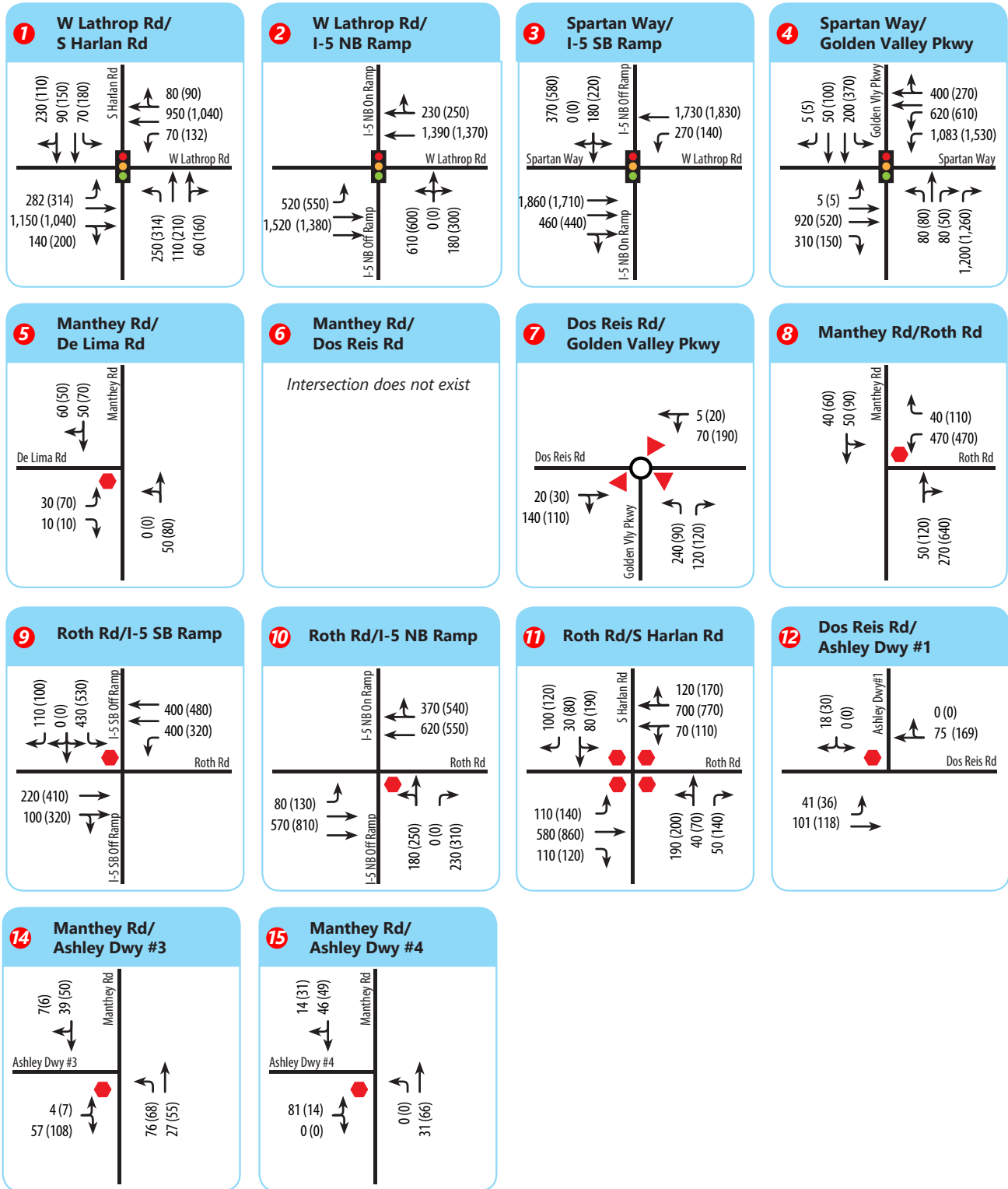
Table 18: Intersection Level of Service Analysis – Cumulative plus Project Conditions

#	Study Intersections	Control	Peak Hour <sup>1</sup>	Cumulative Conditions		Cumulative Plus Project Conditions	
				Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	45.6	D	46.2	D
			PM	48.1	D	48.7	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	<b>135.5</b>	<b>F</b>	<b>147.5</b>	<b>F</b>
			PM	<b>160.1</b>	<b>F</b>	<b>176.7</b>	<b>F</b>
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	<b>170.3</b>	<b>F</b>	<b>207.1</b>	<b>F</b>
			PM	<b>206.2</b>	<b>F</b>	<b>226.7</b>	<b>F</b>
4	Spartan Way/Golden Valley Parkway	Signal	AM	<b>382.4</b>	<b>F</b>	<b>379.3</b>	<b>F</b>
			PM	<b>643.7</b>	<b>F</b>	<b>684.5</b>	<b>F</b>
5	Manthey Rd/De Lima Rd	One-Way Stop	AM	8.8	A	9.2	A
			PM	9.4	A	9.7	A
6	Manthey Rd/Dos Reis Rd	One-Way Stop /Does not Exist with Project	AM	8.6	A	N/A	N/A
			PM	9.3	A	N/A	N/A
7	Golden Valley Rd/Dos Reis Rd	One-Way Stop/Roundabout	AM	10.4	B	3.3	A
			PM	10.2	B	3.3	A
8	Manthey Rd/Roth Rd	One-Way Stop	AM	19.1	C	23.4	C
			PM	<b>102.7</b>	<b>F</b>	<b>148.6</b>	<b>F</b>
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM	<b>528.2</b>	<b>F</b>	<b>584.9</b>	<b>F</b>
			PM	<b>890.1</b>	<b>F</b>	<b>934.9</b>	<b>F</b>
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM	28.6	D	<b>52.2</b>	<b>F</b>
			PM	<b>229.9</b>	<b>F</b>	<b>310.4</b>	<b>F</b>
11	Roth Rd/Harlan Rd	All-Way Stop	AM	<b>127.3</b>	<b>F</b>	<b>130.9</b>	<b>F</b>
			PM	<b>365.3</b>	<b>F</b>	<b>367.1</b>	<b>F</b>
12	Dos Reis Rd/Ashley Dwy #1	One-Way Stop	AM	N/A	N/A	8.7	A
			PM	N/A	N/A	9.3	A
14	Manthey Rd/Ashley Dwy #3	One-Way Stop	AM	N/A	N/A	8.8	A
			PM	N/A	N/A	9.1	A
15	Manthey Rd/Ashley Dwy #4	One-Way Stop	AM	N/A	N/A	10.6	B
			PM	N/A	N/A	10.4	B

## Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable Level of Service.

Figure 15: Cumulative plus Project Lane Geometry, Traffic Controls, and Volumes



LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal
- ▼ Yield Sign



**7.1.1 Fair Share Analysis**

The City of Lathrop is in the process of planning the improvement of both the Lathrop Road/I-5 Interchange and the Roth Road/I-5 Interchange. These interchange projects consist of Intersections #1-4 and 8-11, respectively.

At the direction of City of Lathrop staff, a fair share analysis was conducted for impacted intersections and intersections that are part of both interchange projects. “Fair Share” is defined as the percent contribution of project traffic to the growth from Existing Conditions to Cumulative plus Project Conditions. **Table 19** shows the fair share for a.m. plus p.m. peak hour volumes at these eight intersections. As it is expected that interchange improvements will be identified and funded prior to 2040, no interim improvement measures are recommended at those locations for this scenario.

At the Lathrop Road/I-5 interchange, individual intersection fair share percentages range from one percent to six percent (5.1 percent overall). At the Roth Road/I-5 interchange, individual intersection fair share percentages range from one percent to nine percent (4.5 percent overall).

The Ashley project is expected to fund its fair share of the interchange project costs by payment of local and regional development fees, consistent with the City of Lathrop General Plan policies and the City’s efforts to achieve an acceptable level of service.

**Table 19: Fair Share Analysis**

#	<i>Study Intersections</i>	<i>Existing A</i>	<i>Project Trips B</i>	<i>Cumulative plus Project C</i>	<i>Cumulative Growth D = C-A</i>	<i>Fair Share B/D</i>
1	Lathrop Rd/ Harlan Rd	4,525	46	7,422	2,897	1.6%
2	Lathrop Rd/ I-5 NB Ramps	4,488	206	8,900	4,412	4.7%
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	3,620	364	9,790	6,170	5.9%
4	Spartan Way/Golden Valley Parkway	2,645	434	9,903	7,258	6.0%
<b>Lathrop Rd/I-5 Interchange (Total)</b>		<b>15,278</b>	<b>1,050</b>	<b>36,015</b>	<b>20,737</b>	<b>5.1%</b>
8	Manthey Rd/ Roth Rd	680	164	2,410	1,730	9.5%
9	Roth Rd/ I-5 SB Ramps	1,242	164	3,820	2,578	6.4%
10	Roth Rd/ I-5 NB Ramps	2,073	89	4,640	2,567	3.5%
11	Roth Rd/ Harlan Rd	2,487	16	5,150	2,663	0.6%
<b>Roth Rd/I-5 Interchange (Total)</b>		<b>6,482</b>	<b>433</b>	<b>16,020</b>	<b>9,538</b>	<b>4.5%</b>



## 8.0 ADDITIONAL ANALYSES

The following sections provide additional analyses of other transportation issues associated with the project site, including:

- Vehicle Miles Traveled,
- Site Access,
- On-site Circulation,
- Truck Operations,
- Parking, and
- Pedestrian, Bicycle, and Transit Impacts

Unlike the LOS impact methodology, the analyses in these sections are generally based on professional judgment in accordance with the standards and methods employed by traffic engineers. However, Vehicle miles traveled (VMT) is evaluated as a CEQA impact. Although operational issues are not considered CEQA impacts, they do describe traffic conditions that are relevant to the project environment.

### 8.1 VEHICLE MILES TRAVELED (VMT)

As previously mentioned, the San Joaquin County Transportation Analysis Guidelines (September 2020) were used. On page 14, the guidelines recommend that the estimated VMT for a proposed project be obtained by inserting the proposed project into the San Joaquin COG 2018 RTP Model. Since the project is not screened out from the maps in the SJ County Transportation Analysis guidelines, a base year plus project model run was performed.

The Ashley Furniture project is located in TAZ #1744 of the SJCOG model. Currently, TAZ #1744 has five employees coded. The project will add a total of 1,295 employees. There are three types of employment in this project; warehouse, office, and retail. From the project’s Site Plan, there are 1,400,000 square feet of warehouse, 25,000 square feet of office, and 100,000 square feet of retail. The Southern California Council of Governments (SCAG) employment density study finds that there are a median of 1,225 square feet per employee for warehouses, 466 square feet per employee for offices, and 1,023 square feet per employee for regional retail. Thus, it is expected that 1,143 new employees will come from the warehouse, 98 employees from the office, and 54 employees for the retail portion. **Table 20** shows the land use changes for the base year with project model run.

**Table 20: Land Use Changes for Base Year**

<i>TAZ</i>	<i>Employees (Industrial Land Use)</i>	<i>Employees (Office Land Use)</i>	<i>Employees (Retail Land Use)</i>	<i>Total Employees</i>
1744	+1,143	+98	+54	+1,295

1,295 employees in the industrial land use category (which is what the SJCOG model uses for warehouses) was added in TAZ #1744 and the project year traffic model was rerun. The results are summarized in **Table 21**.

Table 21: VMT per Employee Comparison

<i>TAZ</i>	<i>Base Year Average Daily VMT per Employee (per SJCOG Model)</i>	<i>Regional Average (per SJCOG Model)</i>	<i>15% Below Regional Average (per SJCOG Model)</i>	<i>Base Year Plus Project Average Daily VMT per Resident (per Model run)</i>
1744	10.48	19.1	16.2	15.43

The base year average daily VMT per employee for TAZ #1744 is 10.48. Adding in the project’s 1,295 employees brought the daily VMT per employee to 15.43, an increase of 4.95. These numbers are reasonable since the project’s location is in relative close proximity to the residential districts of Lathrop, and also brings much needed jobs into an area that has very little employment.

The project’s 15.43 daily VMT per employee is lower than the San Joaquin County VMT threshold of 16.2. VMT impacts for the Ashley Furniture Homestore project are found to be **less-than-significant** for the base year, and thus no mitigation is required for VMT impacts attributable to this project.

### 8.2 SITE ACCESS

The project site plan dated March 29, 2023 is shown in **Figure 2**. The proposed Ashley Furniture includes various drive aisles that allow for circulation throughout the development. Drive aisles for the passenger vehicle parking spaces are approximately 26-36 feet wide. Drive aisles for heavy trucks (larger than SU-30) are 60-72 feet wide, according to the project site plan. The south driveway (Intersection #12) is a full access driveway, 40 feet wide, which accommodates two-way entry. The driveway for Intersection #14 is a full access driveway, approximately 40 feet wide. The driveway for Intersection #15 is also a full access driveway, however this driveway is dedicated for truck traffic only and would be approximately 70 feet wide. Heavy trucks will be restricted to only using this driveway on Manthey Road and would generally be restricted to using the I-5/Roth Road interchange.

The site plan includes the proposed lane geometry on Manthey Road and Dos Reis Road, including the installation of raised medians. Based on overall project design, driveway locations and access restrictions are appropriate. Any proposed landscaping should be maintained in order to maintain sight distance to and from the driveways. The proposed driveway locations, design, and sight distance are all **adequate**.

### 8.3 ON-SITE CIRCULATION

As shown in **Figure 2**, the project site plan includes multiple drive aisles. These drive aisles connect to individual parking areas located throughout the project site. Sight lines appear to be clear at internal intersections. Landscaping should be maintained periodically to provide adequate sight distance.

Drive aisles in the parking areas are typically 26-36 feet wide, with two-way travel and perpendicular parking throughout the site. Drive aisles can accommodate emergency vehicles throughout the site. Trash enclosures are located to the north and south of the site.

The site plan shows all proposed pedestrian facilities on the project frontage and connectivity from Manthey Road to the retail showroom entrance. The project site plan does show four crosswalks connecting the

passenger vehicle parking lot to the retail showroom. The site plan shows two bike rack locations, one on the south side of the building and one on the east side.

The internal circulation for the project is considered **adequate**.

#### 8.4 TRUCK OPERATIONS

The proposed Ashley furniture is proposing to restrict heavy trucks (larger than SU-30) from using the Lathrop Road/I-5 interchange at all times to alleviate potential congestion at those intersections. Instead, trucks will be using the Roth Road/I-5 interchange and head south on Manthey Road to access the Ashley Furniture site via the northernmost driveway only. Only local delivery trucks would be permitted on Dos Reis Boulevard and Golden Valley Parkway. Based on the level of service analysis, additional truck traffic on the Roth Road intersections is not expected to degrade the LOS to unacceptable operations.

#### 8.5 PARKING

According to the City of Lathrop Municipal code (Chapter 17.76 Off-Street Parking and Loading), the project is required to provide the following parking spaces:

- One space per 400 square feet of floor area for office uses.
- One space per 600 square feet of floor area for retail stores that primarily handle bulky merchandise such as furniture.
- One space per 2,000 square feet of floor area for warehouse uses.

Based on the City requirements, the project is required to provide 60 stalls for office uses, 184 stalls for retail uses, and 649 stalls for warehouse uses. This amounts to a total of 893 stalls of parking the project is required to provide. For parking lots providing 501-1000 parking spaces, the Americans with Disabilities Act (ADA) requires that at least two percent must be accessible. The project is proposing to provide a total of 942 stalls, including 20 total accessible spaces. A breakdown is as follows:

- 722 standard spaces (9'x20');
- 19 accessible spaces (9'x20');
- Six van accessible spaces (12'x20');
- 145 electric vehicle (EV) capable spaces (9'x20');
- 38 electric vehicle charging station (EVCS) standard spaces (9'x20');
- Two EVCS van accessible spaces (12'x20');
- Five EVCS standard accessible spaces (9'x20'); and
- Five EVCS ambulatory spaces (10'x20').

The project is also providing 1,104 trailer stalls (ranging from 12' x 30' to 12' x 53') for its own operations. The proposed project satisfies the City and ADA parking requirements.

#### 8.6 PEDESTRIAN, BICYCLE, AND TRANSIT IMPACTS

##### **Pedestrian Access**

Pedestrian access to the project site is facilitated by new sidewalks along Dos Reis Road and Manthey Road, paved walkway within the parking lot and crosswalks. The proposed development project does not conflict

with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is ***less than significant***.

**Bicycle Access**

As shown in **Figure 3**, there are no existing bicycle facilities on De Lima Road, Manthey Road and Dos Reis Road. If the project proposes bicycle facilities, it should show them on future site plans. The project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is ***less than significant***.

**Transit Access**

The project site is within a 3/4 mile of two San Joaquin RTD bus stops, located on the northwest corner of Lathrop Road/Harlan Road and in front of the Save Mart. Due to the lack of development north of Spartan Way, there are sidewalk gaps from the proposed project site to the bus stops. As development in the area increases, sidewalks should be installed to close the gap in pedestrian facilities. Impacts to transit service are expected to be ***less than significant***.

## Appendix A –Level of Service Methodology



## TECHNICAL MEMORANDUM

**Subject: Highway Capacity Manual – Level of Service Definitions**

The purpose of this memorandum is to define level of service (LOS) and the procedures for its calculation.

LOS is commonly used as a measure of effectiveness (MOE) / quality of service (QOS) for traffic. The procedures for LOS determination and calculation are found within the Transportation Research Board’s (TRB) *Highway Capacity Manual* (HCM), 6<sup>th</sup> Edition. MOE / QOS generally consist of quantitative metrics to characterize operational conditions within a traffic stream. LOS is a measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each facility type that has procedures available. Alphabetical letters designated each grade from A to F. LOS A represents the best operating conditions; LOS F represents the worst operating conditions. Each LOS represents a range of operating conditions and drivers’ perceptions of those conditions. Safety is not included in the measure to establish service level.

A general description of LOS for every types of roadway facilities is shown in **Table 1**.

**Table 1: General LOS by Facility Type**

	Uninterrupted Flow	Interrupted Flow
<b>Facility Example Types</b>		
	Freeways	Signalized intersections
	Multi-lane highways	Two-way stop controlled intersections
	Two-lane highways	All-way stop controlled intersections
	Urban Streets	Roundabouts
<b>LOS Character</b>		
A	Free flow.	Very low delay.
B	Stable flow. Presence of other users noticeable.	Low delay.
C	Stable flow. Comfort and convenience starts to decline.	Moderate delay
D	High density stable flow.	Acceptable delay
E	Unstable flow.	Limit of acceptable delay,
F	Forced or breakdown flow.	Unacceptable delay.

## Signalized Intersections

Signalized intersection LOS is based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection, and control delay experienced by each vehicle. LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach; control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control; it is also a surrogate measure of driver discomfort and fuel consumption. The v/c ratio quantifies the degree to which a phase's capacity is utilized by a lane group. A v/c ratio of 1.0 or more indicates cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 sec/veh represents failure from a delay perspective). The detailed methodology for determining LOS at signalized intersection is presented in Chapter 19 of the HCM. The LOS for signalized intersections are defined in **Table 2**.

**Table 2: Signalized LOS Summary**

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Very low control delay. This level is typically assigned when the v/c ratio is low and either progression is exceptionally favorable or the cycle length is short. Most vehicles arrive during the green phase. Many vehicles do not stop at all.	≤ 10	≤ 1.0
B	The v/c ratio is low. There is good progression, short cycle lengths, or both. More vehicles stop, causing higher levels of delay.	≤ 20	≤ 1.0
C	Higher delays occur in favorable progression or a due to a moderate cycle length, or both. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during a given cycle) may begin to appear. The number of vehicles stopping is still considered low-to-moderate, though many vehicles still pass through the intersection without stopping.	≤ 35	≤ 1.0
D	The influence of congestion becomes more apparent. Longer delays may result from some combination of a high v/c ratio, ineffective progression, long cycle length, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	≤ 55	≤ 1.0
E	Typically considered the limit of acceptable delay. High delays usually indicate a very high v/c ratio, poor progression, long cycle lengths, and high volumes. Most cycles fail to clear the queue.	≤ 80	≤ 1.0
F	Delays are unacceptable to most drivers. Conditions are considered oversaturated. Arrival flow rates exceed the capacity of the intersection (v/c in excess of 1.0). Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.	> 80	> 1.0

## Two-Way Stop Controlled Intersections

At two-way stopped controlled (TWSC) intersections, LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons:

1. The major-street through and right-turning traffic are assumed to experience zero delay as traffic progression operates unimpeded;
2. The disproportionate number of major-street through traffic at a typical TWSC intersection skews the weighted average of all movements, resulting in very low overall average delay for all vehicles, and
3. The resulting low delay can mask LOS deficiencies for minor movements.

The LOS for the minor street and the mainline left-turn traffic are dependent on the volume and capacity of the available lanes, and the number and frequency of acceptable gaps in the major street traffic to make a conflicting turn. The LOS grade is provided for all conflicting movements at an intersection and is based on the total average control delay experienced by each vehicle and the lane group volume-to-capacity (v/c) ratios. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection. The detailed methodology for determining LOS at TWSC intersection is presented in Chapter 20 of the HCM. The TWSC LOS descriptions are provided in **Table 3**.

**Table 3: TWSC LOS Summary**

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0



## All-Way Stop Controlled and Roundabout Intersections

All-way stopped controlled (AWSC) intersections and roundabout intersections are based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection, and control delay. LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach; control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection. A v/c ratio of 1.0 represents failure from a capacity perspective (just as delay in excess of 80 sec/veh represents failure from a delay perspective).

The detailed methodology for determining LOS at AWSC and roundabout intersection are presented in Chapter 21 and Chapter 22 respectively in the HCM. The AWSC and roundabout LOS descriptions are shared and are provided in **Table 4**.

**Table 4: AWSC and Roundabout LOS Summary**

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0

## Appendix B – Existing Conditions Level of Service Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	197	415	139	48	526	56	224	110	46	43	74	145
Future Volume (veh/h)	197	415	139	48	526	56	224	110	46	43	74	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	253	532	178	55	598	64	299	147	61	54	94	184
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.75	0.75	0.75	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	945	315	81	818	87	341	714	284	113	284	253
Arrive On Green	0.17	0.36	0.36	0.05	0.25	0.25	0.19	0.29	0.29	0.06	0.16	0.16
Sat Flow, veh/h	1781	2618	872	1781	3239	346	1781	2483	987	1781	1777	1585
Grp Volume(v), veh/h	253	360	350	55	328	334	299	103	105	54	94	184
Grp Sat Flow(s),veh/h/ln	1781	1777	1713	1781	1777	1808	1781	1777	1693	1781	1777	1585
Q Serve(g_s), s	10.2	12.1	12.2	2.3	12.5	12.6	12.1	3.3	3.5	2.2	3.5	8.2
Cycle Q Clear(g_c), s	10.2	12.1	12.2	2.3	12.5	12.6	12.1	3.3	3.5	2.2	3.5	8.2
Prop In Lane	1.00		0.51	1.00		0.19	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	298	641	618	81	449	457	341	511	487	113	284	253
V/C Ratio(X)	0.85	0.56	0.57	0.68	0.73	0.73	0.88	0.20	0.21	0.48	0.33	0.73
Avail Cap(c_a), veh/h	360	718	693	360	718	731	360	718	684	360	718	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	19.0	19.0	34.9	25.4	25.4	29.2	20.0	20.1	33.6	27.7	29.6
Incr Delay (d2), s/veh	15.5	0.9	1.0	11.2	2.8	2.7	20.7	0.2	0.3	3.8	0.8	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	4.7	4.6	1.2	5.3	5.4	6.8	1.3	1.3	1.0	1.4	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	20.0	20.1	46.0	28.2	28.2	49.8	20.2	20.3	37.3	28.5	34.4
LnGrp LOS	D	B	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		963			717			507			332	
Approach Delay, s/veh		26.7			29.5			37.7			33.2	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	30.8	19.2	15.8	16.4	22.7	9.7	25.3				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	4.3	14.2	14.1	10.2	12.2	14.6	4.2	5.5				
Green Ext Time (p_c), s	0.1	4.6	0.1	1.7	0.3	4.2	0.1	1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				30.6								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑			↑↑			↕				
Traffic Volume (veh/h)	100	671	0	0	738	338	171	4	200	0	0	0
Future Volume (veh/h)	100	671	0	0	738	338	171	4	200	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	139	932	0	0	811	371	228	5	267			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	174	1966	0	0	955	435	248	5	291			
Arrive On Green	0.10	0.55	0.00	0.00	0.40	0.40	0.33	0.33	0.33			
Sat Flow, veh/h	1781	3647	0	0	2465	1081	762	17	893			
Grp Volume(v), veh/h	139	932	0	0	607	575	500	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1676	1672	0	0			
Q Serve(g_s), s	5.8	12.0	0.0	0.0	23.5	23.7	21.8	0.0	0.0			
Cycle Q Clear(g_c), s	5.8	12.0	0.0	0.0	23.5	23.7	21.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.65	0.46		0.53			
Lane Grp Cap(c), veh/h	174	1966	0	0	715	675	544	0	0			
V/C Ratio(X)	0.80	0.47	0.00	0.00	0.85	0.85	0.92	0.00	0.00			
Avail Cap(c_a), veh/h	470	1966	0	0	820	773	771	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	33.5	10.3	0.0	0.0	20.6	20.6	24.6	0.0	0.0			
Incr Delay (d2), s/veh	3.2	0.2	0.0	0.0	7.4	8.1	10.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	4.0	0.0	0.0	10.2	9.8	9.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	10.4	0.0	0.0	27.9	28.7	34.9	0.0	0.0			
LnGrp LOS	D	B	A	A	C	C	C	A	A			
Approach Vol, veh/h		1071			1182			500				
Approach Delay, s/veh		13.8			28.3			34.9				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.5			11.4	35.1		29.3				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+1), s		14.0			7.8	25.7		23.8				
Green Ext Time (p_c), s		6.1			0.0	4.9		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					23.9							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	506	129	353	556	0	0	0	0	265	4	79
Future Volume (veh/h)	0	506	129	353	556	0	0	0	0	265	4	79
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	816	208	484	762	0				308	5	92
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	1183	299	479	1148	0				346	6	103
Arrive On Green	0.00	0.29	0.29	0.27	0.61	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	4230	1028	1781	1870	0				1318	21	394
Grp Volume(v), veh/h	0	683	341	484	762	0				405	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1685	1781	1870	0				1734	0	0
Q Serve(g_s), s	0.0	13.2	13.4	20.0	19.8	0.0				16.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.2	13.4	20.0	19.8	0.0				16.7	0.0	0.0
Prop In Lane	0.00		0.61	1.00		0.00				0.76		0.23
Lane Grp Cap(c), veh/h	0	992	491	479	1148	0				455	0	0
V/C Ratio(X)	0.00	0.69	0.69	1.01	0.66	0.00				0.89	0.00	0.00
Avail Cap(c_a), veh/h	0	1601	793	479	1148	0				815	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	23.4	23.4	27.2	9.4	0.0				26.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.6	43.9	1.4	0.0				2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.0	5.2	13.7	6.7	0.0				6.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.2	25.0	71.1	10.8	0.0				28.8	0.0	0.0
LnGrp LOS	A	C	C	F	B	A				C	A	A
Approach Vol, veh/h		1024			1246						405	
Approach Delay, s/veh		24.5			34.2						28.8	
Approach LOS		C			C						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	34.0	26.3		24.1		50.3						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+Q), s	22.0	15.4		18.7		21.8						
Green Ext Time (p_c), s	0.0	6.3		0.8		4.1						

Intersection Summary

HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary  
 4: Golden Valley Pkwy & Spartan Way

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑	↗	↖↗	↑↑		↖	↑	↗↖	↖	↑↑	↗
Traffic Volume (veh/h)	0	427	155	161	379	0	157	0	250	0	0	0
Future Volume (veh/h)	0	427	155	161	379	0	157	0	250	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	776	282	260	611	0	285	0	455	0	0	0
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1266	565	445	2031	0	353	418	624	3	7	3
Arrive On Green	0.00	0.36	0.36	0.13	0.57	0.00	0.20	0.00	0.22	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3647	0	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	776	282	260	611	0	285	0	455	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	0	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	9.6	7.4	3.8	4.7	0.0	8.1	0.0	8.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.6	7.4	3.8	4.7	0.0	8.1	0.0	8.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	1266	565	445	2031	0	353	418	624	3	7	3
V/C Ratio(X)	0.00	0.61	0.50	0.58	0.30	0.00	0.81	0.00	0.73	0.00	0.00	0.00
Avail Cap(c_a), veh/h	335	3340	1490	650	3340	0	670	1758	2622	335	2672	1192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	14.1	13.4	21.8	5.9	0.0	20.4	0.0	19.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.7	1.2	0.1	0.0	4.4	0.0	1.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	2.1	1.4	1.2	0.0	3.2	0.0	2.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.6	14.1	23.1	6.0	0.0	24.8	0.0	20.8	0.0	0.0	0.0
LnGrp LOS	A	B	B	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		1058			871			740				0
Approach Delay, s/veh		14.5			11.1			22.3				0.0
Approach LOS		B			B			C				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	24.1	15.1	2.6	0.0	35.5	0.0	17.7				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+1), s	11.6	11.6	10.1	0.0	0.0	6.7	0.0	10.0				
Green Ext Time (p_c), s	0.3	7.4	0.6	0.0	0.0	4.6	0.0	1.9				

Intersection Summary

HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	106	106	0
Future Vol, veh/h	0	0	0	106	106	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	115	115	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	230	115	115	0	-	0
Stage 1	115	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	758	937	1474	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	758	937	1474	-	-	-
Mov Cap-2 Maneuver	758	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1474	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	115	106	79	27
Future Vol, veh/h	0	0	115	106	79	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	125	115	86	29

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	466	101	115	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	555	954	1474	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	504	954	1474	-	-	-
Mov Cap-2 Maneuver	504	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1474	-	-	-	-	-
HCM Lane V/C Ratio	0.085	-	-	-	-	-
HCM Control Delay (s)	7.7	0	0	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-	-



HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Traffic Vol, veh/h	0	0	0	142	0	0
Future Vol, veh/h	0	0	0	142	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	154	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1	0	155
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	154
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1622	-	836
Stage 1	-	-	-	-	1022
Stage 2	-	-	-	-	874
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1622	-	836
Mov Cap-2 Maneuver	-	-	-	-	836
Stage 1	-	-	-	-	1022
Stage 2	-	-	-	-	874

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1622	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	4.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	73	27	44	62	37	33
Future Vol, veh/h	73	27	44	62	37	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	59	59	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	106	39	75	105	46	41

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	261	128	0	0	180
Stage 1	128	-	-	-	-
Stage 2	133	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	728	922	-	-	1396
Stage 1	898	-	-	-	-
Stage 2	893	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	703	922	-	-	1396
Mov Cap-2 Maneuver	703	-	-	-	-
Stage 1	898	-	-	-	-
Stage 2	863	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	703	922	1396	-
HCM Lane V/C Ratio	-	-	0.15	0.042	0.033	-
HCM Control Delay (s)	-	-	11	9.1	7.7	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	0.1	-

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Existing Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	83	16	157	60	0	0	0	0	246	5	40
Future Vol, veh/h	0	83	16	157	60	0	0	0	0	246	5	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	88	88	88	92	92	92	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	114	22	178	68	0	0	0	0	276	6	45

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	136	0	0		481	560	34
Stage 1	-	-	-	-	-	-		424	424	-
Stage 2	-	-	-	-	-	-		57	136	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1446	-	0		514	436	1032
Stage 1	0	-	-	-	-	0		628	585	-
Stage 2	0	-	-	-	-	0		959	783	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	1446	-	-		451	0	1032
Mov Cap-2 Maneuver	-	-	-	-	-	-		451	0	-
Stage 1	-	-	-	-	-	-		628	0	-
Stage 2	-	-	-	-	-	-		841	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.7	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1446	-	451	490	1032
HCM Lane V/C Ratio	-	-	0.123	-	0.409	0.23	0.029
HCM Control Delay (s)	-	-	7.8	-	18.4	14.5	8.6
HCM Lane LOS	-	-	A	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.4	-	2	0.9	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Existing Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	42	287	0	0	209	268	8	0	172	0	0	0
Future Vol, veh/h	42	287	0	0	209	268	8	0	172	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	94	94	94	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	322	0	0	227	291	9	0	183	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	518	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1044	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1044	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.1	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	457	855	1044	-	-	-
HCM Lane V/C Ratio	0.019	0.214	0.045	-	-	-
HCM Control Delay (s)	13	10.4	8.6	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	0.8	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	16.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	68	249	142	27	212	36	212	32	50	29	13	53
Future Vol, veh/h	68	249	142	27	212	36	212	32	50	29	13	53
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.90	0.90	0.90	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	277	158	30	238	40	236	36	56	36	16	65
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	16.1	14.3	20.9	12.3
HCM LOS	C	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	87%	0%	100%	0%	0%	20%	0%	69%	0%
Vol Thru, %	13%	0%	0%	100%	0%	80%	75%	31%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	244	50	68	249	142	133	142	42	53
LT Vol	212	0	68	0	0	27	0	29	0
Through Vol	32	0	0	249	0	106	106	13	0
RT Vol	0	50	0	0	142	0	36	0	53
Lane Flow Rate	271	56	76	277	158	149	160	52	65
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.613	0.108	0.165	0.566	0.292	0.328	0.337	0.127	0.141
Departure Headway (Hd)	8.136	6.983	7.877	7.367	6.652	7.896	7.609	8.807	7.736
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	442	512	455	490	538	454	471	406	462
Service Time	5.897	4.743	5.638	5.127	4.412	5.665	5.378	6.586	5.514
HCM Lane V/C Ratio	0.613	0.109	0.167	0.565	0.294	0.328	0.34	0.128	0.141
HCM Control Delay	23	10.6	12.2	19.4	12.2	14.5	14.2	12.9	11.8
HCM Lane LOS	C	B	B	C	B	B	B	B	B
HCM 95th-tile Q	4	0.4	0.6	3.5	1.2	1.4	1.5	0.4	0.5

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Existing Conditions  
 Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	546	169	105	448	57	265	196	102	127	149	84
Future Volume (veh/h)	254	546	169	105	448	57	265	196	102	127	149	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	267	575	178	124	527	67	427	316	165	137	160	90
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.62	0.62	0.62	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	825	255	162	752	95	383	554	283	177	286	153
Arrive On Green	0.18	0.31	0.31	0.09	0.24	0.24	0.21	0.24	0.24	0.10	0.13	0.13
Sat Flow, veh/h	1781	2673	825	1781	3173	402	1781	2276	1162	1781	2237	1195
Grp Volume(v), veh/h	267	382	371	124	294	300	427	245	236	137	125	125
Grp Sat Flow(s),veh/h/ln	1781	1777	1722	1781	1777	1798	1781	1777	1661	1781	1777	1655
Q Serve(g_s), s	10.1	13.2	13.3	4.7	10.6	10.7	15.0	8.5	8.7	5.2	4.6	5.0
Cycle Q Clear(g_c), s	10.1	13.2	13.3	4.7	10.6	10.7	15.0	8.5	8.7	5.2	4.6	5.0
Prop In Lane	1.00		0.48	1.00		0.22	1.00		0.70	1.00		0.72
Lane Grp Cap(c), veh/h	315	548	531	162	421	426	383	432	404	177	227	212
V/C Ratio(X)	0.85	0.70	0.70	0.77	0.70	0.70	1.12	0.57	0.58	0.77	0.55	0.59
Avail Cap(c_a), veh/h	383	764	740	383	764	773	383	764	714	383	764	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	21.2	21.3	31.0	24.4	24.4	27.4	23.2	23.3	30.7	28.6	28.7
Incr Delay (d2), s/veh	14.5	1.9	2.0	8.8	2.5	2.6	81.1	1.4	1.6	8.3	2.5	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	5.3	5.2	2.3	4.4	4.5	14.4	3.4	3.3	2.5	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	23.2	23.3	39.8	26.9	27.0	108.5	24.6	24.9	39.0	31.1	31.8
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		1020			718			908			387	
Approach Delay, s/veh		28.2			29.2			64.2			34.1	
Approach LOS		C			C			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	25.5	20.0	12.9	16.3	20.5	11.9	21.0				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	6.7	15.3	17.0	7.0	12.1	12.7	7.2	10.7				
Green Ext Time (p_c), s	0.2	4.8	0.0	1.5	0.3	3.9	0.2	3.1				

Intersection Summary

HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Existing Conditions  
 Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↕				
Traffic Volume (veh/h)	84	696	0	0	606	344	132	7	397	0	0	0
Future Volume (veh/h)	84	696	0	0	606	344	132	7	397	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	94	782	0	0	705	400	142	8	427			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	121	1788	0	0	838	475	152	9	456			
Arrive On Green	0.07	0.50	0.00	0.00	0.38	0.38	0.38	0.38	0.38			
Sat Flow, veh/h	1781	3647	0	0	2280	1238	402	23	1208			
Grp Volume(v), veh/h	94	782	0	0	573	532	577	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1647	1633	0	0			
Q Serve(g_s), s	4.0	10.8	0.0	0.0	22.6	22.7	26.2	0.0	0.0			
Cycle Q Clear(g_c), s	4.0	10.8	0.0	0.0	22.6	22.7	26.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.75	0.25		0.74			
Lane Grp Cap(c), veh/h	121	1788	0	0	681	632	616	0	0			
V/C Ratio(X)	0.78	0.44	0.00	0.00	0.84	0.84	0.94	0.00	0.00			
Avail Cap(c_a), veh/h	462	1788	0	0	807	748	742	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	35.3	12.2	0.0	0.0	21.6	21.6	23.1	0.0	0.0			
Incr Delay (d2), s/veh	4.0	0.2	0.0	0.0	6.8	7.4	16.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.8	3.8	0.0	0.0	9.8	9.2	11.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	12.3	0.0	0.0	28.4	29.0	39.3	0.0	0.0			
LnGrp LOS	D	B	A	A	C	C	D	A	A			
Approach Vol, veh/h		876			1105			577				
Approach Delay, s/veh		15.2			28.7			39.3				
Approach LOS		B			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.4			9.2	34.1		33.7				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+1), s		12.8			6.0	24.7		28.2				
Green Ext Time (p_c), s		5.1			0.0	4.9		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					26.5							
HCM 6th LOS					C							

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Existing Conditions  
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	443	89	247	491	0	0	0	0	337	8	113
Future Volume (veh/h)	0	443	89	247	491	0	0	0	0	337	8	113
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	503	101	301	599	0				383	9	128
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	915	180	355	912	0				435	10	145
Arrive On Green	0.00	0.21	0.21	0.20	0.49	0.00				0.34	0.34	0.34
Sat Flow, veh/h	0	4451	841	1781	1870	0				1274	30	426
Grp Volume(v), veh/h	0	398	206	301	599	0				520	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1719	1781	1870	0				1730	0	0
Q Serve(g_s), s	0.0	5.6	5.8	8.8	13.0	0.0				15.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.6	5.8	8.8	13.0	0.0				15.2	0.0	0.0
Prop In Lane	0.00		0.49	1.00		0.00				0.74		0.25
Lane Grp Cap(c), veh/h	0	727	367	355	912	0				591	0	0
V/C Ratio(X)	0.00	0.55	0.56	0.85	0.66	0.00				0.88	0.00	0.00
Avail Cap(c_a), veh/h	0	2216	1119	663	1218	0				1126	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.8	18.9	20.7	10.4	0.0				16.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.2	2.2	0.7	0.0				1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	2.1	3.4	4.2	0.0				5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.4	20.1	22.9	11.1	0.0				18.4	0.0	0.0
LnGrp LOS		A	B	C	C	B				A	A	A
Approach Vol, veh/h		604				900				520		
Approach Delay, s/veh		19.7				15.1				18.4		
Approach LOS		B				B				B		
Timer - Assigned Phs	1	2	4				6					
Phs Duration (G+Y+Rc), s	14.7	16.1	23.0				30.8					
Change Period (Y+Rc), s	4.0	4.6	4.6				4.6					
Max Green Setting (Gmax), s	20.0	35.0	35.0				35.0					
Max Q Clear Time (g_c+10), s	10.8	7.8	17.2				15.0					
Green Ext Time (p_c), s	0.1	3.7	1.1				3.5					
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			17.3									
HCM 6th LOS			B									



# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Existing Conditions  
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑	↗	↙↗	↑↑		↙	↑	↗↙	↙	↑↑	↗
Traffic Volume (veh/h)	0	185	33	325	211	0	30	0	332	0	0	0
Future Volume (veh/h)	0	185	33	325	211	0	30	0	332	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No		No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	250	45	378	245	0	33	0	361	0	0	0
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	820	366	570	1796	0	95	439	655	4	256	114
Arrive On Green	0.00	0.23	0.23	0.16	0.51	0.00	0.05	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3647	0	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	250	45	378	245	0	33	0	361	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	0	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	2.4	0.9	4.3	1.5	0.0	0.7	0.0	4.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	0.9	4.3	1.5	0.0	0.7	0.0	4.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	820	366	570	1796	0	95	439	655	4	256	114
V/C Ratio(X)	0.00	0.30	0.12	0.66	0.14	0.00	0.35	0.00	0.55	0.00	0.00	0.00
Avail Cap(c_a), veh/h	425	4236	1889	824	4236	0	849	2230	3326	425	3389	1512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.3	12.8	16.4	5.5	0.0	19.2	0.0	14.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.1	1.3	0.0	0.0	2.2	0.0	0.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.3	1.5	0.4	0.0	0.3	0.0	1.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.6	12.9	17.8	5.5	0.0	21.3	0.0	14.8	0.0	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	C	A	B	A	A	A
Approach Vol, veh/h		295		623			394		0			
Approach Delay, s/veh		13.5		13.0			15.4		0.0			
Approach LOS		B		B			B					
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	14.8	6.8	8.8	0.0	26.3	0.0	15.7				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+1), s	10.0	4.4	2.7	0.0	0.0	3.5	0.0	6.8				
Green Ext Time (p_c), s	0.5	1.8	0.0	0.0	0.0	1.6	0.0	1.4				

### Intersection Summary

HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	163	94	0
Future Vol, veh/h	0	8	0	163	94	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	177	102	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	279	102	102	0	-	0
Stage 1	102	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	711	953	1490	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	711	953	1490	-	-	-
Mov Cap-2 Maneuver	711	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	854	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1490	-	-	953	-	-
HCM Lane V/C Ratio	-	-	-	0.009	-	-
HCM Control Delay (s)	0	-	0	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	0	160	102	0
Future Vol, veh/h	3	0	0	160	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	174	111	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	285	111	111	0	-	0
Stage 1	111	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	705	942	1479	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	705	942	1479	-	-	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1479	-	705	-	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-	-
HCM Control Delay (s)	0	-	10.1	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Traffic Vol, veh/h	3	0	0	0	0	0
Future Vol, veh/h	3	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	3	0	4
Stage 1	-	-	-	-	3
Stage 2	-	-	-	-	1
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1619	-	1018
Stage 1	-	-	-	-	1020
Stage 2	-	-	-	-	1022
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1619	-	1018
Mov Cap-2 Maneuver	-	-	-	-	1018
Stage 1	-	-	-	-	1020
Stage 2	-	-	-	-	1022

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1619	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	4.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	47	85	111	52	62	47
Future Vol, veh/h	47	85	111	52	62	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	84	84	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	102	132	62	77	58

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	375	163	0	0	194	0
Stage 1	163	-	-	-	-	-
Stage 2	212	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	626	882	-	-	1379	-
Stage 1	866	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	590	882	-	-	1379	-
Mov Cap-2 Maneuver	590	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	4.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	590	882	1379
HCM Lane V/C Ratio	-	-	0.096	0.116	0.056
HCM Control Delay (s)	-	-	11.7	9.6	7.8
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.4	0.2

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Existing Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	79	35	140	95	0	0	0	0	246	3	37
Future Vol, veh/h	0	79	35	140	95	0	0	0	0	246	3	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	83	83	83	92	92	92	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	101	45	169	114	0	0	0	0	280	3	42

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	146	0	0		503	598	57
Stage 1	-	-	-	-	-	-		452	452	-
Stage 2	-	-	-	-	-	-		51	146	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1434	-	0		498	414	997
Stage 1	0	-	-	-	-	0		608	569	-
Stage 2	0	-	-	-	-	0		965	775	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	1434	-	-		439	0	997
Mov Cap-2 Maneuver	-	-	-	-	-	-		439	0	-
Stage 1	-	-	-	-	-	-		608	0	-
Stage 2	-	-	-	-	-	-		851	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.7	16.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1434	-	439	474	997
HCM Lane V/C Ratio	-	-	0.118	-	0.425	0.233	0.028
HCM Control Delay (s)	-	-	7.8	-	19.1	14.9	8.7
HCM Lane LOS	-	-	A	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.4	-	2.1	0.9	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Existing Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	34	291	0	0	200	341	35	5	181	0	0	0
Future Vol, veh/h	34	291	0	0	200	341	35	5	181	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	95	95	95	88	88	88	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	327	0	0	211	359	40	6	206	0	0	0

Major/Minor	Major1		Major2			Minor1			
Conflicting Flow All	570	0	-	-	-	0	509	973	164
Stage 1	-	-	-	-	-	-	403	403	-
Stage 2	-	-	-	-	-	-	106	570	-
Critical Hdwy	4.14	-	-	-	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	-	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	999	-	0	0	-	-	494	251	852
Stage 1	-	-	0	0	-	-	644	598	-
Stage 2	-	-	0	0	-	-	907	504	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	999	-	-	-	-	-	475	0	852
Mov Cap-2 Maneuver	-	-	-	-	-	-	475	0	-
Stage 1	-	-	-	-	-	-	620	0	-
Stage 2	-	-	-	-	-	-	907	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	475	852	999	-	-	-
HCM Lane V/C Ratio	0.096	0.241	0.038	-	-	-
HCM Control Delay (s)	13.4	10.6	8.7	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0.9	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	21.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	67	257	148	47	284	56	204	58	85	53	52	53
Future Vol, veh/h	67	257	148	47	284	56	204	58	85	53	52	53
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	71	271	156	53	319	63	217	62	90	58	57	58
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	20	20.1	26.4	15.5
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	78%	0%	100%	0%	0%	25%	0%	50%	0%
Vol Thru, %	22%	0%	0%	100%	0%	75%	72%	50%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	28%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	262	85	67	257	148	189	198	105	53
LT Vol	204	0	67	0	0	47	0	53	0
Through Vol	58	0	0	257	0	142	142	52	0
RT Vol	0	85	0	0	148	0	56	0	53
Lane Flow Rate	279	90	71	271	156	212	222	114	58
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.703	0.2	0.176	0.636	0.335	0.514	0.518	0.308	0.14
Departure Headway (Hd)	9.086	7.968	8.978	8.463	7.742	8.715	8.382	9.719	8.734
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	399	450	400	427	464	414	429	370	410
Service Time	6.838	5.72	6.73	6.214	5.493	6.468	6.134	7.481	6.495
HCM Lane V/C Ratio	0.699	0.2	0.177	0.635	0.336	0.512	0.517	0.308	0.141
HCM Control Delay	30.8	12.7	13.6	24.9	14.4	20.4	19.8	16.8	12.9
HCM Lane LOS	D	B	B	C	B	C	C	C	B
HCM 95th-tile Q	5.2	0.7	0.6	4.3	1.5	2.8	2.9	1.3	0.5



## Appendix C – Existing Conditions Freeway Level of Service Sheets

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4078	Heavy Vehicle Adjustment Factor (fHV)	0.871
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1660
Total Trucks, %	14.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3860	Heavy Vehicle Adjustment Factor (fHV)	0.860
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1592
Total Trucks, %	16.30	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	23.1
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3927	Heavy Vehicle Adjustment Factor (fHV)	0.848
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1642
Total Trucks, %	17.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.3
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4232	Heavy Vehicle Adjustment Factor (fHV)	0.876
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1713
Total Trucks, %	14.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4187	Heavy Vehicle Adjustment Factor (fHV)	0.867
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1713
Total Trucks, %	15.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4119	Heavy Vehicle Adjustment Factor (fHV)	0.885
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1650
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4496	Heavy Vehicle Adjustment Factor (fHV)	0.900
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1771
Total Trucks, %	11.10	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.6
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4516	Heavy Vehicle Adjustment Factor (fHV)	0.881
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1818
Total Trucks, %	13.50	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c <sub>adj</sub> ), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.76
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.5
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS <sub>adj</sub> ), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4415	Heavy Vehicle Adjustment Factor (fHV)	0.863
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1814
Total Trucks, %	15.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.76
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.5
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4230	Heavy Vehicle Adjustment Factor (fHV)	0.864
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1736
Total Trucks, %	15.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c <sub>adj</sub> ), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS <sub>adj</sub> ), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3963	Heavy Vehicle Adjustment Factor (fHV)	0.833
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1687
Total Trucks, %	20.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4122	Heavy Vehicle Adjustment Factor (fHV)	0.898
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1628
Total Trucks, %	11.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	23.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

## Appendix D – Baseline Conditions Level of Service Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕		↗	↕		↖	↕	
Traffic Volume (veh/h)	200	482	146	50	569	57	227	111	48	45	75	149
Future Volume (veh/h)	200	482	146	50	569	57	227	111	48	45	75	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	618	187	57	647	65	303	148	64	57	95	189
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.75	0.75	0.75	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	1000	302	81	857	86	341	707	292	113	286	255
Arrive On Green	0.17	0.37	0.37	0.05	0.26	0.26	0.19	0.29	0.29	0.06	0.16	0.16
Sat Flow, veh/h	1781	2689	812	1781	3261	327	1781	2451	1014	1781	1777	1585
Grp Volume(v), veh/h	256	408	397	57	352	360	303	105	107	57	95	189
Grp Sat Flow(s),veh/h/ln	1781	1777	1724	1781	1777	1811	1781	1777	1688	1781	1777	1585
Q Serve(g_s), s	10.9	14.6	14.7	2.5	14.2	14.3	12.9	3.5	3.7	2.4	3.7	8.9
Cycle Q Clear(g_c), s	10.9	14.6	14.7	2.5	14.2	14.3	12.9	3.5	3.7	2.4	3.7	8.9
Prop In Lane	1.00		0.47	1.00		0.18	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	298	661	641	81	467	476	341	513	487	113	286	255
V/C Ratio(X)	0.86	0.62	0.62	0.70	0.75	0.76	0.89	0.21	0.22	0.50	0.33	0.74
Avail Cap(c_a), veh/h	342	683	662	342	683	696	342	683	648	342	683	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	20.0	20.0	36.8	26.5	26.5	30.8	21.0	21.1	35.4	29.0	31.2
Incr Delay (d2), s/veh	18.0	1.8	1.8	12.6	3.3	3.2	23.9	0.2	0.3	4.1	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	5.9	5.8	1.3	6.1	6.2	7.4	1.4	1.4	1.1	1.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	21.8	21.8	49.4	29.7	29.7	54.7	21.3	21.4	39.5	29.9	36.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1061			769			515			341	
Approach Delay, s/veh		28.5			31.2			40.9			35.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	33.0	19.9	16.6	17.1	24.5	10.0	26.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	4.5	16.7	14.9	10.9	12.9	16.3	4.4	5.7				
Green Ext Time (p_c), s	0.1	4.9	0.0	1.7	0.2	4.3	0.1	1.3				

Intersection Summary

HCM 6th Ctrl Delay				32.5								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	743	0	0	780	346	220	4	209	0	0	0
Future Volume (veh/h)	141	743	0	0	780	346	220	4	209	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	196	1032	0	0	857	380	293	5	279			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	229	1930	0	0	892	393	307	5	292			
Arrive On Green	0.13	0.54	0.00	0.00	0.37	0.37	0.36	0.36	0.36			
Sat Flow, veh/h	1781	3647	0	0	2492	1058	854	15	813			
Grp Volume(v), veh/h	196	1032	0	0	634	603	577	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1680	1681	0	0			
Q Serve(g_s), s	10.1	17.6	0.0	0.0	32.7	33.1	31.5	0.0	0.0			
Cycle Q Clear(g_c), s	10.1	17.6	0.0	0.0	32.7	33.1	31.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.63	0.51		0.48			
Lane Grp Cap(c), veh/h	229	1930	0	0	661	625	604	0	0			
V/C Ratio(X)	0.85	0.53	0.00	0.00	0.96	0.97	0.96	0.00	0.00			
Avail Cap(c_a), veh/h	379	1930	0	0	661	625	625	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.1	13.8	0.0	0.0	28.8	29.0	29.4	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.3	0.0	0.0	25.1	27.5	24.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.6	6.5	0.0	0.0	17.7	17.3	15.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	14.1	0.0	0.0	53.9	56.5	54.1	0.0	0.0			
LnGrp LOS	D	B	A	A	D	E	D	A	A			
Approach Vol, veh/h		1228			1237			577				
Approach Delay, s/veh		19.0			55.2			54.1				
Approach LOS		B			E			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		55.7			16.1	39.6		38.4				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		19.6			12.1	35.1		33.5				
Green Ext Time (p_c), s		6.0			0.1	0.0		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					40.4							
HCM 6th LOS					D							



HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	611	204	361	639	0	0	0	0	273	4	122
Future Volume (veh/h)	0	611	204	361	639	0	0	0	0	273	4	122
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	985	329	495	875	0				317	5	142
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	1252	418	403	1127	0				344	5	154
Arrive On Green	0.00	0.33	0.33	0.23	0.60	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3953	1263	1781	1870	0				1173	19	525
Grp Volume(v), veh/h	0	886	428	495	875	0				464	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1643	1781	1870	0				1717	0	0
Q Serve(g_s), s	0.0	20.8	20.8	20.0	30.9	0.0				23.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.8	20.8	20.0	30.9	0.0				23.1	0.0	0.0
Prop In Lane	0.00		0.77	1.00		0.00				0.68		0.31
Lane Grp Cap(c), veh/h	0	1127	544	403	1127	0				504	0	0
V/C Ratio(X)	0.00	0.79	0.79	1.23	0.78	0.00				0.92	0.00	0.00
Avail Cap(c_a), veh/h	0	1347	650	403	1127	0				680	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.8	26.8	34.2	13.1	0.0				30.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	5.2	123.0	3.4	0.0				12.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.5	22.0	12.0	0.0				10.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.3	32.0	157.2	16.6	0.0				42.9	0.0	0.0
LnGrp LOS	A	C	C	F	B	A				D	A	A
Approach Vol, veh/h		1314			1370						464	
Approach Delay, s/veh		30.2			67.4						42.9	
Approach LOS		C			E						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	34.0	33.9		30.6		57.9						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+Q), s	22.0	22.8		25.1		32.9						
Green Ext Time (p_c), s	0.0	6.4		0.8		1.2						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				48.3								
HCM 6th LOS				D								

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	464	175	179	382	134	183	10	346	50	10	25
Future Volume (veh/h)	30	464	175	179	382	134	183	10	346	50	10	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	844	318	289	616	216	333	18	629	54	11	27
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	1164	519	368	965	338	372	503	750	106	425	190
Arrive On Green	0.06	0.33	0.33	0.11	0.37	0.37	0.21	0.27	0.27	0.06	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	3456	2581	904	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	55	844	318	289	424	408	333	18	629	54	11	27
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1708	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	2.5	17.7	14.3	6.9	16.6	16.6	15.4	0.6	18.0	2.5	0.2	1.3
Cycle Q Clear(g_c), s	2.5	17.7	14.3	6.9	16.6	16.6	15.4	0.6	18.0	2.5	0.2	1.3
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	1164	519	368	664	639	372	503	750	106	425	190
V/C Ratio(X)	0.51	0.73	0.61	0.79	0.64	0.64	0.90	0.04	0.84	0.51	0.03	0.14
Avail Cap(c_a), veh/h	211	2101	937	409	1050	1009	421	1106	1649	211	1681	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	25.1	23.9	36.8	21.8	21.8	32.6	22.8	29.2	38.6	32.9	33.3
Incr Delay (d2), s/veh	3.8	0.9	1.2	8.9	1.0	1.1	19.7	0.0	2.6	3.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.2	5.0	3.3	6.6	6.4	8.2	0.3	5.8	1.1	0.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	26.0	25.1	45.7	22.8	22.9	52.2	22.9	31.8	42.3	32.9	33.7
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1217			1121			980			92	
Approach Delay, s/veh		26.5			28.7			38.6			38.7	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.6	32.8	22.3	15.9	9.7	36.7	9.6	28.5				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+10), s	19.7	19.7	17.4	3.3	4.5	18.6	4.5	20.0				
Green Ext Time (p_c), s	0.1	8.0	0.3	0.1	0.0	5.9	0.0	2.7				

### Intersection Summary

HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	26	230	79	0
Future Vol, veh/h	0	0	26	230	79	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	28	250	86	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	392	86	86	0	-	0
Stage 1	86	-	-	-	-	-
Stage 2	306	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	612	973	1510	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	599	973	1510	-	-	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	747	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1510	-	-	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	-	-
HCM Control Delay (s)	7.4	0	0	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	0	0	221	79	0
Future Vol, veh/h	35	0	0	221	79	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	0	0	240	86	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	326	86	86	0	0
Stage 1	86	-	-	-	-
Stage 2	240	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	668	973	1510	-	-
Stage 1	937	-	-	-	-
Stage 2	800	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	668	973	1510	-	-
Mov Cap-2 Maneuver	668	-	-	-	-
Stage 1	937	-	-	-	-
Stage 2	800	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1510	-	668	-	-	-
HCM Lane V/C Ratio	-	-	0.057	-	-	-
HCM Control Delay (s)	0	-	10.7	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	6.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	85	0	0	139	35
Future Vol, veh/h	0	85	0	0	139	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	92	0	0	151	38

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	92	0	47 46
Stage 1	-	-	-	-	46 -
Stage 2	-	-	-	-	1 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1503	-	963 1023
Stage 1	-	-	-	-	976 -
Stage 2	-	-	-	-	1022 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1503	-	963 1023
Mov Cap-2 Maneuver	-	-	-	-	963 -
Stage 1	-	-	-	-	976 -
Stage 2	-	-	-	-	1022 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	963	1023	-	-	1503	-
HCM Lane V/C Ratio	0.157	0.037	-	-	-	-
HCM Control Delay (s)	9.4	8.7	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	28	80	63	38	34
Future Vol, veh/h	75	28	80	63	38	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	59	59	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	41	136	107	47	42

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	326	190	0	0	243
Stage 1	190	-	-	-	-
Stage 2	136	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	668	852	-	-	1323
Stage 1	842	-	-	-	-
Stage 2	890	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	644	852	-	-	1323
Mov Cap-2 Maneuver	644	-	-	-	-
Stage 1	842	-	-	-	-
Stage 2	858	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	644	852	1323
HCM Lane V/C Ratio	-	-	0.169	0.048	0.035
HCM Control Delay (s)	-	-	11.7	9.4	7.8
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	0.1

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Background Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	84	17	166	62	0	0	0	0	271	5	41
Future Vol, veh/h	0	84	17	166	62	0	0	0	0	271	5	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	88	88	88	92	92	92	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	115	23	189	70	0	0	0	0	304	6	46

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	138	0	0		506	586	35
Stage 1	-	-	-	-	-	-		448	448	-
Stage 2	-	-	-	-	-	-		58	138	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1443	-	0		496	421	1030
Stage 1	0	-	-	-	-	0		611	571	-
Stage 2	0	-	-	-	-	0		958	781	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1443	-	-		431	0	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-		431	0	-
Stage 1	-	-	-	-	-	-		611	0	-
Stage 2	-	-	-	-	-	-		833	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.7	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1443	-	431	467	1030
HCM Lane V/C Ratio	-	-	0.131	-	0.471	0.262	0.03
HCM Control Delay (s)	-	-	7.9	-	20.6	15.4	8.6
HCM Lane LOS	-	-	A	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	2.5	1	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Background Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	43	312	0	0	219	278	9	0	196	0	0	0
Future Vol, veh/h	43	312	0	0	219	278	9	0	196	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	94	94	94	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	351	0	0	238	302	10	0	209	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	540	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1025	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1025	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.1	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	433	837	1025	-	-	-
HCM Lane V/C Ratio	0.022	0.249	0.047	-	-	-
HCM Control Delay (s)	13.5	10.7	8.7	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	1	0.1	-	-	-



Intersection	
Intersection Delay, s/veh	19
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	69	295	144	28	229	37	214	33	51	30	14	54
Future Vol, veh/h	69	295	144	28	229	37	214	33	51	30	14	54
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.90	0.90	0.90	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	77	328	160	31	257	42	238	37	57	37	17	67
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	20.1	15.4	22.9	12.8
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	87%	0%	100%	0%	0%	20%	0%	68%	0%
Vol Thru, %	13%	0%	0%	100%	0%	80%	76%	32%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	24%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	51	69	295	144	143	152	44	54
LT Vol	214	0	69	0	0	28	0	30	0
Through Vol	33	0	0	295	0	115	115	14	0
RT Vol	0	51	0	0	144	0	37	0	54
Lane Flow Rate	274	57	77	328	160	160	170	54	67
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.644	0.115	0.172	0.688	0.304	0.363	0.373	0.138	0.15
Departure Headway (Hd)	8.447	7.293	8.066	7.555	6.839	8.161	7.884	9.164	8.093
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	425	490	443	479	523	439	454	389	441
Service Time	6.225	5.069	5.839	5.327	4.611	5.943	5.667	6.963	5.891
HCM Lane V/C Ratio	0.645	0.116	0.174	0.685	0.306	0.364	0.374	0.139	0.152
HCM Control Delay	25.4	11	12.5	25.5	12.6	15.6	15.3	13.4	12.3
HCM Lane LOS	D	B	B	D	B	C	C	B	B
HCM 95th-tile Q	4.4	0.4	0.6	5.2	1.3	1.6	1.7	0.5	0.5

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Background Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕		↖	↕		↖	↕	
Traffic Volume (veh/h)	273	637	193	107	545	59	288	199	106	128	152	102
Future Volume (veh/h)	273	637	193	107	545	59	288	199	106	128	152	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	671	203	126	641	69	465	321	171	138	163	110
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.62	0.62	0.62	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	329	928	281	163	859	92	353	511	266	177	264	168
Arrive On Green	0.18	0.35	0.35	0.09	0.27	0.27	0.20	0.23	0.23	0.10	0.13	0.13
Sat Flow, veh/h	1781	2688	813	1781	3237	348	1781	2258	1177	1781	2082	1326
Grp Volume(v), veh/h	287	443	431	126	352	358	465	251	241	138	138	135
Grp Sat Flow(s),veh/h/ln	1781	1777	1724	1781	1777	1808	1781	1777	1659	1781	1777	1632
Q Serve(g_s), s	11.8	16.5	16.5	5.2	13.7	13.7	15.0	9.6	10.0	5.7	5.5	6.0
Cycle Q Clear(g_c), s	11.8	16.5	16.5	5.2	13.7	13.7	15.0	9.6	10.0	5.7	5.5	6.0
Prop In Lane	1.00		0.47	1.00		0.19	1.00		0.71	1.00		0.81
Lane Grp Cap(c), veh/h	329	613	595	163	472	480	353	402	375	177	226	207
V/C Ratio(X)	0.87	0.72	0.72	0.77	0.75	0.75	1.32	0.62	0.64	0.78	0.61	0.65
Avail Cap(c_a), veh/h	353	705	684	353	705	717	353	705	658	353	705	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	21.6	21.6	33.6	25.4	25.4	30.3	26.4	26.5	33.3	31.2	31.4
Incr Delay (d2), s/veh	20.2	3.4	3.5	9.0	2.8	2.8	161.0	1.9	2.2	8.7	3.2	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.9	6.7	2.6	5.8	5.9	21.8	4.0	3.9	2.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	25.0	25.1	42.6	28.3	28.3	191.4	28.3	28.7	41.9	34.4	35.6
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	D
Approach Vol, veh/h		1161			836			957			411	
Approach Delay, s/veh		31.2			30.4			107.6			37.3	
Approach LOS		C			C			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	30.1	20.0	13.6	17.9	24.1	12.5	21.1				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	7.2	18.5	17.0	8.0	13.8	15.7	7.7	12.0				
Green Ext Time (p_c), s	0.2	4.9	0.0	1.7	0.1	4.3	0.2	3.1				

Intersection Summary

HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Background Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	822	0	0	735	353	278	7	408	0	0	0
Future Volume (veh/h)	184	822	0	0	735	353	278	7	408	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	207	924	0	0	855	410	299	8	439			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	240	1920	0	0	850	405	242	6	356			
Arrive On Green	0.13	0.54	0.00	0.00	0.36	0.36	0.36	0.36	0.36			
Sat Flow, veh/h	1781	3647	0	0	2429	1112	666	18	978			
Grp Volume(v), veh/h	207	924	0	0	649	616	746	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1670	1661	0	0			
Q Serve(g_s), s	10.9	15.5	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	10.9	15.5	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.67	0.40		0.59			
Lane Grp Cap(c), veh/h	240	1920	0	0	647	608	605	0	0			
V/C Ratio(X)	0.86	0.48	0.00	0.00	1.00	1.01	1.23	0.00	0.00			
Avail Cap(c_a), veh/h	371	1920	0	0	647	608	605	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	13.7	0.0	0.0	30.6	30.6	30.6	0.0	0.0			
Incr Delay (d2), s/veh	7.9	0.2	0.0	0.0	36.2	39.8	119.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.2	5.8	0.0	0.0	20.6	20.0	32.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	13.9	0.0	0.0	66.8	70.4	149.6	0.0	0.0			
LnGrp LOS	D	B	A	A	F	F	F	A	A			
Approach Vol, veh/h		1131			1265			746				
Approach Delay, s/veh		20.3			68.5			149.6				
Approach LOS		C			E			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		56.5			16.9	39.6		39.6				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+1), s		17.5			12.9	37.0		37.0				
Green Ext Time (p_c), s		5.6			0.1	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					70.4							
HCM 6th LOS					E							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Background Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	658	200	270	743	0	0	0	0	348	8	226
Future Volume (veh/h)	0	658	200	270	743	0	0	0	0	348	8	226
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	748	227	329	906	0				395	9	257
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	1021	307	362	953	0				395	9	257
Arrive On Green	0.00	0.26	0.26	0.20	0.51	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	4063	1169	1781	1870	0				1016	23	661
Grp Volume(v), veh/h	0	653	322	329	906	0				661	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1660	1781	1870	0				1701	0	0
Q Serve(g_s), s	0.0	15.8	16.0	16.3	41.5	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.8	16.0	16.3	41.5	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.70	1.00		0.00				0.60		0.39
Lane Grp Cap(c), veh/h	0	893	435	362	953	0				660	0	0
V/C Ratio(X)	0.00	0.73	0.74	0.91	0.95	0.00				1.00	0.00	0.00
Avail Cap(c_a), veh/h	0	1322	644	395	953	0				660	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.4	30.4	35.1	21.0	0.0				27.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	2.3	22.3	18.3	0.0				35.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	6.4	9.0	20.9	0.0				19.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.4	32.7	57.4	39.3	0.0				62.9	0.0	0.0
LnGrp LOS	A	C	C	E	D	A				F	A	A
Approach Vol, veh/h		975			1235						661	
Approach Delay, s/veh		31.8			44.1						62.9	
Approach LOS		C			D						E	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	22.3	28.2		39.6		50.6						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+110), s	19.3	18.0		37.0		43.5						
Green Ext Time (p_c), s	0.0	5.6		0.0		0.0						

Intersection Summary

HCM 6th Ctrl Delay	44.3
HCM 6th LOS	D

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Background Conditions  
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	220	35	369	272	260	35	50	368	260	70	50
Future Volume (veh/h)	103	220	35	369	272	260	35	50	368	260	70	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	297	47	429	316	302	38	54	400	283	76	54
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	772	344	509	471	420	94	360	537	262	1020	455
Arrive On Green	0.10	0.22	0.22	0.15	0.27	0.27	0.05	0.19	0.19	0.15	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	3456	1777	1585	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	139	297	47	429	316	302	38	54	400	283	76	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	5.2	4.9	1.6	8.2	10.8	11.7	1.4	1.6	9.2	10.0	1.1	1.7
Cycle Q Clear(g_c), s	5.2	4.9	1.6	8.2	10.8	11.7	1.4	1.6	9.2	10.0	1.1	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	772	344	509	471	420	94	360	537	262	1020	455
V/C Ratio(X)	0.79	0.38	0.14	0.84	0.67	0.72	0.40	0.15	0.74	1.08	0.07	0.12
Avail Cap(c_a), veh/h	262	2615	1167	509	1308	1167	524	1377	2053	262	2092	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	22.7	21.5	28.2	22.3	22.7	31.1	22.8	25.9	29.0	17.6	17.9
Incr Delay (d2), s/veh	9.1	0.3	0.2	12.3	1.7	2.3	2.8	0.2	2.1	78.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.9	0.6	4.0	4.4	4.3	0.6	0.7	2.9	9.6	0.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	23.0	21.6	40.5	24.0	25.0	33.9	23.0	27.9	107.3	17.7	18.0
LnGrp LOS	D	C	C	D	C	C	C	C	C	F	B	B
Approach Vol, veh/h		483			1047			492			413	
Approach Delay, s/veh		27.5			31.0			27.9			79.1	
Approach LOS		C			C			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	19.9	8.2	25.3	11.3	23.1	14.6	18.9				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+10), s	10.0	6.9	3.4	3.7	7.2	13.7	12.0	11.2				
Green Ext Time (p_c), s	0.0	2.2	0.0	0.6	0.1	4.3	0.0	1.9				

### Intersection Summary

HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↷		↶	↷	
Traffic Vol, veh/h	0	10	0	326	245	0
Future Vol, veh/h	0	10	0	326	245	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	0	354	266	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	620	266	266	0	-	0
Stage 1	266	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	452	773	1298	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	452	773	1298	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1298	-	-	773	-	-
HCM Lane V/C Ratio	-	-	-	0.014	-	-
HCM Control Delay (s)	0	-	0	9.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	165	0	0	161	103	152
Future Vol, veh/h	165	0	0	161	103	152
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	179	0	0	175	112	165

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	370	195	277	0	-	0
Stage 1	195	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	630	846	1286	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	630	846	1286	-	-	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	855	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1286	-	630	-	-	-
HCM Lane V/C Ratio	-	-	0.285	-	-	-
HCM Control Delay (s)	0	-	13	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Intersection						
Int Delay, s/veh	10					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	228	152	0	248	165
Future Vol, veh/h	0	228	152	0	248	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	248	165	0	270	179

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	248	0	454
Stage 1	-	-	-	-	124
Stage 2	-	-	-	-	330
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1318	-	564
Stage 1	-	-	-	-	902
Stage 2	-	-	-	-	728
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1318	-	494
Mov Cap-2 Maneuver	-	-	-	-	494
Stage 1	-	-	-	-	902
Stage 2	-	-	-	-	637

Approach	EB	WB	NB
HCM Control Delay, s	0	8.1	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	494	927	-	-	1318	-
HCM Lane V/C Ratio	0.546	0.193	-	-	0.125	-
HCM Control Delay (s)	20.7	9.8	-	-	8.1	0
HCM Lane LOS	C	A	-	-	A	A
HCM 95th %tile Q(veh)	3.2	0.7	-	-	0.4	-



HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Intersection						
Int Delay, s/veh	3.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	86	273	53	63	197
Future Vol, veh/h	48	86	273	53	63	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	84	84	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	104	325	63	78	243

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	756	357	0	0	388
Stage 1	357	-	-	-	-
Stage 2	399	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	376	687	-	-	1170
Stage 1	708	-	-	-	-
Stage 2	678	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	347	687	-	-	1170
Mov Cap-2 Maneuver	347	-	-	-	-
Stage 1	708	-	-	-	-
Stage 2	626	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	347	687	1170
HCM Lane V/C Ratio	-	-	0.167	0.151	0.066
HCM Control Delay (s)	-	-	17.4	11.2	8.3
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.2

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Background Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	80	36	166	96	0	0	0	0	262	3	38
Future Vol, veh/h	0	80	36	166	96	0	0	0	0	262	3	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	83	83	83	92	92	92	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	103	46	200	116	0	0	0	0	298	3	43

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	149	0	0		568	665	58
Stage 1	-	-	-	-	-	-		516	516	-
Stage 2	-	-	-	-	-	-		52	149	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1430	-	0		453	379	996
Stage 1	0	-	-	-	-	0		564	533	-
Stage 2	0	-	-	-	-	0		964	773	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	1430	-	-		390	0	996
Mov Cap-2 Maneuver	-	-	-	-	-	-		390	0	-
Stage 1	-	-	-	-	-	-		564	0	-
Stage 2	-	-	-	-	-	-		829	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1430	-	390	423	996
HCM Lane V/C Ratio	-	-	0.14	-	0.509	0.277	0.029
HCM Control Delay (s)	-	-	7.9	-	23.4	16.7	8.7
HCM Lane LOS	-	-	A	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	2.8	1.1	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Background Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	35	307	0	0	226	369	36	5	190	0	0	0
Future Vol, veh/h	35	307	0	0	226	369	36	5	190	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	95	95	95	88	88	88	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	345	0	0	238	388	41	6	216	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	626	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	952	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	952	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	451	840	952	-	-	-
HCM Lane V/C Ratio	0.103	0.257	0.041	-	-	-
HCM Control Delay (s)	13.9	10.8	8.9	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	1	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	24.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	68	279	150	48	335	57	206	59	86	54	53	54
Future Vol, veh/h	68	279	150	48	335	57	206	59	86	54	53	54
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	294	158	54	376	64	219	63	91	59	58	59
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	24.1	24.3	30	16.5
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	78%	0%	100%	0%	0%	22%	0%	50%	0%
Vol Thru, %	22%	0%	0%	100%	0%	78%	75%	50%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	265	86	68	279	150	216	225	107	54
LT Vol	206	0	68	0	0	48	0	54	0
Through Vol	59	0	0	279	0	168	168	53	0
RT Vol	0	86	0	0	150	0	57	0	54
Lane Flow Rate	282	91	72	294	158	242	252	116	59
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.744	0.213	0.186	0.719	0.355	0.604	0.608	0.329	0.15
Departure Headway (Hd)	9.505	8.385	9.33	8.814	8.09	8.978	8.678	10.195	9.206
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	381	427	384	411	444	402	416	352	389
Service Time	7.271	6.15	7.093	6.576	5.852	6.742	6.442	7.974	6.985
HCM Lane V/C Ratio	0.74	0.213	0.188	0.715	0.356	0.602	0.606	0.33	0.152
HCM Control Delay	35.4	13.4	14.2	31.2	15.3	24.6	24.1	17.9	13.6
HCM Lane LOS	E	B	B	D	C	C	C	C	B
HCM 95th-tile Q	5.9	0.8	0.7	5.5	1.6	3.8	3.9	1.4	0.5

## Appendix E – Baseline Conditions Freeway Level of Service Sheets

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4200	Heavy Vehicle Adjustment Factor (fhv)	0.871
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1710
Total Trucks, %	14.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.5
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3975	Heavy Vehicle Adjustment Factor (fhv)	0.860
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1639
Total Trucks, %	16.30	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.3
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4045	Heavy Vehicle Adjustment Factor (fhv)	0.848
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1692
Total Trucks, %	17.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4359	Heavy Vehicle Adjustment Factor (fhv)	0.876
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1765
Total Trucks, %	14.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.5
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4313	Heavy Vehicle Adjustment Factor (fhv)	0.867
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1764
Total Trucks, %	15.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4243	Heavy Vehicle Adjustment Factor (fhv)	0.885
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1700
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.1
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4586	Heavy Vehicle Adjustment Factor (fhv)	0.900
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1807
Total Trucks, %	11.10	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4606	Heavy Vehicle Adjustment Factor (fhv)	0.881
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1854
Total Trucks, %	13.50	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.77
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4503	Heavy Vehicle Adjustment Factor (fhv)	0.863
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1850
Total Trucks, %	15.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.77
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.5
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4315	Heavy Vehicle Adjustment Factor (fhv)	0.864
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1771
Total Trucks, %	15.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.6
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4043	Heavy Vehicle Adjustment Factor (fhv)	0.833
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1721
Total Trucks, %	20.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.3
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.6
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4204	Heavy Vehicle Adjustment Factor (fhv)	0.898
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1660
Total Trucks, %	11.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

## Appendix F – Ashley Driveway Counts

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore N Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-001  
 Date: 6/2/2021

**Total**

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
12:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 AM	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
12:45 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
1:15 AM	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	0	11
1:30 AM	0	42	0	0	0	4	0	0	0	0	0	0	0	0	0	0	46
1:45 AM	0	8	0	0	1	3	0	0	0	0	0	0	0	1	0	0	13
2:00 AM	0	6	0	0	1	0	0	0	0	0	0	0	0	1	0	0	8
2:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
2:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
3:15 AM	0	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	12
3:30 AM	0	3	0	0	1	15	0	0	0	0	0	0	0	0	0	0	19
3:45 AM	0	3	0	0	3	44	0	0	0	0	0	0	0	0	0	0	50
4:00 AM	0	5	0	0	4	17	0	0	0	0	0	0	0	0	0	0	26
4:15 AM	0	6	0	0	1	9	0	0	0	0	0	0	0	0	0	0	16
4:30 AM	0	8	0	0	2	11	0	0	0	0	0	0	0	2	0	0	23
4:45 AM	0	3	0	0	4	18	0	0	0	0	0	0	0	0	0	0	25
5:00 AM	0	4	0	0	4	24	0	0	0	0	0	0	0	0	0	0	32
5:15 AM	0	3	0	0	2	14	0	0	0	0	0	0	0	0	0	0	19
5:30 AM	0	4	0	0	1	14	0	0	0	0	0	0	0	0	0	0	19
5:45 AM	0	2	0	0	1	17	0	0	0	0	0	0	0	1	0	0	21
6:00 AM	0	7	1	0	1	13	0	0	0	0	0	0	0	2	0	0	24
6:15 AM	0	8	0	0	1	9	0	0	0	0	0	0	0	0	0	0	18
6:30 AM	0	11	0	0	2	5	0	0	0	0	0	0	0	0	0	0	18
6:45 AM	0	9	0	0	2	12	0	0	0	0	0	0	0	2	0	0	25
7:00 AM	0	10	0	0	1	6	0	0	0	0	0	0	0	2	0	0	19
7:15 AM	0	10	0	0	3	10	0	0	0	0	0	0	0	4	0	0	27
7:30 AM	0	8	0	0	4	11	0	0	0	0	0	0	0	4	0	0	27
7:45 AM	0	8	0	0	10	15	0	0	0	0	0	0	1	3	0	0	37
8:00 AM	0	10	1	0	4	11	0	0	0	0	0	0	0	12	0	0	38
8:15 AM	0	13	0	0	2	8	0	0	0	0	0	0	0	1	0	0	24
8:30 AM	0	5	0	0	1	7	0	0	0	0	0	0	0	0	0	0	13
8:45 AM	0	12	0	0	3	7	0	0	0	0	0	0	0	1	0	0	23
9:00 AM	0	5	0	0	3	9	0	0	0	0	0	0	0	0	0	0	17
9:15 AM	0	9	0	0	4	11	0	0	0	0	0	0	0	2	0	0	26
9:30 AM	0	9	0	0	2	13	0	0	0	0	0	0	0	1	0	0	25
9:45 AM	0	4	0	0	3	11	0	0	0	0	0	0	0	2	0	0	20
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	264	2	0	71	375	0	0	0	0	0	0	1	0	43	0	756
	0.00%	99.25%	0.75%	0.00%	15.92%	84.08%	0.00%	0.00%	0.000	0.000	0.000	0.000	2.27%	0.00%	97.73%	0.00%	
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	36	1	0	21	47	0	0	0	0	0	0	1	0	23	0	129
<b>PEAK HR FACTOR :</b>	0.000	0.900	0.250	0.000	0.525	0.783	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.479	0.000	0.849
	0.841				0.680								0.500				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
NOON	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	11	0	0	4	12	0	1	0	0	0	0	0	3	0	0	31
10:15 AM	0	11	0	0	3	5	0	0	0	0	0	0	0	3	0	0	22
10:30 AM	0	9	0	0	2	15	0	1	0	0	0	0	0	3	0	0	30
10:45 AM	0	6	0	0	5	8	0	0	0	0	0	0	0	0	0	0	19
11:00 AM	0	10	0	0	5	4	0	0	0	0	0	0	0	1	0	0	20
11:15 AM	0	10	0	0	4	10	0	0	0	0	0	0	0	5	0	0	29
11:30 AM	0	13	0	0	4	11	0	0	0	0	0	0	0	2	0	0	30
11:45 AM	0	10	0	0	8	10	0	1	0	0	0	0	0	3	0	0	32
12:00 PM	0	6	0	0	6	7	0	0	0	0	0	0	0	5	0	0	24
12:15 PM	0	3	0	0	11	8	0	1	0	0	0	0	0	5	0	0	28
12:30 PM	0	14	0	0	6	10	0	0	0	0	0	0	0	6	0	0	36
12:45 PM	0	7	0	0	8	26	0	0	0	0	0	0	0	5	0	0	46
1:00 PM	0	10	0	0	4	14	0	0	0	0	0	0	0	3	0	0	31
1:15 PM	0	18	0	0	5	6	0	0	0	0	0	0	1	4	0	0	34
1:30 PM	0	21	0	0	1	7	0	0	0	0	0	0	0	4	0	0	33
1:45 PM	0	12	0	0	0	15	0	0	0	0	0	0	0	9	0	0	36
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	171	0	0	76	168	0	4	0	0	0	0	1	0	61	0	481
	0.00%	100.00%	0.00%	0.00%	30.65%	67.74%	0.00%	1.61%	0.000	0.000	0.000	0.000	1.61%	0.00%	98.39%	0.00%	
<b>PEAK HR :</b>	12:30 PM - 01:30 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	49	0	0	23	56	0	0	0	0	0	0	1	0	18	0	147
<b>PEAK HR FACTOR :</b>	0.000	0.681	0.000	0.000	0.719	0.538	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.750	0.000	0.799
	0.681				0.581								0.792				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	12	0	0	2	10	0	0	0	0	0	0	0	4	0	0	28
2:15 PM	0	23	0	0	3	18	0	0	0	0	0	0	0	4	0	0	48
2:30 PM	0	46	0	0	5	36	0	0	0	0	0	0	0	3	0	0	90
2:45 PM	0	15	0	0	3	35	0	0	0	0	0	0	0	2	0	0	55
3:00 PM	0	9	0	0	3	14	0	1	0	0	0	0	0	3	0	0	30
3:15 PM	0	11	0	0	1	5	0	0	0	0	0	0	0	4	0	0	21
3:30 PM	0	14	0	0	3	10	0	0	0	0	0	0	0	7	0	0	34
3:45 PM	0	9	0	0	3	10	0	0	0	0	0	0	0	6	0	0	28
4:00 PM	0	15	0	0	4	6	0	0	0	0	0	0	0	12	0	0	37
4:15 PM	0	17	0	0	3	10	0	0	0	0	0	0	0	6	0	0	36
4:30 PM	0	10	0	0	6	3	0	1	0	0	0	0	0	6	0	0	26
4:45 PM	0	6	0	0	3	9	0	0	0	0	0	0	0	5	0	0	23
5:00 PM	0	8	0	0	1	11	0	0	0	0	0	0	0	6	0	0	26
5:15 PM	0	12	0	0	0	16	0	0	0	0	0	0	0	3	0	0	31
5:30 PM	0	12	1	0	2	12	0	1	0	0	0	0	0	4	0	0	32
5:45 PM	0	7	0	0	3	11	0	0	0	0	0	0	0	5	0	0	26
6:00 PM	0	14	0	0	2	11	0	1	0	0	0	0	0	8	0	0	36
6:15 PM	0	12	0	0	3	10	0	0	0	0	0	0	0	2	0	0	27
6:30 PM	0	16	0	0	2	12	0	0	0	0	0	0	0	6	0	0	36
6:45 PM	0	10	0	0	2	12	0	0	0	0	0	0	0	0	0	0	24
7:00 PM	0	11	0	1	2	9	0	0	0	0	0	0	0	5	0	0	28
7:15 PM	0	14	0	0	0	4	0	0	0	0	0	0	0	0	0	0	18
7:30 PM	0	14	0	0	1	8	0	0	0	0	0						

**National Data & Surveying Services**  
**Intersection Turning Movement Count**

Location: S Harlan Rd & Ashley Homestore N Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-001  
 Date: 6/2/2021

**Cars**

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
12:30 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
12:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1:15 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
1:30 AM	0	41	0	0	0	2	0	0	0	0	0	0	0	0	0	0	43
1:45 AM	0	6	0	0	1	1	0	0	0	0	0	0	0	0	1	0	9
2:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	0	1	0	7
2:15 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
2:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
3:15 AM	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11
3:30 AM	0	2	0	0	1	15	0	0	0	0	0	0	0	0	0	0	18
3:45 AM	0	1	0	0	3	43	0	0	0	0	0	0	0	0	0	0	47
4:00 AM	0	1	0	0	4	16	0	0	0	0	0	0	0	0	0	0	21
4:15 AM	0	5	0	0	1	8	0	0	0	0	0	0	0	0	0	0	14
4:30 AM	0	4	0	0	2	9	0	0	0	0	0	0	0	0	2	0	17
4:45 AM	0	0	0	0	4	15	0	0	0	0	0	0	0	0	0	0	19
5:00 AM	0	3	0	0	4	22	0	0	0	0	0	0	0	0	0	0	29
5:15 AM	0	1	0	0	2	13	0	0	0	0	0	0	0	0	0	0	16
5:30 AM	0	3	0	0	1	11	0	0	0	0	0	0	0	0	0	0	15
5:45 AM	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	10
6:00 AM	0	4	1	0	1	8	0	0	0	0	0	0	0	0	2	0	16
6:15 AM	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	7
6:30 AM	0	4	0	0	2	3	0	0	0	0	0	0	0	0	0	0	9
6:45 AM	0	3	0	0	2	12	0	0	0	0	0	0	0	0	1	0	18
7:00 AM	0	5	0	0	1	5	0	0	0	0	0	0	0	0	1	0	12
7:15 AM	0	5	0	0	3	6	0	0	0	0	0	0	0	0	1	0	15
7:30 AM	0	1	0	0	4	7	0	0	0	0	0	0	0	0	3	0	15
7:45 AM	0	4	0	0	10	10	0	0	0	0	0	0	1	0	2	0	27
8:00 AM	0	2	0	0	4	6	0	0	0	0	0	0	0	0	6	0	18
8:15 AM	0	4	0	0	2	6	0	0	0	0	0	0	0	0	0	0	12
8:30 AM	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	6	0	0	3	4	0	0	0	0	0	0	0	0	0	0	13
9:00 AM	0	3	0	0	3	6	0	0	0	0	0	0	0	0	0	0	12
9:15 AM	0	2	0	0	4	5	0	0	0	0	0	0	0	0	2	0	13
9:30 AM	0	4	0	0	2	7	0	0	0	0	0	0	0	0	1	0	14
9:45 AM	0	0	0	0	3	9	0	0	0	0	0	0	0	0	2	0	14
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	0	141	1	0	71	287	0	0	0	0	0	0	1	0	27	0	528
<b>APPROACH %'s :</b>	0.00%				99.30%				0.70%				0.00%				
					19.83%	80.17%	0.00%	0.00%					3.57%	0.00%	96.43%	0.00%	
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>
	0	12	0	0	21	29	0	0	0	0	0	0	1	0	12	0	75
<b>PEAK HR VOL :</b>	0.00				0.600				0.000				0.000				
<b>PEAK HR FACTOR :</b>					0.525	0.725	0.000	0.000	0.000				0.250	0.000	0.500	0.000	0.694
	0.600				0.625								0.542				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
10:00 AM	0	5	0	0	4	4	0	1	0	0	0	0	0	0	3	0	17
10:15 AM	0	5	0	0	3	1	0	0	0	0	0	0	0	0	3	0	12
10:30 AM	0	3	0	0	2	8	0	1	0	0	0	0	0	0	3	0	17
10:45 AM	0	1	0	0	5	4	0	0	0	0	0	0	0	0	0	0	10
11:00 AM	0	6	0	0	4	0	0	0	0	0	0	0	0	0	1	0	11
11:15 AM	0	4	0	0	4	7	0	0	0	0	0	0	0	0	5	0	20
11:30 AM	0	7	0	0	4	7	0	0	0	0	0	0	0	0	2	0	20
11:45 AM	0	4	0	0	8	7	0	1	0	0	0	0	0	0	3	0	23
12:00 PM	0	3	0	0	6	2	0	0	0	0	0	0	0	0	5	0	16
12:15 PM	0	3	0	0	11	6	0	1	0	0	0	0	0	0	5	0	26
12:30 PM	0	7	0	0	6	7	0	0	0	0	0	0	0	0	6	0	26
12:45 PM	0	5	0	0	8	17	0	0	0	0	0	0	0	0	4	0	34
1:00 PM	0	4	0	0	3	6	0	0	0	0	0	0	0	0	3	0	16
1:15 PM	0	11	0	0	5	5	0	0	0	0	0	0	1	0	4	0	26
1:30 PM	0	18	0	0	1	3	0	0	0	0	0	0	0	0	4	0	26
1:45 PM	0	11	0	0	0	11	0	0	0	0	0	0	0	0	9	0	31
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	0	97	0	0	74	95	0	4	0	0	0	0	1	0	60	0	331
<b>APPROACH %'s :</b>	0.00%				100.00%				0.00%				0.00%				
					42.77%	54.91%	0.00%	2.31%					1.64%	0.00%	98.36%	0.00%	
<b>PEAK HR :</b>	12:30 PM - 01:30 PM																<b>TOTAL</b>
	0	27	0	0	22	35	0	0	0	0	0	0	1	0	17	0	102
<b>PEAK HR VOL :</b>	0.00				0.614				0.000				0.000				
<b>PEAK HR FACTOR :</b>					0.688	0.515	0.000	0.000	0.000				0.250	0.000	0.708	0.000	0.750
	0.614				0.570								0.750				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	10	0	0	2	7	0	0	0	0	0	0	0	0	4	0	23
2:15 PM	0	21	0	0	3	11	0	0	0	0	0	0	0	0	4	0	39
2:30 PM	0	44	0	0	5	35	0	0	0	0	0	0	0	0	3	0	87
2:45 PM	0	12	0	0	3	30	0	0	0	0	0	0	0	0	2	0	47
3:00 PM	0	5	0	0	3	10	0	1	0	0	0	0	0	0	3	0	22
3:15 PM	0	8	0	0	1	2	0	0	0	0	0	0	0	0	4	0	15
3:30 PM	0	10	0	0	3	6	0	0	0	0	0	0	0	0	7	0	26
3:45 PM	0	5	0	0	3	3	0	0	0	0	0	0	0	0	6	0	17
4:00 PM	0	13	0	0	4	0	0	0	0	0	0	0	0	0	12	0	29
4:15 PM	0	13	0	0	3	5	0	0	0	0	0	0	0	0	6	0	27
4:30 PM	0	8	0	0	5	2	0	1	0	0	0	0	0	0	6	0	22
4:45 PM	0	4	0	0	3	3	0	0	0	0	0	0	0	0	5	0	15
5:00 PM	0	5	0	0	1	5	0	0	0	0	0	0	0	0	6	0	17
5:15 PM	0	10	0	0	0	9	0	0	0	0	0	0	0	0	3	0	22
5:30 PM	0	10	1	0	2	5	0	1	0	0	0	0	0	0	4	0	23
5:45 PM	0	6	0	0	3	6	0	0	0	0	0	0	0	0	5	0	20
6:00 PM	0	10	0	0	2	5	0	0	0	0	0	0	0	0	8	0	25
6:15 PM	0	10	0	0	3	4	0	0	0	0	0	0	0	0	2	0	19
6:30 PM	0	13	0	0	2	5	0	0	0	0	0	0	0	0	6	0	26
6:45 PM	0	10	0	0	2	3	0	0	0	0	0	0	0	0	0	0	15
7:00 PM	0	10	0	1	2	3	0	0	0	0	0	0	0	0	4	0	20
7:15 PM	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6
7:30 PM	0	9	0	0	1	2	0	0	0	0	0	0	0	0	1	0	13
7:45 PM	0	9	0	0	1	4	0	0	0	0	0	0	0	0	3	0	17
8:00 PM	0	13	1	0	1	5	0	0	0	0	0	0	0	0	4	0	24
8:15 PM	0	3															

**National Data & Surveying Services**  
**Intersection Turning Movement Count**

Location: S Harlan Rd & Ashley Homestore N Dwy  
City: Lathrop  
Control: 1-Way Stop(WB)

Project ID: 21-090040-001  
Date: 6/2/2021

		<b>S Harlan Rd</b>								<b>S Harlan Rd</b>				<b>Asley Homestore N Dwy</b>				<b>Asley Homestore N Dwy</b>				
<b>NS/EW Streets:</b>		<b>NORTHBOUND</b>				<b>SOUTHBOUND</b>				<b>EASTBOUND</b>				<b>WESTBOUND</b>								
<b>AM</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>				
12:00 AM		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2			
12:15 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
12:30 AM		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2				
12:45 AM		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2				
1:00 AM		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1				
1:15 AM		0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3				
1:30 AM		0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3				
1:45 AM		0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4				
2:00 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
2:15 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
2:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
2:45 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
3:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:15 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
3:30 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
3:45 AM		0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3				
4:00 AM		0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5				
4:15 AM		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2				
4:30 AM		0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6				
4:45 AM		0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6				
5:00 AM		0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3				
5:15 AM		0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3				
5:30 AM		0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4				
5:45 AM		0	2	0	0	0	8	0	0	0	0	0	0	0	0	1	0	11				
6:00 AM		0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8				
6:15 AM		0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	0	11				
6:30 AM		0	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0	9				
6:45 AM		0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7				
7:00 AM		0	5	0	0	0	1	0	0	0	0	0	0	0	0	1	0	7				
7:15 AM		0	5	0	0	0	4	0	0	0	0	0	0	0	0	3	0	12				
7:30 AM		0	7	0	0	0	4	0	0	0	0	0	0	0	0	1	0	12				
7:45 AM		0	4	0	0	0	5	0	0	0	0	0	0	0	0	1	0	10				
8:00 AM		0	8	1	0	0	5	0	0	0	0	0	0	0	0	6	0	20				
8:15 AM		0	9	0	0	0	2	0	0	0	0	0	0	0	0	1	0	12				
8:30 AM		0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	9				
8:45 AM		0	6	0	0	0	3	0	0	0	0	0	0	0	0	1	0	10				
9:00 AM		0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5				
9:15 AM		0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	0	13				
9:30 AM		0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	0	11				
9:45 AM		0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6				
<b>TOTAL VOLUMES :</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>				
<b>APPROACH %'s :</b>		0	123	1	0	0	88	0	0	0	0	0	0	0	0	16	0	228				
<b>APPROACH %'s :</b>		0.00%	99.19%	0.81%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
<b>PEAK HR :</b>		<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>				
<b>PEAK HR VOL :</b>		0	24	1	0	0	18	0	0	0	0	0	0	0	0	11	0	54				
<b>PEAK HR FACTOR :</b>		0.000	0.750	0.250	0.000	0.000	0.900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.458	0.000	0.675				
<b>NOON</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>				
10:00 AM		0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0	14				
10:15 AM		0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	10				
10:30 AM		0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	0	13				
10:45 AM		0	5	0	0	0	4	0	0	0	0	0	0	0	0	0	0	9				
11:00 AM		0	4	0	0	1	4	0	0	0	0	0	0	0	0	0	0	9				
11:15 AM		0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	0	9				
11:30 AM		0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	10				
11:45 AM		0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	0	9				
12:00 PM		0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8				
12:15 PM		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2				
12:30 PM		0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	0	10				
12:45 PM		0	2	0	0	0	9	0	0	0	0	0	0	0	0	1	0	12				
1:00 PM		0	6	0	0	1	8	0	0	0	0	0	0	0	0	0	0	15				
1:15 PM		0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8				
1:30 PM		0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7				
1:45 PM		0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5				
<b>TOTAL VOLUMES :</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>				
<b>APPROACH %'s :</b>		0	74	0	0	0	73	0	0	0	0	0	0	0	0	1	0	150				
<b>APPROACH %'s :</b>		0.00%	100.00%	0.00%	0.00%	2.67%	97.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
<b>PEAK HR :</b>		<b>12:30 PM - 01:30 PM</b>																<b>TOTAL</b>				
<b>PEAK HR VOL :</b>		0	22	0	0	1	21	0	0	0	0	0	0	0	0	1	0	45				
<b>PEAK HR FACTOR :</b>		0.00	0.786	0.000	0.000	0.250	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.750				
<b>PM</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>				
2:00 PM		0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5				
2:15 PM		0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0	9				
2:30 PM		0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3				
2:45 PM		0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8				
3:00 PM		0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8				
3:15 PM		0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6				
3:30 PM		0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8				
3:45 PM		0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	0	11				
4:00 PM		0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	8				
4:15 PM		0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	9				
4:30 PM		0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4				
4:45 PM		0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	8				
5:00 PM		0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	0	9				
5:15 PM		0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0	9				
5:30 PM		0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0	9				
5:45 PM		0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	6				
6:00 PM		0	4	0	0	0	6	0	1	0	0	0	0	0	0	0	0	11				
6:15 PM		0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	8				
6:30 PM		0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	0	10				
6:45 PM		0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9				
7:00 PM		0	1	0	0	0	6	0	0	0	0	0	0	0	0	1	0	8				
7:15 PM		0	9	0	0	0	3	0	0	0	0	0	0	0	0	0	0	12				
7:30 PM		0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	0	11				
7:45 PM		0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0	9				
8:00 PM		0																				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore S Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-002  
 Date: 6/2/2021

		Total																TOTAL	
		S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy					
NS/EW Streets:	AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3
	12:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
	12:30 AM	0	2	0	0	1	1	0	0	0	0	0	0	0	0	1	0	5	
	12:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	4	
	1:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4	
	1:15 AM	0	10	0	0	1	1	0	0	0	0	0	0	0	0	0	0	12	
	1:30 AM	0	39	0	0	2	2	0	0	0	0	0	0	0	0	2	0	45	
	1:45 AM	0	5	0	0	0	3	0	0	0	0	0	0	0	0	3	0	11	
	2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	
	2:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	
	2:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	
	2:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
	3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	
	3:15 AM	0	1	0	0	1	10	0	0	0	0	0	0	0	0	0	0	12	
	3:30 AM	0	2	0	0	3	12	0	0	0	0	0	0	0	1	0	0	18	
	3:45 AM	0	3	0	0	14	30	0	0	0	0	0	1	0	0	0	0	48	
	4:00 AM	0	4	0	0	7	9	0	0	0	0	0	0	0	1	0	0	21	
	4:15 AM	0	1	0	0	2	8	0	0	0	0	0	0	0	5	0	0	16	
	4:30 AM	0	2	0	0	6	5	0	0	0	0	0	0	0	6	0	0	19	
	4:45 AM	0	2	0	0	7	11	0	0	0	0	0	0	0	1	0	0	21	
	5:00 AM	0	2	0	0	18	6	0	0	0	0	0	0	0	3	0	0	29	
	5:15 AM	0	1	2	0	8	6	0	0	0	0	0	0	0	1	0	0	18	
	5:30 AM	0	3	0	0	7	6	0	0	0	0	0	0	0	1	0	0	17	
	5:45 AM	0	2	0	0	9	9	0	0	0	0	0	0	0	0	0	0	20	
	6:00 AM	0	6	0	0	11	2	0	0	0	0	0	0	0	2	0	0	21	
	6:15 AM	0	6	0	0	7	1	0	0	0	0	0	0	0	2	0	0	16	
	6:30 AM	0	3	0	0	4	2	0	0	0	0	0	0	0	8	0	0	17	
	6:45 AM	0	4	0	0	10	2	0	0	0	0	0	0	0	5	0	0	21	
	7:00 AM	0	4	2	0	4	2	0	0	0	0	0	1	0	7	0	0	20	
	7:15 AM	0	1	0	0	3	6	0	0	0	0	0	1	0	8	0	0	19	
	7:30 AM	0	3	0	0	7	5	0	0	0	0	0	0	0	5	0	0	20	
	7:45 AM	0	5	0	0	7	9	0	0	0	0	0	0	0	3	0	0	24	
	8:00 AM	0	3	0	0	3	7	0	0	0	0	0	0	0	8	0	0	21	
	8:15 AM	0	6	0	0	5	4	0	0	0	0	0	0	0	8	0	0	23	
	8:30 AM	0	1	0	0	2	5	0	0	0	0	0	0	0	3	0	0	11	
	8:45 AM	0	9	0	0	3	4	0	0	0	0	0	0	0	3	0	0	19	
	9:00 AM	0	3	1	0	2	7	0	0	0	0	0	1	0	2	0	0	16	
	9:15 AM	0	8	0	0	3	8	0	0	0	0	0	0	0	1	0	0	20	
	9:30 AM	0	8	0	0	4	8	0	0	0	0	0	0	0	1	0	0	21	
	9:45 AM	0	4	0	0	7	5	0	0	0	0	0	0	0	1	0	0	17	
<b>TOTAL VOLUMES :</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>		0.00%	97.14%	2.86%	0.00%	44.95%	55.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.96%	0.00%	96.04%	0.00%	652	
<b>PEAK HR :</b>		<b>03:45 AM - 04:45 AM</b>																<b>TOTAL</b>	
<b>PEAK HR VOL :</b>		0	10	0	0	29	52	0	0	0	0	0	0	1	0	12	0	104	
<b>PEAK HR FACTOR :</b>		0.000	0.625	0.000	0.000	0.518	0.433	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.542	

	NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	10:00 AM	0	8	1	0	3	9	0	0	0	0	0	0	0	3	0	0	24
	10:15 AM	0	8	0	0	2	3	0	0	0	0	0	0	0	3	0	0	16
	10:30 AM	0	6	0	0	3	12	0	0	0	0	0	0	0	3	0	0	24
	10:45 AM	0	3	0	0	2	6	0	0	0	0	0	0	0	3	0	0	14
	11:00 AM	0	11	0	0	2	2	0	0	0	0	0	0	0	0	0	0	15
	11:15 AM	0	6	0	0	4	6	0	0	0	0	0	0	0	3	0	0	19
	11:30 AM	0	6	0	0	6	5	0	0	0	0	0	0	0	8	0	0	25
	11:45 AM	0	6	0	0	6	3	0	1	0	0	0	0	0	2	0	0	18
	12:00 PM	0	4	0	0	1	6	0	0	0	0	0	0	0	2	0	0	13
	12:15 PM	0	2	0	0	6	2	0	0	0	0	0	0	0	2	0	0	12
	12:30 PM	0	9	0	0	2	7	0	0	0	0	0	0	0	4	0	0	22
	12:45 PM	0	3	0	0	14	13	0	0	0	0	0	0	0	4	0	0	34
	1:00 PM	0	4	1	0	6	8	0	0	0	0	0	0	0	6	0	0	25
	1:15 PM	0	12	0	0	1	5	0	1	0	0	0	0	0	5	0	0	24
	1:30 PM	0	10	0	0	2	5	0	0	0	0	0	0	0	11	0	0	28
	1:45 PM	0	3	1	0	5	10	0	0	0	0	0	0	0	9	0	0	28
<b>TOTAL VOLUMES :</b>		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>		0.00%	97.12%	2.88%	0.00%	38.46%	60.36%	0.00%	1.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	341
<b>PEAK HR :</b>		<b>12:45 PM - 01:45 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>		0	29	1	0	23	31	0	1	0	0	0	0	0	0	26	0	111
<b>PEAK HR FACTOR :</b>		0.000	0.604	0.250	0.000	0.411	0.596	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.591	0.000	0.816

	PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	2:00 PM	0	7	0	0	5	5	0	0	0	0	0	0	0	5	0	0	22
	2:15 PM	0	20	0	0	4	12	0	0	0	0	0	0	0	3	0	0	39
	2:30 PM	0	40	0	0	3	34	0	1	0	0	0	0	1	5	0	0	84
	2:45 PM	0	6	0	0	10	25	0	0	0	0	0	1	0	9	0	0	51
	3:00 PM	0	6	0	0	2	12	0	0	0	0	0	0	0	3	0	0	23
	3:15 PM	0	8	0	0	3	1	0	0	0	0	0	0	0	3	0	0	15
	3:30 PM	0	8	0	0	7	4	0	0	0	0	0	0	0	6	0	0	25
	3:45 PM	0	5	0	0	6	4	0	0	0	0	0	0	0	4	0	0	19
	4:00 PM	0	6	0	0	3	3	0	0	0	0	0	0	0	9	0	0	21
	4:15 PM	0	6	0	0	4	6	0	0	0	0	0	0	0	11	0	0	27
	4:30 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	5	0	0	13
	4:45 PM	0	2	0	0	4	3	0	0	0	0	0	0	0	4	0	0	13
	5:00 PM	0	5	0	0	8	5	0	0	0	0	0	0	0	3	0	0	21
	5:15 PM	0	4	0	0	14	2	0	0	0	0	0	0	0	8	0	0	28
	5:30 PM	0	7	0	0	8	3	0	0	0	0	0	0	0	6	0	0	24
	5:45 PM	0	2	0	0	10	2	0	0	0	0	0	0	0	5	0	0	19
	6:00 PM	0	3	0	0	7	1	0	1	0	0	0	0	0	11	0	0	23
	6:15 PM	0	5	0	0	6	6	0	0	0	0	0	0	0	6	0	0	23
	6:30 PM	0	2	0	0	8	4	0	0	0	0	0	0	0	14	0	0	28
	6:45 PM	0	3	0	0	4	8	0	0	0	0	0	0	0	7	0	0	22
	7:00 PM	0	5	0	0	3	6	0	1	0	0	0	0	0	6	0	0	21
	7:15 PM	0	9	0	0	1	3	0	0	0								

## National Data & Surveying Services Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore S Dwy  
City: Lathrop  
Control: 1-Way Stop(WB)

Project ID: 21-090040-002  
Date: 6/2/2021

		Cars																		
NS/EW Streets:		S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy						
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU			
	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
	12:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3
	12:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
	1:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	1:15 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	1:30 AM	0	38	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	42	
	1:45 AM	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	7	
	2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
	2:15 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	
	2:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	
	2:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
	3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	5	
	3:15 AM	0	0	0	0	1	10	0	0	0	0	0	0	0	0	0	0	0	11	
	3:30 AM	0	1	0	0	3	12	0	0	0	0	0	0	0	0	0	1	0	17	
	3:45 AM	0	1	0	0	14	29	0	0	0	0	0	1	0	0	0	0	0	45	
	4:00 AM	0	0	0	0	7	8	0	0	0	0	0	0	0	1	0	1	0	16	
	4:15 AM	0	1	0	0	2	7	0	0	0	0	0	0	0	4	0	0	14		
	4:30 AM	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	0	13		
	4:45 AM	0	0	0	0	6	9	0	0	0	0	0	0	0	0	0	0	15		
	5:00 AM	0	2	0	0	16	6	0	0	0	0	0	0	0	2	0	0	26		
	5:15 AM	0	0	1	0	7	6	0	0	0	0	0	0	0	0	0	0	14		
	5:30 AM	0	2	0	0	5	5	0	0	0	0	0	0	0	1	0	0	13		
	5:45 AM	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	0	10		
	6:00 AM	0	4	0	0	8	0	0	0	0	0	0	0	0	1	0	0	13		
	6:15 AM	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5		
	6:30 AM	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	8		
	6:45 AM	0	0	0	0	10	2	0	0	0	0	0	0	0	3	0	0	15		
	7:00 AM	0	3	2	0	4	1	0	0	0	0	0	1	0	2	0	0	13		
	7:15 AM	0	1	0	0	2	4	0	0	0	0	0	1	0	4	0	0	12		
	7:30 AM	0	0	0	0	5	2	0	0	0	0	0	0	0	1	0	0	8		
	7:45 AM	0	3	0	0	6	5	0	0	0	0	0	0	0	1	0	0	15		
	8:00 AM	0	0	0	0	2	4	0	0	0	0	0	0	0	2	0	0	8		
	8:15 AM	0	1	0	0	5	1	0	0	0	0	0	0	0	3	0	0	10		
	8:30 AM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3		
	8:45 AM	0	5	0	0	3	1	0	0	0	0	0	0	0	1	0	0	10		
	9:00 AM	0	2	1	0	1	5	0	0	0	0	0	1	0	1	0	0	11		
	9:15 AM	0	1	0	0	2	3	0	0	0	0	0	0	0	1	0	0	7		
	9:30 AM	0	3	0	0	4	3	0	0	0	0	0	0	0	1	0	0	11		
	9:45 AM	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	9		
	TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL		
		0	97	4	0	143	145	0	0	0	0	0	0	4	0	45	0	438		
	APPROACH %'s :	0.00%	96.04%	3.96%	0.00%	49.65%	50.35%	0.00%	0.00%					8.16%	0.00%	91.84%	0.00%			
	PEAK HR :	03:45 AM - 04:45 AM																TOTAL		
	PEAK HR VOL :	0	2	0	0	28	48	0	0	0	0	0	0	1	0	9	0	88		
	PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.500	0.414	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.563	0.000	0.489		
		0.500				0.442				0.625										
	10:00 AM	0	3	0	0	1	3	0	0	0	0	0	0	0	2	0	0	9		
	10:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	1	0	0	6		
	10:30 AM	0	2	0	0	2	6	0	0	0	0	0	0	0	1	0	0	11		
	10:45 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0	0	5		
	11:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6		
	11:15 AM	0	2	0	0	2	5	0	0	0	0	0	0	0	2	0	0	11		
	11:30 AM	0	2	0	0	5	2	0	0	0	0	0	0	0	5	0	0	14		
	11:45 AM	0	2	0	0	5	1	0	1	0	0	0	0	0	1	0	0	10		
	12:00 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	1	0	0	5		
	12:15 PM	0	1	0	0	5	1	0	0	0	0	0	0	0	2	0	0	9		
	12:30 PM	0	4	0	0	2	5	0	0	0	0	0	0	0	3	0	0	14		
	12:45 PM	0	2	0	0	11	6	0	0	0	0	0	0	0	3	0	0	22		
	1:00 PM	0	1	1	0	1	5	0	0	0	0	0	0	0	3	0	0	11		
	1:15 PM	0	6	0	0	1	4	0	1	0	0	0	0	0	4	0	0	16		
	1:30 PM	0	9	0	0	2	1	0	0	0	0	0	0	0	9	0	0	21		
	1:45 PM	0	3	1	0	4	7	0	0	0	0	0	0	0	8	0	0	23		
	TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL		
		0	49	2	0	44	50	0	2	0	0	0	0	0	0	46	0	193		
	APPROACH %'s :	0.00%	96.08%	3.92%	0.00%	45.83%	52.08%	0.00%	2.08%					0.00%	0.00%	100.00%	0.00%			
	PEAK HR :	12:45 PM - 01:45 PM																TOTAL		
	PEAK HR VOL :	0	18	1	0	15	16	0	1	0	0	0	0	0	0	19	0	70		
	PEAK HR FACTOR :	0.00	0.500	0.250	0.000	0.341	0.667	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.528	0.000	0.795		
		0.528				0.471				0.528										
	2:00 PM	0	6	0	0	3	4	0	0	0	0	0	0	0	4	0	0	17		
	2:15 PM	0	18	0	0	2	8	0	0	0	0	0	0	0	3	0	0	31		
	2:30 PM	0	38	0	0	3	32	0	1	0	0	0	0	0	5	0	0	79		
	2:45 PM	0	4	0	0	7	23	0	0	0	0	0	1	0	8	0	0	43		
	3:00 PM	0	2	0	0	1	9	0	0	0	0	0	0	0	3	0	0	15		
	3:15 PM	0	6	0	0	2	0	0	0	0	0	0	0	0	2	0	0	10		
	3:30 PM	0	6	0	0	4	2	0	0	0	0	0	0	0	4	0	0	16		
	3:45 PM	0	2	0	0	2	1	0	0	0	0	0	0	0	3	0	0	8		
	4:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	8	0	0	13		
	4:15 PM	0	3	0	0	3	2	0	0	0	0	0	0	0	10	0	0	18		
	4:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	5	0	0	10		
	4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	4	0	0	6		
	5:00 PM	0	3	0	0	6	0	0	0	0	0	0	0	0	2	0	0	11		
	5:15 PM	0	2	0	0	9	0	0	0	0	0	0	0	0	8	0	0	19		
	5:30 PM	0	6	0	0	3	1	0	0	0	0	0	0	0	5	0	0	15		
	5:45 PM	0	1	0	0	7	0	0	0	0	0	0	0	0	5	0	0	13		
	6:00 PM	0	1	0	0	4	0	0	0	0	0	0	0	0	10	0	0	15		
	6:15 PM	0	3	0	0	3	2	0	0	0	0	0	0	0	6	0	0	14		
	6:30 PM	0	1	0	0	4	1	0	0	0	0	0	0	0	12	0	0	18		
	6:45 PM	0	3	0	0	2	1	0	0	0	0	0	0	0	7	0	0	13		
	7:00 PM	0	5	0	0	0	3	0	1	0	0	0	0	0	5	0	0	14		
	7:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	4	0	0	6		
	7:30 PM	0	6	0	0	1	1	0	0	0	0	0	0	0	3	0	0	11		
	7:45 PM	0	7	0	0	0	4	0	0	0	0	0	0	0	2	0	0	13		
	8:00 PM	0	8	0	0	1	4	0	0	0	0	0	0	0	6	0	0	19		
	8:15 PM	0	1	0	0	4	4	0												

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore S Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-002  
 Date: 6/2/2021

HT

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:15 AM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
1:30 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
1:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	4
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
2:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	
4:00 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	
4:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	
4:30 AM	0	2	0	0	1	1	0	0	0	0	0	0	0	2	0	6	
4:45 AM	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	6	
5:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	3	
5:15 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	1	0	4	
5:30 AM	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	4	
5:45 AM	0	2	0	0	2	6	0	0	0	0	0	0	0	0	0	10	
6:00 AM	0	2	0	0	3	2	0	0	0	0	0	0	0	1	0	8	
6:15 AM	0	6	0	0	2	1	0	0	0	0	0	0	0	2	0	11	
6:30 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	4	0	9	
6:45 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	6	
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	5	0	7	
7:15 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	4	0	7	
7:30 AM	0	3	0	0	2	3	0	0	0	0	0	0	0	4	0	12	
7:45 AM	0	2	0	0	1	4	0	0	0	0	0	0	0	2	0	9	
8:00 AM	0	3	0	0	1	3	0	0	0	0	0	0	0	6	0	13	
8:15 AM	0	5	0	0	0	3	0	0	0	0	0	0	0	5	0	13	
8:30 AM	0	0	0	0	1	4	0	0	0	0	0	0	0	3	0	8	
8:45 AM	0	4	0	0	0	3	0	0	0	0	0	0	0	2	0	9	
9:00 AM	0	1	0	0	1	2	0	0	0	0	0	0	0	1	0	5	
9:15 AM	0	7	0	0	1	5	0	0	0	0	0	0	0	0	0	13	
9:30 AM	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	10	
9:45 AM	0	4	0	0	1	2	0	0	0	0	0	0	0	1	0	8	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	73	1	0	26	62	0	0	0	0	0	0	0	52	0	0	214
<b>APPROACH %'s :</b>	0.00% 98.65% 1.35% 0.00%				29.55% 70.45% 0.00% 0.00%				0.00% 0.00% 100.00% 0.00%								
<b>PEAK HR :</b>	03:45 AM - 04:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	8	0	0	1	4	0	0	0	0	0	0	0	3	0	0	16
<b>PEAK HR FACTOR :</b>	0.000 0.500 0.000 0.000				0.250 1.000 0.000 0.000				0.000 0.000 0.000 0.000				0.000 0.000 0.375 0.000				0.667
	0.458				0.625								0.375				
NOON	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	5	1	0	2	6	0	0	0	0	0	0	0	1	0	15	
10:15 AM	0	4	0	0	2	2	0	0	0	0	0	0	0	2	0	10	
10:30 AM	0	4	0	0	1	6	0	0	0	0	0	0	0	2	0	13	
10:45 AM	0	3	0	0	0	4	0	0	0	0	0	0	0	2	0	9	
11:00 AM	0	5	0	0	2	2	0	0	0	0	0	0	0	0	0	9	
11:15 AM	0	4	0	0	2	1	0	0	0	0	0	0	0	1	0	8	
11:30 AM	0	4	0	0	1	3	0	0	0	0	0	0	0	3	0	11	
11:45 AM	0	4	0	0	1	2	0	0	0	0	0	0	0	1	0	8	
12:00 PM	0	2	0	0	0	5	0	0	0	0	0	0	0	1	0	8	
12:15 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3	
12:30 PM	0	5	0	0	0	2	0	0	0	0	0	0	0	1	0	8	
12:45 PM	0	1	0	0	3	7	0	0	0	0	0	0	0	1	0	12	
1:00 PM	0	3	0	0	5	3	0	0	0	0	0	0	0	3	0	14	
1:15 PM	0	6	0	0	0	1	0	0	0	0	0	0	0	1	0	8	
1:30 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	2	0	7	
1:45 PM	0	0	0	0	1	3	0	0	0	0	0	0	0	1	0	5	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	52	1	0	21	52	0	0	0	0	0	0	0	22	0	0	148
<b>APPROACH %'s :</b>	0.00% 98.11% 1.89% 0.00%				28.77% 71.23% 0.00% 0.00%				0.00% 0.00% 100.00% 0.00%								
<b>PEAK HR :</b>	12:45 PM - 01:45 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	11	0	0	8	15	0	0	0	0	0	0	0	7	0	0	41
<b>PEAK HR FACTOR :</b>	0.00 0.458 0.000 0.000				0.400 0.536 0.000 0.000				0.000 0.000 0.000 0.000				0.000 0.000 0.583 0.000				0.732
	0.458				0.575								0.583				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	2	1	0	0	0	0	0	0	0	1	0	5	
2:15 PM	0	2	0	0	2	4	0	0	0	0	0	0	0	0	0	8	
2:30 PM	0	2	0	0	0	2	0	0	0	0	0	1	0	0	0	5	
2:45 PM	0	2	0	0	3	2	0	0	0	0	0	0	0	1	0	8	
3:00 PM	0	4	0	0	1	3	0	0	0	0	0	0	0	0	0	8	
3:15 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	1	0	5	
3:30 PM	0	2	0	0	3	2	0	0	0	0	0	0	0	2	0	9	
3:45 PM	0	3	0	0	4	3	0	0	0	0	0	0	0	1	0	11	
4:00 PM	0	1	0	0	3	3	0	0	0	0	0	0	0	1	0	8	
4:15 PM	0	3	0	0	1	4	0	0	0	0	0	0	0	1	0	9	
4:30 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	
4:45 PM	0	2	0	0	2	3	0	0	0	0	0	0	0	0	0	7	
5:00 PM	0	2	0	0	2	5	0	0	0	0	0	0	0	1	0	10	
5:15 PM	0	2	0	0	5	2	0	0	0	0	0	0	0	0	0	9	
5:30 PM	0	1	0	0	5	2	0	0	0	0	0	0	0	1	0	9	
5:45 PM	0	1	0	0	3	2	0	0	0	0	0	0	0	0	0	6	
6:00 PM	0	2	0	0	3	1	0	1	0	0	0	0	0	1	0	8	
6:15 PM	0	2	0	0	3	4	0	0	0	0	0	0	0	0	0	9	
6:30 PM	0	1	0	0	4	3	0	0	0	0	0	0	0	2	0	10	
6:45 PM	0	0	0	0	2	7	0	0	0	0	0	0	0	0	0	9	
7:00 PM	0	0	0	0	3	3	0	0	0	0	0	0	0	1	0	7	
7:15 PM	0	8	0	0	1	2	0	0	0	0	0	0	0	1	0	12	
7:30 PM	0	5	0	0	4	2	0	0	0	0	0	0	0	0	0	11	
7:45 PM	0	0	0	0	2	4	0	0	0	0	0	0	0	2	0	8	
8:00 PM	0	1	0	0	1	3	0	0	0	0	0	0	0	1	0	6	
8:15 PM	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	6	
8:30 PM	0	3	0	0	1	2	0	0	0	0	0	0	0	0	0	6	
8:45 PM	0	3	0	0	1	1	0	0	0	0	0	0	0	1	0	6	
9:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	
9:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
9:30 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	
9:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	
10:00 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4</	



## Appendix G – Baseline plus Project Level of Service Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↷		↶	↷	
Traffic Volume (veh/h)	200	490	146	50	581	57	227	111	48	45	75	149
Future Volume (veh/h)	200	490	146	50	581	57	227	111	48	45	75	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	628	187	57	660	65	303	148	64	57	95	189
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.75	0.75	0.75	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	1012	301	81	869	85	339	705	292	113	285	254
Arrive On Green	0.17	0.37	0.37	0.05	0.27	0.27	0.19	0.29	0.29	0.06	0.16	0.16
Sat Flow, veh/h	1781	2700	803	1781	3268	321	1781	2451	1014	1781	1777	1585
Grp Volume(v), veh/h	256	413	402	57	359	366	303	105	107	57	95	189
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1812	1781	1777	1688	1781	1777	1585
Q Serve(g_s), s	11.0	14.9	14.9	2.5	14.6	14.6	13.1	3.5	3.8	2.4	3.7	8.9
Cycle Q Clear(g_c), s	11.0	14.9	14.9	2.5	14.6	14.6	13.1	3.5	3.8	2.4	3.7	8.9
Prop In Lane	1.00		0.47	1.00		0.18	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	298	666	647	81	472	482	339	511	486	113	285	254
V/C Ratio(X)	0.86	0.62	0.62	0.71	0.76	0.76	0.89	0.21	0.22	0.51	0.33	0.74
Avail Cap(c_a), veh/h	339	677	658	339	677	691	339	677	643	339	677	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	20.0	20.0	37.1	26.6	26.6	31.1	21.2	21.3	35.7	29.3	31.5
Incr Delay (d2), s/veh	18.4	1.8	1.9	12.8	3.5	3.5	24.6	0.2	0.3	4.2	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	6.0	5.9	1.3	6.3	6.4	7.6	1.4	1.4	1.1	1.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	21.9	22.0	49.9	30.1	30.1	55.6	21.5	21.6	39.8	30.1	36.6
LnGrp LOS	D	C	C	D	C	C	E	C	C	D	C	D
Approach Vol, veh/h		1071			782			515			341	
Approach Delay, s/veh		28.7			31.5			41.6			35.3	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	33.5	20.0	16.6	17.1	24.9	10.0	26.6				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	4.5	16.9	15.1	10.9	13.0	16.6	4.4	5.8				
Green Ext Time (p_c), s	0.1	4.9	0.0	1.7	0.2	4.3	0.1	1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				32.8								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Future Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	235	1043	0	0	870	380	351	5	279			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	267	1949	0	0	862	374	334	5	266			
Arrive On Green	0.15	0.55	0.00	0.00	0.36	0.36	0.36	0.36	0.36			
Sat Flow, veh/h	1781	3647	0	0	2505	1047	934	13	743			
Grp Volume(v), veh/h	235	1043	0	0	640	610	635	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1682	1690	0	0			
Q Serve(g_s), s	12.6	18.4	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	12.6	18.4	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.62	0.55		0.44			
Lane Grp Cap(c), veh/h	267	1949	0	0	635	601	604	0	0			
V/C Ratio(X)	0.88	0.54	0.00	0.00	1.01	1.01	1.05	0.00	0.00			
Avail Cap(c_a), veh/h	364	1949	0	0	635	601	604	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	14.1	0.0	0.0	31.4	31.4	31.4	0.0	0.0			
Incr Delay (d2), s/veh	13.7	0.3	0.0	0.0	37.3	40.5	50.6	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.4	6.8	0.0	0.0	20.8	20.2	21.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	14.4	0.0	0.0	68.8	71.9	82.1	0.0	0.0			
LnGrp LOS	D	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	1278				1250				635			
Approach Delay, s/veh	21.8				70.3				82.1			
Approach LOS	C				E				F			
Timer - Assigned Phs	2				5		6		8			
Phs Duration (G+Y+Rc), s	58.3				18.7		39.6		39.6			
Change Period (Y+Rc), s	4.6				4.0		4.6		4.6			
Max Green Setting (Gmax), s	35.0				20.0		35.0		35.0			
Max Q Clear Time (g_c+I1), s	20.4				14.6		37.0		37.0			
Green Ext Time (p_c), s	5.9				0.1		0.0		0.0			
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					53.1							
HCM 6th LOS					D							

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Future Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1044	373	495	951	0				317	5	192
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1239	443	370	1091	0				337	5	204
Arrive On Green	0.00	0.33	0.33	0.21	0.58	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	3879	1325	1781	1870	0				1050	17	636
Grp Volume(v), veh/h	0	958	459	495	951	0				514	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1632	1781	1870	0				1703	0	0
Q Serve(g_s), s	0.0	25.1	25.1	20.0	41.5	0.0				28.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	25.1	25.1	20.0	41.5	0.0				28.2	0.0	0.0
Prop In Lane	0.00		0.81	1.00		0.00				0.62		0.37
Lane Grp Cap(c), veh/h	0	1137	545	370	1091	0				547	0	0
V/C Ratio(X)	0.00	0.84	0.84	1.34	0.87	0.00				0.94	0.00	0.00
Avail Cap(c_a), veh/h	0	1239	594	370	1091	0				620	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	29.7	29.7	38.1	17.0	0.0				31.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.0	9.9	168.8	7.8	0.0				20.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.6	10.9	25.8	17.9	0.0				14.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.7	39.6	206.9	24.8	0.0				52.0	0.0	0.0
LnGrp LOS	A	C	D	F	C	A				D	A	A
Approach Vol, veh/h		1417			1446						514	
Approach Delay, s/veh		36.3			87.1						52.0	
Approach LOS		D			F						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	34.0	36.7		35.5		60.7						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+Q), s	22.0	27.1		30.2		43.5						
Green Ext Time (p_c), s	0.0	5.0		0.6		0.0						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				60.5								
HCM 6th LOS				E								

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Future Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1441	643	291	721	643	300	480	716	150	612	273
Arrive On Green	0.08	0.41	0.41	0.08	0.41	0.41	0.17	0.26	0.26	0.08	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	3456	1777	1585	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	10.0	17.1	17.7	9.9	37.4	42.7	20.0	1.9	25.7	10.0	1.2	3.5
Cycle Q Clear(g_c), s	10.0	17.1	17.7	9.9	37.4	42.7	20.0	1.9	25.7	10.0	1.2	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	1441	643	291	721	643	300	480	716	150	612	273
V/C Ratio(X)	1.44	0.48	0.49	0.99	0.85	0.93	1.11	0.08	0.88	1.09	0.07	0.20
Avail Cap(c_a), veh/h	150	1498	668	291	749	668	300	788	1176	150	1198	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	26.1	26.2	54.3	32.1	33.7	49.3	33.5	42.3	54.3	41.1	42.1
Incr Delay (d2), s/veh	231.0	0.3	0.6	50.5	9.3	19.3	84.5	0.1	4.6	98.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	7.2	6.5	6.3	17.4	19.3	15.7	0.9	9.0	8.5	0.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	285.4	26.3	26.8	104.8	41.4	53.0	133.8	33.6	46.9	152.5	41.2	42.4
LnGrp LOS	F	C	C	F	D	D	F	C	D	F	D	D
Approach Vol, veh/h		1229			1503			1002			259	
Approach Delay, s/veh		72.0			58.2			75.3			111.5	
Approach LOS		E			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	53.2	24.6	26.2	14.6	53.2	14.6	36.2				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M), s	19.7	19.7	22.0	5.5	12.0	44.7	12.0	27.7				
Green Ext Time (p_c), s	0.0	6.5	0.0	0.4	0.0	3.4	0.0	2.8				

### Intersection Summary

HCM 6th Ctrl Delay	70.2
HCM 6th LOS	E

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	26	315	100	0
Future Vol, veh/h	0	0	26	315	100	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	26	14	2
Mvmt Flow	0	0	28	342	109	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	507	109	109	0	-	0
Stage 1	109	-	-	-	-	-
Stage 2	398	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	525	945	1481	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	513	945	1481	-	-	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1481	-	-	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	-	-
HCM Control Delay (s)	7.5	0	0	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

04/25/2023

Intersection				
Intersection Delay, s/veh	2.0			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	92	167	556	
Demand Flow Rate, veh/h	94	170	567	
Vehicles Circulating, veh/h	170	154	0	
Vehicles Exiting, veh/h	154	0	264	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	3.9	4.4	1.0	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	413
Entry Flow, veh/h	94	170	154	1938
Cap Entry Lane, veh/h	1160	1179	1380	0.980
Entry HV Adj Factor	0.979	0.982	0.981	405
Flow Entry, veh/h	92	167	151	1900
Cap Entry, veh/h	1136	1158	1353	0.213
V/C Ratio	0.081	0.144	0.112	0.0
Control Delay, s/veh	3.9	4.4	3.6	A
LOS	A	A	A	1
95th %tile Queue, veh	0	1	0	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

04/25/2023

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	28	80	148	38	34
Future Vol, veh/h	96	28	80	148	38	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	59	59	81	81
Heavy Vehicles, %	15	2	2	55	2	2
Mvmt Flow	139	41	136	251	47	42

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	398	262	0	0	387
Stage 1	262	-	-	-	-
Stage 2	136	-	-	-	-
Critical Hdwy	6.55	6.22	-	-	4.12
Critical Hdwy Stg 1	5.55	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-
Follow-up Hdwy	3.635	3.318	-	-	2.218
Pot Cap-1 Maneuver	583	777	-	-	1171
Stage 1	753	-	-	-	-
Stage 2	859	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	559	777	-	-	1171
Mov Cap-2 Maneuver	559	-	-	-	-
Stage 1	753	-	-	-	-
Stage 2	824	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	559	777	1171
HCM Lane V/C Ratio	-	-	0.249	0.052	0.04
HCM Control Delay (s)	-	-	13.6	9.9	8.2
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1



HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	9.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	133	53	166	70	0	0	0	0	271	5	54
Future Vol, veh/h	0	133	53	166	70	0	0	0	0	271	5	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	88	88	88	92	92	92	89	89	89
Heavy Vehicles, %	2	34	68	2	11	2	2	2	2	2	2	11
Mvmt Flow	0	182	73	189	80	0	0	0	0	304	6	61

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	255	0	0		549	713	40
Stage 1	-	-	-	-	-	-		458	458	-
Stage 2	-	-	-	-	-	-		91	255	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.41
Pot Cap-1 Maneuver	0	-	-	1307	-	0		466	356	994
Stage 1	0	-	-	-	-	0		604	565	-
Stage 2	0	-	-	-	-	0		922	695	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1307	-	-		398	0	994
Mov Cap-2 Maneuver	-	-	-	-	-	-		398	0	-
Stage 1	-	-	-	-	-	-		604	0	-
Stage 2	-	-	-	-	-	-		788	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.8	19.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1307	-	398	442	994
HCM Lane V/C Ratio	-	-	0.144	-	0.51	0.288	0.041
HCM Control Delay (s)	-	-	8.2	-	23.1	16.4	8.8
HCM Lane LOS	-	-	A	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	2.8	1.2	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	83	321	0	0	221	278	15	0	196	0	0	0
Future Vol, veh/h	83	321	0	0	221	278	15	0	196	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	94	94	94	92	92	92
Heavy Vehicles, %	43	3	2	2	2	2	40	2	2	2	2	2
Mvmt Flow	93	361	0	0	240	302	16	0	209	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	542	0	- - - 0 667 1089 181
Stage 1	-	-	- - - 547 547 -
Stage 2	-	-	- - - 120 542 -
Critical Hdwy	4.96	-	- - - 7.6 6.54 6.94
Critical Hdwy Stg 1	-	-	- - - 6.6 5.54 -
Critical Hdwy Stg 2	-	-	- - - 6.6 5.54 -
Follow-up Hdwy	2.63	-	- - - 3.9 4.02 3.32
Pot Cap-1 Maneuver	786	- 0 0	- - - 317 214 831
Stage 1	-	- 0 0	- - - 449 516 -
Stage 2	-	- 0 0	- - - 790 518 -
Platoon blocked, %	-	-	- - -
Mov Cap-1 Maneuver	786	- - -	- - - 280 0 831
Mov Cap-2 Maneuver	-	- - -	- - - 280 0 -
Stage 1	-	- - -	- - - 396 0 -
Stage 2	-	- - -	- - - 790 0 -

Approach	EB	WB	NB
HCM Control Delay, s	2.1	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	280	831	786	-	-	-
HCM Lane V/C Ratio	0.057	0.251	0.119	-	-	-
HCM Control Delay (s)	18.6	10.8	10.2	-	-	-
HCM Lane LOS	C	B	B	-	-	-
HCM 95th %tile Q(veh)	0.2	1	0.4	-	-	-

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	69	304	144	28	231	37	214	33	51	30	14	54
Future Vol, veh/h	69	304	144	28	231	37	214	33	51	30	14	54
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.90	0.90	0.90	0.81	0.81	0.81
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	77	338	160	31	260	42	238	37	57	37	17	67
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	21.2	15.6	23.2	12.9
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	87%	0%	100%	0%	0%	20%	0%	68%	0%
Vol Thru, %	13%	0%	0%	100%	0%	80%	76%	32%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	24%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	51	69	304	144	144	153	44	54
LT Vol	214	0	69	0	0	28	0	30	0
Through Vol	33	0	0	304	0	116	116	14	0
RT Vol	0	51	0	0	144	0	37	0	54
Lane Flow Rate	274	57	77	338	160	161	171	54	67
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.648	0.116	0.172	0.712	0.305	0.367	0.377	0.139	0.151
Departure Headway (Hd)	8.495	7.34	8.087	7.593	6.86	8.203	7.928	9.222	8.151
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	423	486	442	473	522	437	452	387	437
Service Time	6.274	5.118	5.862	5.368	4.634	5.987	5.712	7.021	5.948
HCM Lane V/C Ratio	0.648	0.117	0.174	0.715	0.307	0.368	0.378	0.14	0.153
HCM Control Delay	25.7	11.1	12.5	27.2	12.6	15.7	15.5	13.5	12.4
HCM Lane LOS	D	B	B	D	B	C	C	B	B
HCM 95th-tile Q	4.5	0.4	0.6	5.6	1.3	1.7	1.7	0.5	0.5

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	332	136	0	0	18
Future Vol, veh/h	41	332	136	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	361	148	0	0	20

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	148	0	-	0	599 148
Stage 1	-	-	-	-	148 -
Stage 2	-	-	-	-	451 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1434	-	-	-	465 899
Stage 1	-	-	-	-	880 -
Stage 2	-	-	-	-	642 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1434	-	-	-	451 899
Mov Cap-2 Maneuver	-	-	-	-	451 -
Stage 1	-	-	-	-	853 -
Stage 2	-	-	-	-	642 -

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1434	-	-	-	899
HCM Lane V/C Ratio	0.031	-	-	-	0.022
HCM Control Delay (s)	7.6	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

04/25/2023

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	4	57	76	256	79	7
Future Vol, veh/h	4	57	76	256	79	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	62	83	278	86	8

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	534	90	94	0	0
Stage 1	90	-	-	-	-
Stage 2	444	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	507	968	1500	-	-
Stage 1	934	-	-	-	-
Stage 2	646	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	479	968	1500	-	-
Mov Cap-2 Maneuver	479	-	-	-	-
Stage 1	883	-	-	-	-
Stage 2	646	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1500	-	907	-	-
HCM Lane V/C Ratio	0.055	-	0.073	-	-
HCM Control Delay (s)	7.5	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

HCM 6th TWSC  
15: Manthey Rd & Ashley Dwy #4

04/25/2023

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	81	0	0	260	86	14
Future Vol, veh/h	81	0	0	260	86	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	88	0	0	283	93	15

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	384	101	108	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	466	954	1483	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	466	954	1483	-	-	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1483	-	466	-	-
HCM Lane V/C Ratio	-	-	0.189	-	-
HCM Control Delay (s)	0	-	14.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↶↷		↶	↶↷		↶	↶↷		↶	↶↷	
Traffic Volume (veh/h)	273	652	193	107	556	59	288	199	106	128	152	102
Future Volume (veh/h)	273	652	193	107	556	59	288	199	106	128	152	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	686	203	126	654	69	465	321	171	138	163	110
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.62	0.62	0.62	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	942	279	163	871	92	351	507	264	177	264	168
Arrive On Green	0.18	0.35	0.35	0.09	0.27	0.27	0.20	0.22	0.22	0.10	0.13	0.13
Sat Flow, veh/h	1781	2704	800	1781	3244	342	1781	2258	1177	1781	2082	1326
Grp Volume(v), veh/h	287	451	438	126	358	365	465	251	241	138	138	135
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1809	1781	1777	1659	1781	1777	1632
Q Serve(g_s), s	11.9	16.9	16.9	5.3	14.0	14.1	15.0	9.7	10.0	5.8	5.6	6.0
Cycle Q Clear(g_c), s	11.9	16.9	16.9	5.3	14.0	14.1	15.0	9.7	10.0	5.8	5.6	6.0
Prop In Lane	1.00		0.46	1.00		0.19	1.00		0.71	1.00		0.81
Lane Grp Cap(c), veh/h	328	619	601	163	477	486	351	399	373	177	225	207
V/C Ratio(X)	0.87	0.73	0.73	0.77	0.75	0.75	1.32	0.63	0.65	0.78	0.61	0.65
Avail Cap(c_a), veh/h	351	700	680	351	700	713	351	700	654	351	700	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	21.7	21.7	33.8	25.5	25.5	30.6	26.6	26.8	33.5	31.5	31.6
Incr Delay (d2), s/veh	20.5	3.6	3.7	9.1	3.0	3.0	164.6	2.0	2.3	8.7	3.2	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	7.1	6.9	2.6	5.9	6.1	22.0	4.0	3.9	2.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	25.2	25.4	42.9	28.5	28.5	195.2	28.6	29.0	42.2	34.7	35.8
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	D
Approach Vol, veh/h		1176			849			957			411	
Approach Delay, s/veh		31.5			30.7			109.7			37.6	
Approach LOS		C			C			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	30.5	20.0	13.6	18.0	24.4	12.5	21.1				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	7.3	18.9	17.0	8.0	13.9	16.1	7.8	12.0				
Green Ext Time (p_c), s	0.2	4.9	0.0	1.7	0.1	4.4	0.2	3.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			54.1									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Future Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	264	940	0	0	867	410	340	8	439			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	295	1978	0	0	824	387	253	6	326			
Arrive On Green	0.17	0.56	0.00	0.00	0.35	0.35	0.35	0.35	0.35			
Sat Flow, veh/h	1781	3647	0	0	2441	1101	720	17	930			
Grp Volume(v), veh/h	264	940	0	0	655	622	787	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1672	1667	0	0			
Q Serve(g_s), s	14.5	15.9	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	14.5	15.9	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.66	0.43		0.56			
Lane Grp Cap(c), veh/h	295	1978	0	0	624	587	585	0	0			
V/C Ratio(X)	0.89	0.48	0.00	0.00	1.05	1.06	1.35	0.00	0.00			
Avail Cap(c_a), veh/h	357	1978	0	0	624	587	585	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	13.3	0.0	0.0	32.4	32.4	32.4	0.0	0.0			
Incr Delay (d2), s/veh	19.2	0.2	0.0	0.0	49.7	54.2	166.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	5.9	0.0	0.0	22.9	22.3	40.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.9	13.5	0.0	0.0	82.1	86.6	198.8	0.0	0.0			
LnGrp LOS	E	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	1204				1277		787					
Approach Delay, s/veh	23.7				84.3		198.8					
Approach LOS	C				F		F					
Timer - Assigned Phs	2				5		6		8			
Phs Duration (G+Y+Rc), s	60.1				20.5		39.6		39.6			
Change Period (Y+Rc), s	4.6				4.0		4.6		4.6			
Max Green Setting (Gmax), s	35.0				20.0		35.0		35.0			
Max Q Clear Time (g_c+I1), s	17.9				16.5		37.0		37.0			
Green Ext Time (p_c), s	5.7				0.0		0.0		0.0			
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			89.5									
HCM 6th LOS			F									



# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Future Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	823	284	329	966	0				395	9	300
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1073	368	360	992	0				353	8	268
Arrive On Green	0.00	0.29	0.29	0.20	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	3924	1287	1781	1870	0				950	22	721
Grp Volume(v), veh/h	0	746	361	329	966	0				704	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1639	1781	1870	0				1693	0	0
Q Serve(g_s), s	0.0	18.9	19.0	17.0	47.2	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.9	19.0	17.0	47.2	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.79	1.00		0.00				0.56		0.43
Lane Grp Cap(c), veh/h	0	973	468	360	992	0				629	0	0
V/C Ratio(X)	0.00	0.77	0.77	0.91	0.97	0.00				1.12	0.00	0.00
Avail Cap(c_a), veh/h	0	1266	609	378	992	0				629	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.7	30.8	36.7	21.5	0.0				29.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	4.3	24.6	22.3	0.0				73.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	7.8	9.6	24.4	0.0				26.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.8	35.1	61.3	43.8	0.0				102.5	0.0	0.0
LnGrp LOS	A	C	D	E	D	A				F	A	A
Approach Vol, veh/h		1107			1295						704	
Approach Delay, s/veh		33.5			48.2						102.5	
Approach LOS		C			D						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	33.0	31.5		39.6		54.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+119), s	119.0	21.0		37.0		49.2						
Green Ext Time (p_c), s	0.0	5.9		0.0		0.0						

### Intersection Summary

HCM 6th Ctrl Delay	55.3
HCM 6th LOS	E

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Future Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1358	606	377	679	606	84	337	503	194	861	384
Arrive On Green	0.11	0.38	0.38	0.11	0.38	0.38	0.05	0.18	0.18	0.11	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	3456	1777	1585	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	10.0	3.6	1.7	10.0	12.2	27.4	1.9	2.7	12.6	10.0	2.2	3.6
Cycle Q Clear(g_c), s	10.0	3.6	1.7	10.0	12.2	27.4	1.9	2.7	12.6	10.0	2.2	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	1358	606	377	679	606	84	337	503	194	861	384
V/C Ratio(X)	1.19	0.16	0.08	1.14	0.47	0.85	0.45	0.20	0.79	2.51	0.13	0.20
Avail Cap(c_a), veh/h	194	1939	865	377	970	865	389	1021	1522	194	1551	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	18.6	18.0	40.8	21.3	26.0	42.5	31.9	35.9	40.8	27.1	27.7
Incr Delay (d2), s/veh	126.4	0.1	0.1	89.3	0.5	5.9	3.7	0.3	2.9	694.7	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.4	0.6	8.8	4.9	10.7	0.9	1.2	4.2	41.7	0.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	167.2	18.7	18.1	130.1	21.8	31.9	46.2	32.2	38.8	735.6	27.2	27.9
LnGrp LOS	F	B	B	F	C	C	D	C	D	F	C	C
Approach Vol, veh/h	491			1262			504			675		
Approach Delay, s/veh	88.8			62.7			38.5			539.4		
Approach LOS	F			E			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	40.1	8.9	28.0	14.6	40.1	14.6	22.3				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	10.0	5.6	3.9	5.6	12.0	29.4	12.0	14.6				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.8	0.0	5.6	0.0	2.0				

### Intersection Summary

HCM 6th Ctrl Delay	172.7
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	0	347	282	0
Future Vol, veh/h	0	10	0	347	282	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	4	11	2
Mvmt Flow	0	11	0	377	307	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	684	307	307	0	-	0
Stage 1	307	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	414	733	1254	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	414	733	1254	-	-	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1254	-	-	733	-	-
HCM Lane V/C Ratio	-	-	-	0.015	-	-
HCM Control Delay (s)	0	-	0	10	-	-
HCM Lane LOS	A	-	A	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

04/25/2023

Intersection				
Intersection Delay, s/veh	4.6			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	248	427	737	
Demand Flow Rate, veh/h	253	436	751	
Vehicles Circulating, veh/h	436	275	0	
Vehicles Exiting, veh/h	275	0	689	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	7.2	8.1	1.6	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	476
Entry Flow, veh/h	253	436	275	1938
Cap Entry Lane, veh/h	885	1042	1380	0.980
Entry HV Adj Factor	0.980	0.979	0.982	467
Flow Entry, veh/h	248	427	270	1900
Cap Entry, veh/h	867	1021	1355	0.246
V/C Ratio	0.286	0.418	0.199	0.0
Control Delay, s/veh	7.2	8.1	4.3	A
LOS	A	A	A	1
95th %tile Queue, veh	1	2	1	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

04/25/2023

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	85	86	273	74	63	197
Future Vol, veh/h	85	86	273	74	63	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	84	84	81	81
Heavy Vehicles, %	36	2	2	19	2	2
Mvmt Flow	102	104	325	88	78	243

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	768	369	0	0	413	0
Stage 1	369	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.76	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.76	-	-	-	-	-
Critical Hdwy Stg 2	5.76	-	-	-	-	-
Follow-up Hdwy	3.824	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	326	677	-	-	1146	-
Stage 1	631	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	300	677	-	-	1146	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	562	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	300	677	1146
HCM Lane V/C Ratio	-	-	0.341	0.153	0.068
HCM Control Delay (s)	-	-	23.1	11.3	8.4
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	1.5	0.5	0.2

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	95	42	166	113	0	0	0	0	262	3	58
Future Vol, veh/h	0	95	42	166	113	0	0	0	0	262	3	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	83	83	83	92	92	92	88	88	88
Heavy Vehicles, %	2	8	14	2	15	2	2	2	2	2	2	24
Mvmt Flow	0	122	54	200	136	0	0	0	0	298	3	66

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	176	0	0		597	712	68
Stage 1	-	-	-	-	-	-		536	536	-
Stage 2	-	-	-	-	-	-		61	176	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7.38
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.54
Pot Cap-1 Maneuver	0	-	-	1398	-	0		434	356	915
Stage 1	0	-	-	-	-	0		551	522	-
Stage 2	0	-	-	-	-	0		954	752	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1398	-	-		372	0	915
Mov Cap-2 Maneuver	-	-	-	-	-	-		372	0	-
Stage 1	-	-	-	-	-	-		551	0	-
Stage 2	-	-	-	-	-	-		818	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.8	20.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1398	-	372	417	915
HCM Lane V/C Ratio	-	-	0.143	-	0.534	0.299	0.048
HCM Control Delay (s)	-	-	8	-	25.2	17.3	9.1
HCM Lane LOS	-	-	A	-	D	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	3	1.2	0.2

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	48	309	0	0	229	369	50	5	190	0	0	0
Future Vol, veh/h	48	309	0	0	229	369	50	5	190	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	95	95	95	88	88	88	92	92	92
Heavy Vehicles, %	13	2	2	2	2	2	28	2	2	2	2	2
Mvmt Flow	54	347	0	0	241	388	57	6	216	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	629	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.36	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.33	-	-
Pot Cap-1 Maneuver	878	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	878	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.3	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	367	839	878	-	-	-
HCM Lane V/C Ratio	0.17	0.257	0.061	-	-	-
HCM Control Delay (s)	16.8	10.8	9.4	-	-	-
HCM Lane LOS	C	B	A	-	-	-
HCM 95th %tile Q(veh)	0.6	1	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	25
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	68	281	150	48	338	57	206	59	86	54	53	54
Future Vol, veh/h	68	281	150	48	338	57	206	59	86	54	53	54
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	296	158	54	380	64	219	63	91	59	58	59
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	24.5	24.6	30.3	16.6
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	78%	0%	100%	0%	0%	22%	0%	50%	0%
Vol Thru, %	22%	0%	0%	100%	0%	78%	75%	50%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	265	86	68	281	150	217	226	107	54
LT Vol	206	0	68	0	0	48	0	54	0
Through Vol	59	0	0	281	0	169	169	53	0
RT Vol	0	86	0	0	150	0	57	0	54
Lane Flow Rate	282	91	72	296	158	244	254	116	59
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.746	0.214	0.186	0.726	0.356	0.609	0.613	0.33	0.151
Departure Headway (Hd)	9.531	8.41	9.35	8.834	8.11	8.994	8.697	10.224	9.235
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	381	426	384	408	444	400	414	351	387
Service Time	7.297	6.176	7.113	6.596	5.872	6.76	6.462	8.004	7.014
HCM Lane V/C Ratio	0.74	0.214	0.188	0.725	0.356	0.61	0.614	0.33	0.152
HCM Control Delay	35.7	13.5	14.3	31.8	15.3	24.9	24.4	18	13.7
HCM Lane LOS	E	B	B	D	C	C	C	C	B
HCM 95th-tile Q	5.9	0.8	0.7	5.6	1.6	3.9	4	1.4	0.5



Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑	↘		↙	
Traffic Vol, veh/h	36	394	363	0	0	30
Future Vol, veh/h	36	394	363	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	428	395	0	0	33

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	395	0	-	0	901
Stage 1	-	-	-	-	395
Stage 2	-	-	-	-	506
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1164	-	-	-	309
Stage 1	-	-	-	-	681
Stage 2	-	-	-	-	606
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1164	-	-	-	298
Mov Cap-2 Maneuver	-	-	-	-	298
Stage 1	-	-	-	-	658
Stage 2	-	-	-	-	606

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1164	-	-	-	654
HCM Lane V/C Ratio	0.034	-	-	-	0.05
HCM Control Delay (s)	8.2	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

04/25/2023

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	108	68	326	255	6
Future Vol, veh/h	7	108	68	326	255	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	117	74	354	277	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	783	281	284	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	362	758	1278	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	341	758	1278	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	608	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1278	-	705	-	-
HCM Lane V/C Ratio	0.058	-	0.177	-	-
HCM Control Delay (s)	8	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

HCM 6th TWSC  
 15: Manthey Rd & Ashley Dwy #4

04/25/2023

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	0	0	333	261	31
Future Vol, veh/h	14	0	0	333	261	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	15	0	0	362	284	34

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	663	301	318	0	-	0
Stage 1	301	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	306	739	1242	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	306	739	1242	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	532	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1242	-	306	-	-
HCM Lane V/C Ratio	-	-	0.05	-	-
HCM Control Delay (s)	0	-	17.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

# HCM 6th Signalized Intersection Summary

## 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷			↷			↷	↶			
Traffic Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Future Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	235	1043	0	0	870	380	351	5	279			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	278	2276	0	0	1033	449	404	6	365			
Arrive On Green	0.16	0.64	0.00	0.00	0.43	0.43	0.23	0.23	0.23			
Sat Flow, veh/h	1781	3647	0	0	2505	1047	1757	25	1585			
Grp Volume(v), veh/h	235	1043	0	0	640	610	356	0	279			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1682	1782	0	1585			
Q Serve(g_s), s	9.1	10.6	0.0	0.0	22.9	23.2	13.7	0.0	11.7			
Cycle Q Clear(g_c), s	9.1	10.6	0.0	0.0	22.9	23.2	13.7	0.0	11.7			
Prop In Lane	1.00		0.00	0.00		0.62	0.99		1.00			
Lane Grp Cap(c), veh/h	278	2276	0	0	761	721	410	0	365			
V/C Ratio(X)	0.85	0.46	0.00	0.00	0.84	0.85	0.87	0.00	0.76			
Avail Cap(c_a), veh/h	500	2276	0	0	874	827	876	0	779			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.2	6.5	0.0	0.0	18.2	18.2	26.4	0.0	25.6			
Incr Delay (d2), s/veh	2.7	0.1	0.0	0.0	6.5	7.2	2.2	0.0	1.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	3.0	0.0	0.0	9.5	9.3	5.4	0.0	4.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	6.6	0.0	0.0	24.6	25.5	28.6	0.0	26.9			
LnGrp LOS	C	A	A	A	C	C	C	A	C			
Approach Vol, veh/h		1278			1250			635				
Approach Delay, s/veh		11.3			25.1			27.8				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.2			15.1	35.1		21.0				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		12.6			11.1	25.2		15.7				
Green Ext Time (p_c), s		7.2			0.1	5.3		0.7				

### Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑					↖	↔	
Traffic Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Future Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1044	373	495	951	0				257	89	192
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1377	492	463	1278	0				351	104	224
Arrive On Green	0.00	0.37	0.37	0.26	0.68	0.00				0.20	0.20	0.20
Sat Flow, veh/h	0	3879	1325	1781	1870	0				1781	528	1138
Grp Volume(v), veh/h	0	958	459	495	951	0				257	0	281
Grp Sat Flow(s),veh/h/ln	0	1702	1632	1781	1870	0				1781	0	1666
Q Serve(g_s), s	0.0	18.9	18.9	20.0	25.2	0.0				10.4	0.0	12.5
Cycle Q Clear(g_c), s	0.0	18.9	18.9	20.0	25.2	0.0				10.4	0.0	12.5
Prop In Lane	0.00		0.81	1.00		0.00				1.00		0.68
Lane Grp Cap(c), veh/h	0	1264	606	463	1278	0				351	0	328
V/C Ratio(X)	0.00	0.76	0.76	1.07	0.74	0.00				0.73	0.00	0.86
Avail Cap(c_a), veh/h	0	1549	743	463	1278	0				811	0	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.2	21.2	28.5	7.8	0.0				29.0	0.0	29.8
Incr Delay (d2), s/veh	0.0	1.7	3.5	61.3	2.4	0.0				1.1	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.2	7.2	15.8	7.9	0.0				4.3	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.9	24.6	89.7	10.2	0.0				30.1	0.0	32.3
LnGrp LOS	A	C	C	F	B	A				C	A	C
Approach Vol, veh/h		1417			1446						538	
Approach Delay, s/veh		23.4			37.4						31.3	
Approach LOS		C			D						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	24.0	33.1		19.8		57.1						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+I1), s	22.0	20.9		14.5		27.2						
Green Ext Time (p_c), s	0.0	7.6		0.6		3.9						

### Intersection Summary

HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Future Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	1421	634	348	1290	575	363	482	720	225	424	189
Arrive On Green	0.14	0.40	0.40	0.10	0.36	0.36	0.20	0.26	0.26	0.07	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	2790	3456	3554	1585
Grp Volume(v), veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1728	1777	1585
Q Serve(g_s), s	13.5	16.6	17.1	9.3	15.2	41.3	20.8	1.8	24.6	5.3	1.2	3.5
Cycle Q Clear(g_c), s	13.5	16.6	17.1	9.3	15.2	41.3	20.8	1.8	24.6	5.3	1.2	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	1421	634	348	1290	575	363	482	720	225	424	189
V/C Ratio(X)	0.88	0.49	0.50	0.83	0.48	1.04	0.92	0.08	0.87	0.73	0.10	0.29
Avail Cap(c_a), veh/h	272	1446	645	377	1290	575	413	814	1214	355	1124	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	25.5	25.6	50.2	27.9	36.2	44.4	32.0	40.5	52.2	44.7	45.7
Incr Delay (d2), s/veh	25.2	0.3	0.6	13.7	0.3	48.1	23.5	0.1	4.0	4.4	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.9	6.2	4.7	6.4	22.7	11.2	0.8	8.5	2.4	0.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	25.7	26.3	63.9	28.2	84.4	67.9	32.1	44.4	56.6	44.8	46.5
LnGrp LOS	E	C	C	E	C	F	E	C	D	E	D	D
Approach Vol, veh/h		1229			1503			1002			259	
Approach Delay, s/veh		34.3			57.4			51.7			52.6	
Approach LOS		C			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	61.1	50.6	27.8	19.4	20.2	46.4	12.0	35.1				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	12.4	46.3	26.4	* 36	17.4	41.3	11.7	49.5				
Max Q Clear Time (g_c+I), s	11.3	19.1	22.8	5.5	15.5	43.3	7.3	26.6				
Green Ext Time (p_c), s	0.1	6.3	0.4	0.4	0.1	0.0	0.2	2.8				

### Intersection Summary

HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷			↷			↷	↶			
Traffic Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Future Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	264	940	0	0	867	410	340	76	394			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	300	2195	0	0	944	443	402	90	434			
Arrive On Green	0.17	0.62	0.00	0.00	0.40	0.40	0.27	0.27	0.27			
Sat Flow, veh/h	1781	3647	0	0	2441	1101	1469	328	1585			
Grp Volume(v), veh/h	264	940	0	0	655	622	416	0	394			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1672	1797	0	1585			
Q Serve(g_s), s	12.3	11.7	0.0	0.0	29.6	30.1	18.6	0.0	20.4			
Cycle Q Clear(g_c), s	12.3	11.7	0.0	0.0	29.6	30.1	18.6	0.0	20.4			
Prop In Lane	1.00		0.00	0.00		0.66	0.82		1.00			
Lane Grp Cap(c), veh/h	300	2195	0	0	714	672	492	0	434			
V/C Ratio(X)	0.88	0.43	0.00	0.00	0.92	0.93	0.85	0.00	0.91			
Avail Cap(c_a), veh/h	420	2195	0	0	733	690	742	0	654			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.4	8.4	0.0	0.0	24.0	24.2	29.1	0.0	29.8			
Incr Delay (d2), s/veh	11.3	0.1	0.0	0.0	16.0	18.2	3.7	0.0	9.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.1	3.8	0.0	0.0	14.6	14.3	7.8	0.0	8.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	8.5	0.0	0.0	40.0	42.4	32.8	0.0	38.8			
LnGrp LOS	D	A	A	A	D	D	C	A	D			
Approach Vol, veh/h		1204			1277			810				
Approach Delay, s/veh		16.7			41.2			35.7				
Approach LOS		B			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		57.0			18.3	38.7		27.8				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		13.7			14.3	32.1		22.4				
Green Ext Time (p_c), s		6.2			0.1	2.0		0.8				

### Intersection Summary

HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑					↖	↕	
Traffic Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Future Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	823	284	329	966	0				352	69	300
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1233	423	375	1122	0				463	79	345
Arrive On Green	0.00	0.33	0.33	0.21	0.60	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3924	1287	1781	1870	0				1781	305	1326
Grp Volume(v), veh/h	0	746	361	329	966	0				352	0	369
Grp Sat Flow(s),veh/h/ln	0	1702	1639	1781	1870	0				1781	0	1632
Q Serve(g_s), s	0.0	12.4	12.5	11.7	28.0	0.0				12.0	0.0	14.2
Cycle Q Clear(g_c), s	0.0	12.4	12.5	11.7	28.0	0.0				12.0	0.0	14.2
Prop In Lane	0.00		0.79	1.00		0.00				1.00		0.81
Lane Grp Cap(c), veh/h	0	1118	538	375	1122	0				463	0	424
V/C Ratio(X)	0.00	0.67	0.67	0.88	0.86	0.00				0.76	0.00	0.87
Avail Cap(c_a), veh/h	0	1817	874	543	1122	0				951	0	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.9	19.0	25.1	10.9	0.0				22.4	0.0	23.2
Incr Delay (d2), s/veh	0.0	0.6	1.3	8.3	7.0	0.0				1.0	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	4.4	5.4	10.5	0.0				4.7	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.6	20.3	33.4	17.8	0.0				23.4	0.0	25.4
LnGrp LOS	A	B	C	C	B	A				C	A	C
Approach Vol, veh/h		1107			1295						721	
Approach Delay, s/veh		19.8			21.8						24.4	
Approach LOS		B			C						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.8	26.1		21.7		43.9						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+I1), s	13.7	14.5		16.2		30.0						
Green Ext Time (p_c), s	0.1	7.1		0.9		2.8						

### Intersection Summary

HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.



# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Future Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1282	572	465	1240	553	76	322	480	543	1018	454
Arrive On Green	0.15	0.36	0.36	0.13	0.35	0.35	0.04	0.17	0.17	0.16	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	2790	3456	3554	1585
Grp Volume(v), veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1728	1777	1585
Q Serve(g_s), s	14.6	4.6	2.2	14.0	7.3	36.1	2.4	3.5	15.9	15.9	2.6	4.2
Cycle Q Clear(g_c), s	14.6	4.6	2.2	14.0	7.3	36.1	2.4	3.5	15.9	15.9	2.6	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	1282	572	465	1240	553	76	322	480	543	1018	454
V/C Ratio(X)	0.89	0.17	0.08	0.92	0.25	0.93	0.50	0.20	0.83	0.90	0.11	0.17
Avail Cap(c_a), veh/h	286	1431	638	465	1338	597	112	653	975	555	1626	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	24.9	24.1	49.0	26.6	36.0	53.6	40.7	45.8	47.4	30.1	30.7
Incr Delay (d2), s/veh	25.9	0.1	0.1	24.1	0.1	21.4	4.9	0.3	3.8	17.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	2.0	0.8	7.5	3.1	16.4	1.1	1.6	5.6	7.9	1.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	24.9	24.2	73.1	26.7	57.4	58.5	41.0	49.6	64.7	30.1	30.8
LnGrp LOS	E	C	C	E	C	E	E	D	D	E	C	C
Approach Vol, veh/h		491			1262			504			675	
Approach Delay, s/veh		48.0			55.0			49.2			55.2	
Approach LOS		D			E			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	46.4	9.5	38.6	21.3	45.1	22.6	25.5				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	15.4	46.1	7.2	* 52	18.4	43.1	18.4	40.0				
Max Q Clear Time (g_c+I1), s	16.0	6.6	4.4	6.2	16.6	38.1	17.9	17.9				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.9	0.1	1.9	0.1	1.8				

### Intersection Summary

HCM 6th Ctrl Delay	52.9
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

## Appendix H – Baseline plus Project Conditions Freeway Level of Service Sheets

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4228	Heavy Vehicle Adjustment Factor (fhv)	0.866
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1731
Total Trucks, %	15.50	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4018	Heavy Vehicle Adjustment Factor (fhv)	0.860
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1657
Total Trucks, %	16.30	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4073	Heavy Vehicle Adjustment Factor (fhv)	0.848
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1703
Total Trucks, %	17.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4402	Heavy Vehicle Adjustment Factor (fhv)	0.876
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1782
Total Trucks, %	14.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.5
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4340	Heavy Vehicle Adjustment Factor (fhv)	0.861
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1787
Total Trucks, %	16.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4286	Heavy Vehicle Adjustment Factor (fhv)	0.879
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1729
Total Trucks, %	13.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4637	Heavy Vehicle Adjustment Factor (fhv)	0.900
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1827
Total Trucks, %	11.10	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.76
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4644	Heavy Vehicle Adjustment Factor (fhv)	0.880
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1871
Total Trucks, %	13.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.78
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4555	Heavy Vehicle Adjustment Factor (fhv)	0.862
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1874
Total Trucks, %	16.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.78
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4353	Heavy Vehicle Adjustment Factor (fhv)	0.863
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1789
Total Trucks, %	15.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4093	Heavy Vehicle Adjustment Factor (fhv)	0.833
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1742
Total Trucks, %	20.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4242	Heavy Vehicle Adjustment Factor (fhv)	0.898
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1675
Total Trucks, %	11.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.9
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

## Appendix I – Cumulative Conditions Level of Service Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Cumulative Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	282	1142	140	70	938	80	250	110	60	70	90	230
Future Volume (veh/h)	282	1142	140	70	938	80	250	110	60	70	90	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	1142	140	70	938	80	250	110	60	70	90	230
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	1319	161	91	1039	89	283	627	322	113	320	286
Arrive On Green	0.16	0.41	0.41	0.05	0.31	0.31	0.16	0.28	0.28	0.06	0.18	0.18
Sat Flow, veh/h	1781	3187	390	1781	3314	283	1781	2272	1165	1781	1777	1585
Grp Volume(v), veh/h	282	636	646	70	503	515	250	84	86	70	90	230
Grp Sat Flow(s),veh/h/ln	1781	1777	1800	1781	1777	1819	1781	1777	1661	1781	1777	1585
Q Serve(g_s), s	14.5	30.1	30.3	3.6	25.0	25.0	12.7	3.3	3.6	3.5	4.0	12.8
Cycle Q Clear(g_c), s	14.5	30.1	30.3	3.6	25.0	25.0	12.7	3.3	3.6	3.5	4.0	12.8
Prop In Lane	1.00		0.22	1.00		0.16	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	290	736	745	91	557	570	283	491	459	113	320	286
V/C Ratio(X)	0.97	0.86	0.87	0.77	0.90	0.90	0.88	0.17	0.19	0.62	0.28	0.80
Avail Cap(c_a), veh/h	290	736	745	290	578	592	290	578	540	290	578	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	24.6	24.7	43.2	30.3	30.3	37.9	25.4	25.5	42.1	32.6	36.2
Incr Delay (d2), s/veh	45.4	10.6	10.8	14.7	17.4	17.1	25.6	0.2	0.2	6.6	0.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	13.9	14.2	1.9	12.8	13.1	7.3	1.4	1.4	1.7	1.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.8	35.2	35.5	57.9	47.7	47.4	63.5	25.6	25.7	48.7	33.2	42.5
LnGrp LOS	F	D	D	E	D	D	E	C	C	D	C	D
Approach Vol, veh/h		1564			1088			420			390	
Approach Delay, s/veh		44.1			48.2			48.2			41.5	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	42.2	19.7	20.6	19.0	32.9	10.8	29.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	5.6	32.3	14.7	14.8	16.5	27.0	5.5	5.6				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.8	0.0	1.9	0.1	1.0				

Intersection Summary

HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D



HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Cumulative Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	492	1512	0	0	1378	230	567	0	180	0	0	0
Future Volume (veh/h)	492	1512	0	0	1378	230	567	0	180	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	492	1512	0	0	1378	230	567	0	180			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1035	171	445	0	141			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3147	503	1313	0	417			
Grp Volume(v), veh/h	492	1512	0	0	795	813	747	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1780	1730	0	0			
Q Serve(g_s), s	20.0	32.7	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	32.7	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.28	0.76		0.24			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	604	587	0	0			
V/C Ratio(X)	1.43	0.74	0.00	0.00	1.32	1.35	1.27	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	604	587	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	16.5	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	207.5	1.5	0.0	0.0	155.1	167.0	136.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh	18.5	12.5	0.0	0.0	40.4	42.4	35.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	249.1	18.0	0.0	0.0	189.2	201.1	170.1	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	2004				1608		747					
Approach Delay, s/veh	74.7				195.2		170.1					
Approach LOS	E				F		F					
Timer - Assigned Phs	2				5		6		8			
Phs Duration (G+Y+Rc), s	63.6				24.0		39.6		39.6			
Change Period (Y+Rc), s	4.6				4.0		4.6		4.6			
Max Green Setting (Gmax), s	35.0				20.0		35.0		35.0			
Max Q Clear Time (g_c+I1), s	34.7				22.0		37.0		37.0			
Green Ext Time (p_c), s	0.2				0.0		0.0		0.0			
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			135.5									
HCM 6th LOS			F									

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Cumulative Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	1824	433	270	1675	0	0	0	0	180	0	327
Future Volume (veh/h)	0	1824	433	270	1675	0	0	0	0	180	0	327
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1824	433	270	1675	0				180	0	327
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1515	352	302	1080	0				191	0	347
Arrive On Green	0.00	0.37	0.37	0.17	0.58	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	4309	961	1781	1870	0				586	0	1064
Grp Volume(v), veh/h	0	1492	765	270	1675	0				507	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1697	1781	1870	0				1650	0	0
Q Serve(g_s), s	0.0	35.0	35.0	14.2	55.2	0.0				28.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	14.2	55.2	0.0				28.6	0.0	0.0
Prop In Lane	0.00		0.57	1.00		0.00				0.36		0.64
Lane Grp Cap(c), veh/h	0	1246	621	302	1080	0				538	0	0
V/C Ratio(X)	0.00	1.20	1.23	0.89	1.55	0.00				0.94	0.00	0.00
Avail Cap(c_a), veh/h	0	1246	621	373	1080	0				604	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.3	30.3	38.9	20.2	0.0				31.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	96.9	117.8	17.9	252.5	0.0				21.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	30.3	33.8	7.5	96.5	0.0				14.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	127.3	148.1	56.8	272.7	0.0				52.5	0.0	0.0
LnGrp LOS	A	F	F	E	F	A				D	A	A
Approach Vol, veh/h		2257			1945						507	
Approach Delay, s/veh		134.3			242.7						52.5	
Approach LOS		F			F						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.2	39.6		35.8		59.8						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+110), s	110.2	37.0		30.6		57.2						
Green Ext Time (p_c), s	0.1	0.0		0.6		0.0						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				170.3								
HCM 6th LOS				F								

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Cumulative Conditions  
Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	920	310	1083	620	302	80	68	1200	137	42	1
Future Volume (veh/h)	0	920	310	1083	620	302	80	68	1200	137	42	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	920	310	1083	620	302	80	68	1200	137	42	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	1100	490	265	976	475	102	717	1069	137	1431	638
Arrive On Green	0.00	0.31	0.31	0.08	0.42	0.42	0.06	0.38	0.38	0.08	0.40	0.40
Sat Flow, veh/h	1781	3554	1585	3456	2316	1128	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	920	310	1083	476	446	80	68	1200	137	42	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1667	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	31.5	21.9	10.0	27.6	27.6	5.8	3.0	50.0	10.0	0.9	0.0
Cycle Q Clear(g_c), s	0.0	31.5	21.9	10.0	27.6	27.6	5.8	3.0	50.0	10.0	0.9	0.0
Prop In Lane	1.00		1.00	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1	1100	490	265	749	703	102	717	1069	137	1431	638
V/C Ratio(X)	0.00	0.84	0.63	4.09	0.64	0.64	0.79	0.09	1.12	1.00	0.03	0.00
Avail Cap(c_a), veh/h	137	1362	607	265	749	703	273	717	1069	137	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	42.0	38.7	60.2	29.8	29.8	60.7	25.8	40.2	60.2	23.6	23.3
Incr Delay (d2), s/veh	0.0	3.9	1.5	1399.0	1.8	1.9	12.4	0.1	67.7	78.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.2	8.5	55.8	12.0	11.3	2.9	1.3	26.3	7.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	45.9	40.1	1459.2	31.6	31.7	73.1	25.8	107.9	138.2	23.6	23.3
LnGrp LOS	A	D	D	F	C	C	E	C	F	F	C	C
Approach Vol, veh/h		1230			2005			1348			180	
Approach Delay, s/veh		44.4			802.8			101.7			110.8	
Approach LOS		D			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.6	45.5	12.1	58.3	0.0	60.1	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	40.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	11.0	33.5	7.8	2.9	0.0	29.6	12.0	52.0				
Green Ext Time (p_c), s	0.0	6.9	0.1	0.2	0.0	6.0	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	382.4
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	10	0	0	29	60
Future Vol, veh/h	30	10	0	0	29	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	10	0	0	29	60

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	59	59	89	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	948	1007	1506	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	948	1007	1506	-	-	-
Mov Cap-2 Maneuver	948	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1506	-	948	1007	-	-
HCM Lane V/C Ratio	-	-	0.032	0.01	-	-
HCM Control Delay (s)	0	-	8.9	8.6	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	0	0	34	5
Future Vol, veh/h	0	23	0	0	34	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	0	0	34	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	37	37	39	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	975	1035	1571	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	975	1035	1571	-	-	-
Mov Cap-2 Maneuver	975	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1571	-	-	1035	-	-
HCM Lane V/C Ratio	-	-	-	0.022	-	-
HCM Control Delay (s)	0	-	0	8.6	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	6.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	140	0	5	240	3
Future Vol, veh/h	20	140	0	5	240	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	140	0	5	240	3

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	160	0	95
Stage 1	-	-	-	-	90
Stage 2	-	-	-	-	5
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1419	-	905
Stage 1	-	-	-	-	934
Stage 2	-	-	-	-	1018
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1419	-	905
Mov Cap-2 Maneuver	-	-	-	-	905
Stage 1	-	-	-	-	934
Stage 2	-	-	-	-	1018

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	905	968	-	-	1419	-
HCM Lane V/C Ratio	0.265	0.003	-	-	-	-
HCM Control Delay (s)	10.4	8.7	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	11.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	449	40	50	185	50	40
Future Vol, veh/h	449	40	50	185	50	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	449	40	50	185	50	40

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	283	143	0	0	235
Stage 1	143	-	-	-	-
Stage 2	140	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	707	905	-	-	1332
Stage 1	884	-	-	-	-
Stage 2	887	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	680	905	-	-	1332
Mov Cap-2 Maneuver	680	-	-	-	-
Stage 1	884	-	-	-	-
Stage 2	853	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	4.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	680	905	1332
HCM Lane V/C Ratio	-	-	0.66	0.044	0.038
HCM Control Delay (s)	-	-	20	9.2	7.8
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	5	0.1	0.1

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	181.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↑	↑
Traffic Vol, veh/h	0	171	64	400	392	0	0	0	0	430	0	97
Future Vol, veh/h	0	171	64	400	392	0	0	0	0	430	0	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	171	64	400	392	0	0	0	0	430	0	97

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	235	0	0		1278	1427	196
Stage 1	-	-	-	-	-	-		1192	1192	-
Stage 2	-	-	-	-	-	-		86	235	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1329	-	0		~ 158	134	812
Stage 1	0	-	-	-	-	0		~ 250	259	-
Stage 2	0	-	-	-	-	0		927	709	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	1329	-	-		~ 110	0	812
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 110	0	-
Stage 1	-	-	-	-	-	-		~ 250	0	-
Stage 2	-	-	-	-	-	-		648	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.5	\$ 528.2
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1329	-	110	131	812
HCM Lane V/C Ratio	-	-	0.301	-	2.606	1.341	0.08
HCM Control Delay (s)	-	-	8.9	-	\$ 810.1	259.1	9.8
HCM Lane LOS	-	-	A	-	F	F	A
HCM 95th %tile Q(veh)	-	-	1.3	-	26.2	11.4	0.3

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↙	↗			
Traffic Vol, veh/h	40	561	0	0	618	370	174	0	230	0	0	0
Future Vol, veh/h	40	561	0	0	618	370	174	0	230	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	561	0	0	618	370	174	0	230	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	988	0	0
Stage 1	-	-	641
Stage 2	-	-	309
Critical Hdwy	4.14	-	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	3.52
Pot Cap-1 Maneuver	695	0	258
Stage 1	-	0	487
Stage 2	-	0	718
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	695	-	243
Mov Cap-2 Maneuver	-	-	243
Stage 1	-	-	459
Stage 2	-	-	718

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0	28.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	243	716	695	-	-	-
HCM Lane V/C Ratio	0.716	0.321	0.058	-	-	-
HCM Control Delay (s)	50	12.4	10.5	-	-	-
HCM Lane LOS	F	B	B	-	-	-
HCM 95th %tile Q(veh)	4.8	1.4	0.2	-	-	-

HCM 6th AWSC  
11: S Harlan Rd & Roth Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection	
Intersection Delay, s/veh	127.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	110	571	110	70	698	120	190	40	50	80	30	100
Future Vol, veh/h	110	571	110	70	698	120	190	40	50	80	30	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	571	110	70	698	120	190	40	50	80	30	100
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1






















Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	198	119	34.5	20.2
HCM LOS	F	F	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	83%	0%	100%	0%	0%	17%	0%	73%	0%
Vol Thru, %	17%	0%	0%	100%	0%	83%	74%	27%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	26%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	50	110	571	110	419	469	110	100
LT Vol	190	0	110	0	0	70	0	80	0
Through Vol	40	0	0	571	0	349	349	30	0
RT Vol	0	50	0	0	110	0	120	0	100
Lane Flow Rate	230	50	110	571	110	419	469	110	100
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.698	0.136	0.306	1.509	0.269	1.078	1.173	0.345	0.284
Departure Headway (Hd)	12.11	10.946	10.417	9.898	9.171	10.145	9.87	12.521	11.403
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	301	330	348	371	394	360	371	289	317
Service Time	9.81	8.646	8.117	7.598	6.871	7.845	7.57	10.221	9.103
HCM Lane V/C Ratio	0.764	0.152	0.316	1.539	0.279	1.164	1.264	0.381	0.315
HCM Control Delay	38.6	15.4	17.6	268	15.2	102.7	133.5	21.7	18.6
HCM Lane LOS	E	C	C	F	C	F	F	C	C
HCM 95th-tile Q	4.8	0.5	1.3	30	1.1	13.8	17.2	1.5	1.1

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Cumulative Conditions

Timing Plan: PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	314	1025	200	132	1029	90	314	210	160	180	150	110
Future Volume (veh/h)	314	1025	200	132	1029	90	314	210	160	180	150	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1025	200	132	1029	90	314	210	160	180	150	110
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1208	235	167	1122	98	309	330	239	219	236	162
Arrive On Green	0.17	0.41	0.41	0.09	0.34	0.34	0.17	0.17	0.17	0.12	0.12	0.12
Sat Flow, veh/h	1781	2966	577	1781	3306	289	1781	1965	1426	1781	2014	1384
Grp Volume(v), veh/h	314	613	612	132	553	566	314	189	181	180	131	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1818	1781	1777	1614	1781	1777	1621
Q Serve(g_s), s	15.0	27.0	27.2	6.3	25.8	25.8	15.0	8.6	9.1	8.5	6.1	6.6
Cycle Q Clear(g_c), s	15.0	27.0	27.2	6.3	25.8	25.8	15.0	8.6	9.1	8.5	6.1	6.6
Prop In Lane	1.00		0.33	1.00		0.16	1.00		0.88	1.00		0.85
Lane Grp Cap(c), veh/h	309	724	720	167	603	617	309	298	271	219	208	190
V/C Ratio(X)	1.02	0.85	0.85	0.79	0.92	0.92	1.02	0.63	0.67	0.82	0.63	0.68
Avail Cap(c_a), veh/h	309	724	720	309	616	631	309	616	560	309	616	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	23.2	23.2	38.3	27.4	27.4	35.7	33.5	33.7	37.0	36.4	36.6
Incr Delay (d2), s/veh	55.4	9.4	9.7	9.6	18.6	18.4	55.4	2.7	3.4	12.7	3.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	12.3	12.4	3.1	13.4	13.6	10.9	3.7	3.7	4.3	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	32.6	32.9	47.9	46.0	45.8	91.2	36.2	37.1	49.7	40.1	41.7
LnGrp LOS	F	C	C	D	D	D	F	D	D	D	D	D
Approach Vol, veh/h		1539			1251			684			440	
Approach Delay, s/veh		44.7			46.1			61.7			44.5	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	39.2	20.0	14.1	19.0	33.4	15.6	18.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	8.3	29.2	17.0	8.6	17.0	27.8	10.5	11.1				
Green Ext Time (p_c), s	0.2	0.7	0.0	1.6	0.0	1.5	0.2	2.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			48.1									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Cumulative Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	499	1365	0	0	1359	250	562	0	300	0	0	0
Future Volume (veh/h)	499	1365	0	0	1359	250	562	0	300	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	499	1365	0	0	1359	250	562	0	300			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1019	185	378	0	202			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3097	545	1113	0	594			
Grp Volume(v), veh/h	499	1365	0	0	796	813	862	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1772	1708	0	0			
Q Serve(g_s), s	20.0	27.6	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	27.6	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.31	0.65		0.35			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	601	579	0	0			
V/C Ratio(X)	1.45	0.67	0.00	0.00	1.32	1.35	1.49	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	601	579	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	15.4	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	216.2	0.9	0.0	0.0	156.1	169.1	228.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh	19.3	10.4	0.0	0.0	40.6	42.6	50.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	257.8	16.2	0.0	0.0	190.2	203.2	263.0	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h		1864			1609			862				
Approach Delay, s/veh		80.9			196.8			263.0				
Approach LOS		F			F			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		63.6			24.0	39.6		39.6				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		29.6			22.0	37.0		37.0				
Green Ext Time (p_c), s		3.7			0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					160.1							
HCM 6th LOS					F							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Cumulative Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	1644	390	140	1781	0	0	0	0	220	0	542
Future Volume (veh/h)	0	1644	390	140	1781	0	0	0	0	220	0	542
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1644	390	140	1781	0				220	0	542
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1570	368	172	973	0				180	0	443
Arrive On Green	0.00	0.38	0.38	0.10	0.52	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	4300	968	1781	1870	0				473	0	1164
Grp Volume(v), veh/h	0	1351	683	140	1781	0				762	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1696	1781	1870	0				1637	0	0
Q Serve(g_s), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.57	1.00		0.00				0.29		0.71
Lane Grp Cap(c), veh/h	0	1294	645	172	973	0				622	0	0
V/C Ratio(X)	0.00	1.04	1.06	0.81	1.83	0.00				1.22	0.00	0.00
Avail Cap(c_a), veh/h	0	1294	645	387	973	0				622	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.5	28.5	40.8	22.1	0.0				28.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	37.4	52.2	3.5	378.1	0.0				114.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.0	22.6	3.2	120.7	0.0				32.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	65.9	80.8	44.3	400.2	0.0				143.5	0.0	0.0
LnGrp LOS	A	F	F	D	F	A				F	A	A
Approach Vol, veh/h		2034			1921						762	
Approach Delay, s/veh		70.9			374.3						143.5	
Approach LOS		E			F						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.9	39.6		39.6		52.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+I), s	19.1	37.0		37.0		49.9						
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0						

Intersection Summary

HCM 6th Ctrl Delay	206.2
HCM 6th LOS	F

HCM 6th Signalized Intersection Summary  
4: Golden Valley Pkwy & Spartan Way

Cumulative Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	520	150	1530	610	183	80	39	1260	254	85	0
Future Volume (veh/h)	0	520	150	1530	610	183	80	39	1260	254	85	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	520	150	1530	610	183	80	39	1260	254	85	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	689	307	309	874	262	103	837	1248	159	1702	759
Arrive On Green	0.00	0.19	0.19	0.09	0.32	0.32	0.06	0.45	0.45	0.09	0.48	0.00
Sat Flow, veh/h	1781	3554	1585	3456	2695	807	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	520	150	1530	402	391	80	39	1260	254	85	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1725	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	15.4	9.4	10.0	22.1	22.1	5.0	1.3	50.0	10.0	1.4	0.0
Cycle Q Clear(g_c), s	0.0	15.4	9.4	10.0	22.1	22.1	5.0	1.3	50.0	10.0	1.4	0.0
Prop In Lane	1.00		1.00	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	2	689	307	309	576	560	103	837	1248	159	1702	759
V/C Ratio(X)	0.00	0.76	0.49	4.95	0.70	0.70	0.77	0.05	1.01	1.59	0.05	0.00
Avail Cap(c_a), veh/h	159	1590	709	309	795	772	319	837	1248	159	1702	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	42.5	40.1	50.9	33.0	33.0	51.9	17.4	30.9	50.9	15.5	0.0
Incr Delay (d2), s/veh	0.0	1.7	1.2	1783.8	1.6	1.7	11.6	0.0	27.8	294.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	3.7	80.9	9.5	9.3	2.5	0.5	20.2	17.4	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	44.3	41.3	1834.7	34.6	34.7	63.5	17.4	58.7	345.5	15.6	0.0
LnGrp LOS	A	D	D	F	C	C	E	B	F	F	B	A
Approach Vol, veh/h		670			2323			1379			339	
Approach Delay, s/veh		43.6			1220.2			57.8			262.7	
Approach LOS		D			F			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.6	26.8	11.1	59.3	0.0	41.4	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	40.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	17.4	7.0	3.4	0.0	24.1	12.0	52.0					
Green Ext Time (p_c), s	0.0	4.2	0.1	0.4	0.0	5.3	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	643.7
HCM 6th LOS	F

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	10	0	59	33	50
Future Vol, veh/h	70	10	0	59	33	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	10	0	59	33	50

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	117	58	83	0	-	0
Stage 1	58	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	879	1008	1514	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	879	1008	1514	-	-	-
Mov Cap-2 Maneuver	879	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1514	-	879	1008	-	-
HCM Lane V/C Ratio	-	-	0.08	0.01	-	-
HCM Control Delay (s)	0	-	9.5	8.6	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	4.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	0	29	13	0	43
Future Vol, veh/h	46	0	29	13	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	0	29	13	0	43

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	93	22	43	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	907	1055	1566	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	890	1055	1566	-	-	-
Mov Cap-2 Maneuver	890	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	5.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1566	-	890	-	-	-
HCM Lane V/C Ratio	0.019	-	0.052	-	-	-
HCM Control Delay (s)	7.3	0	9.3	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	-



HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	110	52	20	90	16
Future Vol, veh/h	30	110	52	20	90	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	110	52	20	90	16

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	140	0	209 85
Stage 1	-	-	-	-	85 -
Stage 2	-	-	-	-	124 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1443	-	779 974
Stage 1	-	-	-	-	938 -
Stage 2	-	-	-	-	902 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1443	-	751 974
Mov Cap-2 Maneuver	-	-	-	-	751 -
Stage 1	-	-	-	-	938 -
Stage 2	-	-	-	-	870 -

Approach	EB	WB	NB
HCM Control Delay, s	0	5.5	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	751	974	-	-	1443	-
HCM Lane V/C Ratio	0.12	0.016	-	-	0.036	-
HCM Control Delay (s)	10.4	8.8	-	-	7.6	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	39.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	433	110	120	619	90	60
Future Vol, veh/h	433	110	120	619	90	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	433	110	120	619	90	60

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	670	430	0	0	739
Stage 1	430	-	-	-	-
Stage 2	240	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 422	625	-	-	867
Stage 1	656	-	-	-	-
Stage 2	800	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 377	625	-	-	867
Mov Cap-2 Maneuver	~ 377	-	-	-	-
Stage 1	656	-	-	-	-
Stage 2	714	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	102.7	0	5.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	377	625	867	-
HCM Lane V/C Ratio	-	-	1.149	0.176	0.104	-
HCM Control Delay (s)	-	-	125.8	12	9.6	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	16.7	0.6	0.3	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	260											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	395	314	320	463	0	0	0	0	530	0	80
Future Vol, veh/h	0	395	314	320	463	0	0	0	0	530	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	395	314	320	463	0	0	0	0	530	0	80

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	709	0	0		1301	1812	232
Stage 1	-	-	-	-	-	-		1103	1103	-
Stage 2	-	-	-	-	-	-		198	709	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	886	-	0		~ 153	78	770
Stage 1	0	-	-	-	-	0		~ 279	285	-
Stage 2	0	-	-	-	-	0		816	435	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	886	-	-		~ 98	0	770
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 98	0	-
Stage 1	-	-	-	-	-	-		~ 279	0	-
Stage 2	-	-	-	-	-	-		~ 521	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.6	\$ 890.1
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	886	-	98	111	770
HCM Lane V/C Ratio	-	-	0.361	-	3.605	1.832	0.069
HCM Control Delay (s)	-	-	11.3	-	\$ 1263	\$ 473.1	10
HCM Lane LOS	-	-	B	-	F	F	B
HCM 95th %tile Q(veh)	-	-	1.7	-	35.6	16.2	0.2

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	49.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	117	808	0	0	547	540	236	0	310	0	0	0
Future Vol, veh/h	117	808	0	0	547	540	236	0	310	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	808	0	0	547	540	236	0	310	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	1087	0	- - - 0 1316 2129 404
Stage 1	-	-	- - - 1042 1042 -
Stage 2	-	-	- - - 274 1087 -
Critical Hdwy	4.14	-	- - - 6.84 6.54 6.94
Critical Hdwy Stg 1	-	-	- - - 5.84 5.54 -
Critical Hdwy Stg 2	-	-	- - - 5.84 5.54 -
Follow-up Hdwy	2.22	-	- - - 3.52 4.02 3.32
Pot Cap-1 Maneuver	638	- 0 0	- - ~ 149 49 596
Stage 1	-	- 0 0	- - 301 305 -
Stage 2	-	- 0 0	- - 747 290 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	638	- - -	- - ~ 122 0 596
Mov Cap-2 Maneuver	-	- - -	- - ~ 122 0 -
Stage 1	-	- - -	- - 246 0 -
Stage 2	-	- - -	- - 747 0 -

Approach	EB	WB	NB
HCM Control Delay, s	1.5	0	229.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	122	596	638	-	-	-
HCM Lane V/C Ratio	1.934	0.52	0.183	-	-	-
HCM Control Delay (s)	\$ 509.1	17.4	11.9	-	-	-
HCM Lane LOS	F	C	B	-	-	-
HCM 95th %tile Q(veh)	18.9	3	0.7	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th AWSC  
11: S Harlan Rd & Roth Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection	
Intersection Delay, s/veh	365.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	140	858	120	110	767	170	200	70	140	190	80	120
Future Vol, veh/h	140	858	120	110	767	170	200	70	140	190	80	120
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	140	858	120	110	767	170	200	70	140	190	80	120
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	615.5	327.7	63.9	65.8
HCM LOS	F	F	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	74%	0%	100%	0%	0%	22%	0%	70%	0%
Vol Thru, %	26%	0%	0%	100%	0%	78%	69%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	31%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	140	140	858	120	494	554	270	120
LT Vol	200	0	140	0	0	110	0	190	0
Through Vol	70	0	0	858	0	384	384	80	0
RT Vol	0	140	0	0	120	0	170	0	120
Lane Flow Rate	270	140	140	858	120	494	554	270	120
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.913	0.432	0.459	2.692	0.353	1.547	1.685	0.916	0.372
Departure Headway (Hd)	15.94	14.811	12.62	12.097	11.366	13.875	13.523	16.065	14.955
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	229	245	287	309	318	266	277	227	242
Service Time	13.64	12.511	10.32	9.797	9.066	11.575	11.223	13.765	12.655
HCM Lane V/C Ratio	1.179	0.571	0.488	2.777	0.377	1.857	2	1.189	0.496
HCM Control Delay	82.3	28.3	25.6	795	20.1	297.2	354.8	83.4	26.3
HCM Lane LOS	F	D	D	F	C	F	F	F	D
HCM 95th-tile Q	7.7	2	2.3	67.4	1.5	24	28.7	7.7	1.6

Appendix J – Cumulative plus Project Conditions Level of Service  
Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕		↗	↕		↖	↕	
Traffic Volume (veh/h)	282	1150	140	70	950	80	250	110	60	70	90	230
Future Volume (veh/h)	282	1150	140	70	950	80	250	110	60	70	90	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	1150	140	70	950	80	250	110	60	70	90	230
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1323	161	91	1044	88	283	627	322	113	320	286
Arrive On Green	0.16	0.41	0.41	0.05	0.31	0.31	0.16	0.28	0.28	0.06	0.18	0.18
Sat Flow, veh/h	1781	3190	387	1781	3318	279	1781	2272	1165	1781	1777	1585
Grp Volume(v), veh/h	282	639	651	70	509	521	250	84	86	70	90	230
Grp Sat Flow(s),veh/h/ln	1781	1777	1801	1781	1777	1820	1781	1777	1661	1781	1777	1585
Q Serve(g_s), s	14.6	30.4	30.6	3.6	25.4	25.4	12.7	3.3	3.6	3.5	4.0	12.9
Cycle Q Clear(g_c), s	14.6	30.4	30.6	3.6	25.4	25.4	12.7	3.3	3.6	3.5	4.0	12.9
Prop In Lane	1.00		0.22	1.00		0.15	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	289	737	747	91	559	573	283	491	458	113	320	286
V/C Ratio(X)	0.98	0.87	0.87	0.77	0.91	0.91	0.88	0.17	0.19	0.62	0.28	0.81
Avail Cap(c_a), veh/h	289	737	747	289	576	590	289	576	539	289	576	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	24.7	24.8	43.3	30.4	30.4	38.0	25.4	25.5	42.2	32.7	36.3
Incr Delay (d2), s/veh	46.2	10.9	11.1	14.7	18.5	18.1	25.7	0.2	0.2	6.6	0.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	14.1	14.5	1.9	13.2	13.5	7.3	1.4	1.4	1.7	1.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.8	35.6	35.9	58.0	48.9	48.6	63.8	25.6	25.8	48.9	33.3	42.7
LnGrp LOS	F	D	D	E	D	D	E	C	C	D	C	D
Approach Vol, veh/h		1572			1100			420			390	
Approach Delay, s/veh		44.5			49.3			48.4			41.6	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	42.4	19.7	20.7	19.0	33.1	10.8	29.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	5.6	32.6	14.7	14.9	16.6	27.4	5.5	5.6				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.8	0.0	1.7	0.1	1.0				

Intersection Summary

HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1520	0	0	1390	230	610	0	180	0	0	0
Future Volume (veh/h)	520	1520	0	0	1390	230	610	0	180	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	520	1520	0	0	1390	230	610	0	180			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1037	169	454	0	134			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3151	500	1338	0	395			
Grp Volume(v), veh/h	520	1520	0	0	800	820	790	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1780	1732	0	0			
Q Serve(g_s), s	20.0	33.0	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	33.0	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.28	0.77		0.23			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	604	588	0	0			
V/C Ratio(X)	1.51	0.75	0.00	0.00	1.33	1.36	1.34	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	604	588	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	16.5	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	242.4	1.5	0.0	0.0	159.0	171.4	166.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	11.8	12.6	0.0	0.0	41.0	43.2	40.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	284.0	18.1	0.0	0.0	193.1	205.5	200.3	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	2040				1620		790					
Approach Delay, s/veh	85.9				199.4		200.3					
Approach LOS	F				F		F					
Timer - Assigned Phs	2				5		6		8			
Phs Duration (G+Y+Rc), s	63.6				24.0		39.6		39.6			
Change Period (Y+Rc), s	4.6				4.0		4.6		4.6			
Max Green Setting (Gmax), s	35.0				20.0		35.0		35.0			
Max Q Clear Time (g_c+I1), s	35.0				22.0		37.0		37.0			
Green Ext Time (p_c), s	0.0				0.0		0.0		0.0			
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			147.5									
HCM 6th LOS			F									



# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	1860	460	270	1730	0	0	0	0	180	0	370
Future Volume (veh/h)	0	1860	460	270	1730	0	0	0	0	180	0	370
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1860	460	270	1730	0				180	0	370
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1441	346	301	1047	0				187	0	385
Arrive On Green	0.00	0.35	0.35	0.17	0.56	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	4277	988	1781	1870	0				538	0	1106
Grp Volume(v), veh/h	0	1532	788	270	1730	0				550	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1692	1781	1870	0				1644	0	0
Q Serve(g_s), s	0.0	35.0	35.0	14.8	55.9	0.0				32.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	14.8	55.9	0.0				32.7	0.0	0.0
Prop In Lane	0.00		0.58	1.00		0.00				0.33		0.67
Lane Grp Cap(c), veh/h	0	1194	593	301	1047	0				573	0	0
V/C Ratio(X)	0.00	1.28	1.33	0.90	1.65	0.00				0.96	0.00	0.00
Avail Cap(c_a), veh/h	0	1194	593	357	1047	0				577	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	32.4	32.4	40.6	22.0	0.0				31.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	134.2	158.8	20.1	298.1	0.0				27.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	35.9	39.8	8.0	108.3	0.0				16.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	166.6	191.2	60.8	320.1	0.0				59.3	0.0	0.0
LnGrp LOS	A	F	F	E	F	A				E	A	A
Approach Vol, veh/h		2320			2000						550	
Approach Delay, s/veh		174.9			285.1						59.3	
Approach LOS		F			F						E	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.9	39.6		39.4		60.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+10), s	10.8	37.0		34.7		57.9						
Green Ext Time (p_c), s	0.0	0.0		0.1		0.0						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												207.1
HCM 6th LOS												F

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	920	310	1083	620	400	80	80	1200	200	50	5
Future Volume (veh/h)	5	920	310	1083	620	400	80	80	1200	200	50	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	920	310	1083	620	400	80	80	1200	200	50	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	1100	490	265	781	504	102	717	1069	137	1431	638
Arrive On Green	0.01	0.31	0.31	0.08	0.38	0.38	0.06	0.38	0.38	0.08	0.40	0.40
Sat Flow, veh/h	1781	3554	1585	3456	2071	1336	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	5	920	310	1083	532	488	80	80	1200	200	50	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1630	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.4	31.5	21.9	10.0	34.7	34.7	5.8	3.6	50.0	10.0	1.1	0.2
Cycle Q Clear(g_c), s	0.4	31.5	21.9	10.0	34.7	34.7	5.8	3.6	50.0	10.0	1.1	0.2
Prop In Lane	1.00		1.00	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	1100	490	265	670	615	102	717	1069	137	1431	638
V/C Ratio(X)	0.32	0.84	0.63	4.09	0.79	0.79	0.79	0.11	1.12	1.46	0.03	0.01
Avail Cap(c_a), veh/h	137	1362	607	265	681	625	273	717	1069	137	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	42.0	38.7	60.2	36.1	36.1	60.7	25.9	40.2	60.2	23.6	23.4
Incr Delay (d2), s/veh	10.9	3.9	1.5	1399.0	6.4	6.9	12.4	0.1	67.7	244.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	14.2	8.5	55.8	16.0	14.7	2.9	1.6	26.3	13.7	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.2	45.9	40.1	1459.2	42.5	43.0	73.1	26.0	107.9	305.0	23.6	23.4
LnGrp LOS	E	D	D	F	D	D	E	C	F	F	C	C
Approach Vol, veh/h	1235			2103			1360			255		
Approach Delay, s/veh	44.6			772.2			101.1			244.3		
Approach LOS	D			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.6	45.5	12.1	58.3	5.8	54.3	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	40.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	33.5	33.5	7.8	3.1	2.4	36.7	12.0	52.0				
Green Ext Time (p_c), s	0.0	6.9	0.1	0.2	0.0	5.5	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	379.3
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	10	0	50	50	60
Future Vol, veh/h	30	10	0	50	50	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	50	28	2
Mvmt Flow	30	10	0	50	50	60

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	130	80	110	0	-	0
Stage 1	80	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	864	980	1480	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	864	980	1480	-	-	-
Mov Cap-2 Maneuver	864	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1480	-	864	980	-	-
HCM Lane V/C Ratio	-	-	0.035	0.01	-	-
HCM Control Delay (s)	0	-	9.3	8.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

05/08/2023

Intersection				
Intersection Delay, s/veh	3.3			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	160	75	360	
Demand Flow Rate, veh/h	163	76	367	
Vehicles Circulating, veh/h	71	245	20	
Vehicles Exiting, veh/h	250	20	214	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	3.9	4.0	2.8	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	122
Entry Flow, veh/h	163	76	245	1938
Cap Entry Lane, veh/h	1283	1075	1352	0.980
Entry HV Adj Factor	0.979	0.986	0.980	120
Flow Entry, veh/h	160	75	240	1900
Cap Entry, veh/h	1257	1059	1324	0.063
V/C Ratio	0.127	0.071	0.181	0.0
Control Delay, s/veh	3.9	4.0	4.2	A
LOS	A	A	A	0
95th %tile Queue, veh	0	0	1	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

05/08/2023

Intersection						
Int Delay, s/veh	13.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	470	40	50	270	50	40
Future Vol, veh/h	470	40	50	270	50	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	2	2	30	2	2
Mvmt Flow	470	40	50	270	50	40

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	325	185	0	0	320	0
Stage 1	185	-	-	-	-	-
Stage 2	140	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	667	857	-	-	1240	-
Stage 1	844	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	640	857	-	-	1240	-
Mov Cap-2 Maneuver	640	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	848	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	4.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	640	857	1240	-
HCM Lane V/C Ratio	-	-	0.734	0.047	0.04	-
HCM Control Delay (s)	-	-	24.6	9.4	8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	6.4	0.1	0.1	-

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

05/08/2023

Intersection

Int Delay, s/veh 192.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	220	100	400	400	0	0	0	0	430	0	110
Future Vol, veh/h	0	220	100	400	400	0	0	0	0	430	0	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	20	36	2	2	2	2	2	2	2	2	5
Mvmt Flow	0	220	100	400	400	0	0	0	0	430	0	110

Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	320	0	0				1310	1520	200
Stage 1	-	-	-	-	-	-				1200	1200	-
Stage 2	-	-	-	-	-	-				110	320	-
Critical Hdwy	-	-	-	4.14	-	-				6.84	6.54	7
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-				3.52	4.02	3.35
Pot Cap-1 Maneuver	0	-	-	1237	-	0				~ 151	118	798
Stage 1	0	-	-	-	-	0				~ 248	256	-
Stage 2	0	-	-	-	-	0				902	651	-
Platoon blocked, %		-	-	-								
Mov Cap-1 Maneuver	-	-	-	1237	-	-				~ 102	0	798
Mov Cap-2 Maneuver	-	-	-	-	-	-				~ 102	0	-
Stage 1	-	-	-	-	-	-				~ 248	0	-
Stage 2	-	-	-	-	-	-				611	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.6	\$ 584.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1237	-	102	124	798
HCM Lane V/C Ratio	-	-	0.323	-	2.81	1.452	0.092
HCM Control Delay (s)	-	-	9.3	-	\$ 906.5	\$ 306.8	10
HCM Lane LOS	-	-	A	-	F	F	B
HCM 95th %tile Q(veh)	-	-	1.4	-	27.1	12.4	0.3

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

05/08/2023

Intersection												
Int Delay, s/veh	11.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	80	570	0	0	620	370	180	0	230	0	0	0
Future Vol, veh/h	80	570	0	0	620	370	180	0	230	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	45	2	2	2	2	2	3	2	2	2	2	2
Mvmt Flow	80	570	0	0	620	370	180	0	230	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	990	0	0
Stage 1	-	-	730
Stage 2	-	-	310
Critical Hdwy	5	-	6.86
Critical Hdwy Stg 1	-	-	5.86
Critical Hdwy Stg 2	-	-	5.86
Follow-up Hdwy	2.65	-	3.53
Pot Cap-1 Maneuver	484	0	89
Stage 1	-	0	435
Stage 2	-	0	714
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	484	-	0
Mov Cap-2 Maneuver	-	-	0
Stage 1	-	-	363
Stage 2	-	-	714

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	54.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	187	712	484	-	-	-
HCM Lane V/C Ratio	0.963	0.323	0.165	-	-	-
HCM Control Delay (s)	107.5	12.5	13.9	-	-	-
HCM Lane LOS	F	B	B	-	-	-
HCM 95th %tile Q(veh)	7.8	1.4	0.6	-	-	-

HCM 6th AWSC  
11: S Harlan Rd & Roth Rd

05/08/2023

Intersection	
Intersection Delay, s/veh	130.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	110	580	110	70	700	120	190	40	50	80	30	100
Future Vol, veh/h	110	580	110	70	700	120	190	40	50	80	30	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	580	110	70	700	120	190	40	50	80	30	100
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	205.8	120.1	34.5	20.2
HCM LOS	F	F	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	83%	0%	100%	0%	0%	17%	0%	73%	0%
Vol Thru, %	17%	0%	0%	100%	0%	83%	74%	27%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	26%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	50	110	580	110	420	470	110	100
LT Vol	190	0	110	0	0	70	0	80	0
Through Vol	40	0	0	580	0	350	350	30	0
RT Vol	0	50	0	0	110	0	120	0	100
Lane Flow Rate	230	50	110	580	110	420	470	110	100
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.698	0.136	0.306	1.532	0.269	1.081	1.176	0.345	0.284
Departure Headway (Hd)	12.15	10.986	10.42	9.902	9.175	10.174	9.9	12.562	11.443
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	299	329	348	371	394	361	371	288	316
Service Time	9.85	8.686	8.12	7.602	6.875	7.874	7.6	10.262	9.143
HCM Lane V/C Ratio	0.769	0.152	0.316	1.563	0.279	1.163	1.267	0.382	0.316
HCM Control Delay	38.7	15.4	17.6	277.7	15.2	103.8	134.7	21.7	18.6
HCM Lane LOS	E	C	C	F	C	F	F	C	C
HCM 95th-tile Q	4.8	0.5	1.3	30.9	1.1	13.9	17.3	1.5	1.1



Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	101	75	0	0	18
Future Vol, veh/h	41	101	75	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	101	75	0	0	18

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	75	0	-	0	258 75
Stage 1	-	-	-	-	75 -
Stage 2	-	-	-	-	183 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1524	-	-	-	731 986
Stage 1	-	-	-	-	948 -
Stage 2	-	-	-	-	848 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1524	-	-	-	711 986
Mov Cap-2 Maneuver	-	-	-	-	711 -
Stage 1	-	-	-	-	922 -
Stage 2	-	-	-	-	848 -

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1524	-	-	-	986
HCM Lane V/C Ratio	0.027	-	-	-	0.018
HCM Control Delay (s)	7.4	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

05/08/2023

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	4	57	76	27	39	7
Future Vol, veh/h	4	57	76	27	39	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	57	76	27	39	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	222	43	46	0	0
Stage 1	43	-	-	-	-
Stage 2	179	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	766	1027	1562	-	-
Stage 1	979	-	-	-	-
Stage 2	852	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	728	1027	1562	-	-
Mov Cap-2 Maneuver	728	-	-	-	-
Stage 1	931	-	-	-	-
Stage 2	852	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	5.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1562	-	1000	-	-
HCM Lane V/C Ratio	0.049	-	0.061	-	-
HCM Control Delay (s)	7.4	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

HCM 6th TWSC  
 15: Manthey Rd & Ashley Dwy #4

05/08/2023

Intersection						
Int Delay, s/veh	5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	81	0	0	31	46	14
Future Vol, veh/h	81	0	0	31	46	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	81	0	0	31	46	14

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	84	53	60	0	0
Stage 1	53	-	-	-	-
Stage 2	31	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	724	1014	1544	-	-
Stage 1	769	-	-	-	-
Stage 2	789	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	724	1014	1544	-	-
Mov Cap-2 Maneuver	724	-	-	-	-
Stage 1	769	-	-	-	-
Stage 2	789	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	724	-	-
HCM Lane V/C Ratio	-	-	0.112	-	-
HCM Control Delay (s)	0	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕		↖	↕		↖	↕	
Traffic Volume (veh/h)	314	1040	200	132	1040	90	314	210	160	180	150	110
Future Volume (veh/h)	314	1040	200	132	1040	90	314	210	160	180	150	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1040	200	132	1040	90	314	210	160	180	150	110
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	1214	233	167	1126	97	308	329	239	218	236	162
Arrive On Green	0.17	0.41	0.41	0.09	0.34	0.34	0.17	0.17	0.17	0.12	0.12	0.12
Sat Flow, veh/h	1781	2974	571	1781	3309	286	1781	1965	1426	1781	2014	1384
Grp Volume(v), veh/h	314	620	620	132	558	572	314	189	181	180	131	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1768	1781	1777	1819	1781	1777	1614	1781	1777	1621
Q Serve(g_s), s	15.0	27.5	27.7	6.3	26.2	26.2	15.0	8.6	9.1	8.5	6.1	6.6
Cycle Q Clear(g_c), s	15.0	27.5	27.7	6.3	26.2	26.2	15.0	8.6	9.1	8.5	6.1	6.6
Prop In Lane	1.00		0.32	1.00		0.16	1.00		0.88	1.00		0.85
Lane Grp Cap(c), veh/h	308	725	721	167	605	619	308	298	270	218	208	190
V/C Ratio(X)	1.02	0.86	0.86	0.79	0.92	0.92	1.02	0.63	0.67	0.82	0.63	0.68
Avail Cap(c_a), veh/h	308	725	721	308	615	630	308	615	559	308	615	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	23.3	23.4	38.4	27.5	27.5	35.8	33.6	33.8	37.1	36.5	36.7
Incr Delay (d2), s/veh	55.9	10.0	10.3	9.6	19.6	19.4	55.9	2.7	3.4	12.8	3.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	12.6	12.7	3.1	13.7	14.0	11.0	3.7	3.7	4.3	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.7	33.3	33.7	48.0	47.1	46.9	91.7	36.3	37.2	49.8	40.2	41.7
LnGrp LOS	F	C	C	D	D	D	F	D	D	D	D	D
Approach Vol, veh/h		1554			1262			684			440	
Approach Delay, s/veh		45.3			47.1			62.0			44.6	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	39.4	20.0	14.1	19.0	33.5	15.6	18.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	8.3	29.7	17.0	8.6	17.0	28.2	10.5	11.1				
Green Ext Time (p_c), s	0.2	0.3	0.0	1.6	0.0	1.3	0.2	2.3				

Intersection Summary

HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	1380	0	0	1370	250	600	0	300	0	0	0
Future Volume (veh/h)	550	1380	0	0	1370	250	600	0	300	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	550	1380	0	0	1370	250	600	0	300			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1020	184	387	0	193			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3102	541	1140	0	570			
Grp Volume(v), veh/h	550	1380	0	0	801	819	900	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1773	1711	0	0			
Q Serve(g_s), s	20.0	28.1	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	28.1	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.31	0.67		0.33			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	601	580	0	0			
V/C Ratio(X)	1.59	0.68	0.00	0.00	1.33	1.36	1.55	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	601	580	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	15.5	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	280.3	0.9	0.0	0.0	159.7	173.2	256.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh	15.4	10.6	0.0	0.0	41.2	43.3	54.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	321.9	16.4	0.0	0.0	193.8	207.3	290.6	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	1930			1620			900					
Approach Delay, s/veh	103.4			200.6			290.6					
Approach LOS	F			F			F					
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	63.6			24.0			39.6			39.6		
Change Period (Y+Rc), s	4.6			4.0			4.6			4.6		
Max Green Setting (Gmax), s	35.0			20.0			35.0			35.0		
Max Q Clear Time (g_c+I1), s	30.1			22.0			37.0			37.0		
Green Ext Time (p_c), s	3.5			0.0			0.0			0.0		
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	176.7											
HCM 6th LOS	F											

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	1710	440	140	1830	0	0	0	0	220	0	580
Future Volume (veh/h)	0	1710	440	140	1830	0	0	0	0	220	0	580
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1710	440	140	1830	0				220	0	580
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1545	390	172	973	0				171	0	450
Arrive On Green	0.00	0.38	0.38	0.10	0.52	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	4232	1026	1781	1870	0				450	0	1185
Grp Volume(v), veh/h	0	1427	723	140	1830	0				800	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1686	1781	1870	0				1635	0	0
Q Serve(g_s), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.61	1.00		0.00				0.27		0.72
Lane Grp Cap(c), veh/h	0	1294	641	172	973	0				621	0	0
V/C Ratio(X)	0.00	1.10	1.13	0.81	1.88	0.00				1.29	0.00	0.00
Avail Cap(c_a), veh/h	0	1294	641	387	973	0				621	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.5	28.5	40.8	22.1	0.0				28.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	58.2	76.3	3.5	400.6	0.0				141.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.8	26.8	3.2	126.8	0.0				37.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	86.8	104.8	44.3	422.7	0.0				169.9	0.0	0.0
LnGrp LOS	A	F	F	D	F	A				F	A	A
Approach Vol, veh/h		2150			1970						800	
Approach Delay, s/veh		92.9			395.8						169.9	
Approach LOS		F			F						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.9	39.6		39.6		52.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+19), s	19.1	37.0		37.0		49.9						
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											226.7	
HCM 6th LOS											F	

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	520	150	1530	610	270	80	50	1260	370	100	5
Future Volume (veh/h)	5	520	150	1530	610	270	80	50	1260	370	100	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	520	150	1530	610	270	80	50	1260	370	100	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	806	359	297	728	322	103	803	1197	153	1624	725
Arrive On Green	0.01	0.23	0.23	0.09	0.30	0.30	0.06	0.43	0.43	0.09	0.46	0.46
Sat Flow, veh/h	1781	3554	1585	3456	2396	1060	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	5	520	150	1530	452	428	80	50	1260	370	100	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1680	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.3	15.4	9.4	10.0	27.7	27.7	5.2	1.8	50.0	10.0	1.8	0.2
Cycle Q Clear(g_c), s	0.3	15.4	9.4	10.0	27.7	27.7	5.2	1.8	50.0	10.0	1.8	0.2
Prop In Lane	1.00		1.00	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	806	359	297	539	510	103	803	1197	153	1624	725
V/C Ratio(X)	0.31	0.65	0.42	5.16	0.84	0.84	0.78	0.06	1.05	2.42	0.06	0.01
Avail Cap(c_a), veh/h	153	1525	680	297	762	721	306	803	1197	153	1624	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	40.8	38.5	53.3	37.9	37.9	54.2	19.5	33.3	53.3	17.7	17.2
Incr Delay (d2), s/veh	10.7	0.9	0.8	1879.1	5.8	6.1	11.8	0.0	41.0	658.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.8	3.6	81.7	12.7	12.0	2.6	0.8	22.5	32.3	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	41.7	39.2	1932.4	43.7	44.1	66.0	19.5	74.3	711.9	17.7	17.2
LnGrp LOS	E	D	D	F	D	D	E	B	F	F	B	B
Approach Vol, veh/h		675			2410			1390			475	
Approach Delay, s/veh		41.3			1242.8			71.8			558.5	
Approach LOS		D			F			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	31.5	11.3	59.1	5.6	40.5	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	17.4	17.4	7.2	3.8	2.3	29.7	12.0	52.0				
Green Ext Time (p_c), s	0.0	4.2	0.1	0.6	0.0	5.6	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	684.5
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

05/08/2023

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	10	0	80	70	50
Future Vol, veh/h	70	10	0	80	70	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	18	44	2
Mvmt Flow	70	10	0	80	70	50

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	175	95	120	0	-	0
Stage 1	95	-	-	-	-	-
Stage 2	80	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	815	962	1468	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	815	962	1468	-	-	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1468	-	815	962	-	-
HCM Lane V/C Ratio	-	-	0.086	0.01	-	-
HCM Control Delay (s)	0	-	9.8	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-



HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

05/08/2023

Intersection				
Intersection Delay, s/veh	3.3			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	140	210	210	
Demand Flow Rate, veh/h	143	214	214	
Vehicles Circulating, veh/h	194	92	31	
Vehicles Exiting, veh/h	112	31	306	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	4.3	4.4	1.4	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	122
Entry Flow, veh/h	143	214	92	1938
Cap Entry Lane, veh/h	1132	1256	1337	0.980
Entry HV Adj Factor	0.982	0.979	0.978	120
Flow Entry, veh/h	140	210	90	1900
Cap Entry, veh/h	1111	1230	1308	0.063
V/C Ratio	0.126	0.170	0.069	0.0
Control Delay, s/veh	4.3	4.4	3.3	A
LOS	A	A	A	0
95th %tile Queue, veh	0	1	0	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

05/08/2023

Intersection						
Int Delay, s/veh	58.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	470	110	120	640	90	60
Future Vol, veh/h	470	110	120	640	90	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	7	2	2	2	2	2
Mvmt Flow	470	110	120	640	90	60

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	680	440	0	0	760	0
Stage 1	440	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Critical Hdwy	6.47	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 409	617	-	-	852	-
Stage 1	639	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	~ 364	617	-	-	852	-
Mov Cap-2 Maneuver	~ 364	-	-	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	148.6	0	5.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	364	617	852	-
HCM Lane V/C Ratio	-	-	1.291	0.178	0.106	-
HCM Control Delay (s)	-	-	180.6	12.1	9.7	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	21.5	0.6	0.4	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

05/08/2023

Intersection

Int Delay, s/veh 274.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	410	320	320	480	0	0	0	0	530	0	100
Future Vol, veh/h	0	410	320	320	480	0	0	0	0	530	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	14	2	4	2	2	2	2	2	2	14
Mvmt Flow	0	410	320	320	480	0	0	0	0	530	0	100

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	730	0	0		1325	1850	240
Stage 1	-	-	-	-	-	-		1120	1120	-
Stage 2	-	-	-	-	-	-		205	730	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.44
Pot Cap-1 Maneuver	0	-	-	870	-	0		~ 147	74	726
Stage 1	0	-	-	-	-	0		~ 274	280	-
Stage 2	0	-	-	-	-	0		809	426	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	870	-	-		~ 93	0	726
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 93	0	-
Stage 1	-	-	-	-	-	-		~ 274	0	-
Stage 2	-	-	-	-	-	-		~ 511	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.6	\$ 934.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	870	-	93	108	726
HCM Lane V/C Ratio	-	-	0.368	-	3.799	1.944	0.092
HCM Control Delay (s)	-	-	11.5	\$ 1353.9	\$ 523.5	10.5	
HCM Lane LOS	-	-	B	-	F	F	B
HCM 95th %tile Q(veh)	-	-	1.7	-	36.2	17.3	0.3

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

05/08/2023

Intersection												
Int Delay, s/veh	67.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↗			↖	↗			
Traffic Vol, veh/h	130	810	0	0	550	540	250	0	310	0	0	0
Future Vol, veh/h	130	810	0	0	550	540	250	0	310	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	2	2	2	2	2	6	2	2	2	2	2
Mvmt Flow	130	810	0	0	550	540	250	0	310	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	1090	0	0
Stage 1	-	-	1070
Stage 2	-	-	1090
Critical Hdwy	4.2	-	6.92
Critical Hdwy Stg 1	-	-	5.92
Critical Hdwy Stg 2	-	-	5.92
Follow-up Hdwy	2.25	-	3.56
Pot Cap-1 Maneuver	619	0	~ 138
Stage 1	-	0	282
Stage 2	-	0	735
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	619	-	~ 109
Mov Cap-2 Maneuver	-	-	~ 109
Stage 1	-	-	~ 223
Stage 2	-	-	735

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	\$ 310.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	109	595	619	-	-	-
HCM Lane V/C Ratio	2.294	0.521	0.21	-	-	-
HCM Control Delay (s)	\$ 673.8	17.4	12.4	-	-	-
HCM Lane LOS	F	C	B	-	-	-
HCM 95th %tile Q(veh)	21.9	3	0.8	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	367.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	140	860	120	110	770	170	200	70	140	190	80	120
Future Vol, veh/h	140	860	120	110	770	170	200	70	140	190	80	120
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	140	860	120	110	770	170	200	70	140	190	80	120
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	618.2	329.5	63.9	65.9
HCM LOS	F	F	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	74%	0%	100%	0%	0%	22%	0%	70%	0%
Vol Thru, %	26%	0%	0%	100%	0%	78%	69%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	31%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	140	140	860	120	495	555	270	120
LT Vol	200	0	140	0	0	110	0	190	0
Through Vol	70	0	0	860	0	385	385	80	0
RT Vol	0	140	0	0	120	0	170	0	120
Lane Flow Rate	270	140	140	860	120	495	555	270	120
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.913	0.432	0.459	2.699	0.353	1.552	1.689	0.916	0.372
Departure Headway (Hd)	15.956	14.828	12.619	12.097	11.366	13.884	13.533	16.082	14.973
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	229	245	287	310	318	267	272	227	242
Service Time	13.656	12.528	10.319	9.797	9.066	11.584	11.233	13.782	12.673
HCM Lane V/C Ratio	1.179	0.571	0.488	2.774	0.377	1.854	2.04	1.189	0.496
HCM Control Delay	82.4	28.3	25.6	798.1	20.1	299.3	356.5	83.5	26.3
HCM Lane LOS	F	D	D	F	C	F	F	F	D
HCM 95th-tile Q	7.6	2	2.3	67.7	1.5	24.1	28.8	7.7	1.6

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	118	169	0	0	30
Future Vol, veh/h	36	118	169	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	118	169	0	0	30

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	169	0	-	0	359 169
Stage 1	-	-	-	-	169 -
Stage 2	-	-	-	-	190 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1409	-	-	-	640 875
Stage 1	-	-	-	-	861 -
Stage 2	-	-	-	-	842 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1409	-	-	-	623 875
Mov Cap-2 Maneuver	-	-	-	-	623 -
Stage 1	-	-	-	-	839 -
Stage 2	-	-	-	-	842 -

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1409	-	-	-	875
HCM Lane V/C Ratio	0.026	-	-	-	0.034
HCM Control Delay (s)	7.6	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

05/08/2023

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	108	68	55	50	6
Future Vol, veh/h	7	108	68	55	50	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	108	68	55	50	6

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	244	53	56	0	0
Stage 1	53	-	-	-	-
Stage 2	191	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	744	1014	1549	-	-
Stage 1	970	-	-	-	-
Stage 2	841	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	711	1014	1549	-	-
Mov Cap-2 Maneuver	711	-	-	-	-
Stage 1	927	-	-	-	-
Stage 2	841	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	4.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1549	-	988	-	-
HCM Lane V/C Ratio	0.044	-	0.116	-	-
HCM Control Delay (s)	7.4	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM 6th TWSC  
 15: Manthey Rd & Ashley Dwy #4

05/08/2023

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	14	0	0	66	49	31
Future Vol, veh/h	14	0	0	66	49	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	14	0	0	66	49	31

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	131	65	80	0	0
Stage 1	65	-	-	-	-
Stage 2	66	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	676	999	1518	-	-
Stage 1	758	-	-	-	-
Stage 2	757	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	676	999	1518	-	-
Mov Cap-2 Maneuver	676	-	-	-	-
Stage 1	758	-	-	-	-
Stage 2	757	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1518	-	676	-	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	0	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



*This page left intentionally blank.*

---

## **Appendix 3 – AERMOD Output File:**

\*\* Lakes Environmental AERMOD MPI

\*\*  
\*\*\*\*\*  
\*\*

\*\* AERMOD Input Produced by:

\*\* AERMOD View Ver. 11.2.0

\*\* Lakes Environmental Software Inc.

\*\* Date: 7/19/2023

\*\* File: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\Ashley Warehouse.ADI

\*\*  
\*\*\*\*\*  
\*\*  
\*\*

\*\* AERMOD Control Pathway

\*\*  
\*\*\*\*\*  
\*\*  
\*\*

CO STARTING

TITLEONE C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley

MODELOPT CONC FLAT

AVERTIME 1 PERIOD

POLLUTID OTHER

RUNORNOT RUN

ERRORFIL "Ashley Warehouse.err"

CO FINISHED

\*\*  
\*\*\*\*\*

\*\* AERMOD Source Pathway

\*\*  
\*\*\*\*\*  
\*\*  
\*\*

SO STARTING

\*\* Source Location \*\*

\*\* Source ID - Type - X Coord. - Y Coord. \*\*

LOCATION STCK1	POINT	649872.820	4188437.220	0.0
** DESCRSRC Idling Point 1				
LOCATION STCK2	POINT	649963.350	4188439.530	0.0
** DESCRSRC Idling Point 2				
LOCATION STCK3	POINT	650052.100	4188438.320	0.0
** DESCRSRC Idling Point 3				
LOCATION STCK4	POINT	650137.230	4188441.340	0.0
** DESCRSRC Idling Point 4				
LOCATION STCK5	POINT	650227.800	4188441.340	0.0
** DESCRSRC Idling Point 5				
LOCATION STCK6	POINT	650311.720	4188442.550	0.0
** DESCRSRC Idling Point 6				
LOCATION STCK7	POINT	650385.380	4188444.360	0.0
** DESCRSRC Idling Point 7				
LOCATION STCK8	POINT	649861.920	4188629.110	0.0
** DESCRSRC Idling Point 8				
LOCATION STCK9	POINT	649952.480	4188629.110	0.0
** DESCRSRC Idling Point 9				
LOCATION STCK10	POINT	650037.010	4188632.130	0.0

\*\* DESCRSRC Idling Point 10  
 LOCATION STCK11 POINT 650125.760 4188633.340 0.0  
 \*\* DESCRSRC Idling Point 11  
 LOCATION STCK12 POINT 650218.740 4188632.130 0.0  
 \*\* DESCRSRC Idling Point 12  
 LOCATION STCK13 POINT 650305.080 4188634.550 0.0  
 \*\* DESCRSRC Idling Point 13  
 LOCATION STCK14 POINT 650387.190 4188633.940 0.0  
 \*\* DESCRSRC Idling Point 14

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE7

\*\* DESCRSRC On-site Mobile

\*\* PREFIX

\*\* Length of Side = 3.66

\*\* Configuration = Adjacent

\*\* Emission Rate = 1.0

\*\* Vertical Dimension = 3.66

\*\* SZINIT = 1.70

\*\* Nodes = 14

\*\* 650439.798, 4188367.456, 0.00, 1.83, 1.70  
 \*\* 650438.760, 4188425.546, 0.00, 1.83, 1.70  
 \*\* 650481.290, 4188425.546, 0.00, 1.83, 1.70  
 \*\* 650476.103, 4188561.434, 0.00, 1.83, 1.70  
 \*\* 650610.954, 4188561.434, 0.00, 1.83, 1.70  
 \*\* 650610.954, 4188568.695, 0.00, 1.83, 1.70  
 \*\* 650475.066, 4188568.695, 0.00, 1.83, 1.70  
 \*\* 650472.992, 4188654.792, 0.00, 1.83, 1.70  
 \*\* 649663.888, 4188646.493, 0.00, 1.83, 1.70  
 \*\* 649664.925, 4188353.971, 0.00, 1.83, 1.70  
 \*\* 649671.149, 4188352.934, 0.00, 1.83, 1.70  
 \*\* 649669.075, 4188415.173, 0.00, 1.83, 1.70  
 \*\* 650434.611, 4188424.509, 0.00, 1.83, 1.70  
 \*\* 650436.686, 4188367.456, 0.00, 1.83, 1.70

\*\* -----

LOCATION L0003722 VOLUME 650439.765 4188369.285 0.0  
 LOCATION L0003723 VOLUME 650439.700 4188372.942 0.0  
 LOCATION L0003724 VOLUME 650439.634 4188376.599 0.0  
 LOCATION L0003725 VOLUME 650439.569 4188380.256 0.0  
 LOCATION L0003726 VOLUME 650439.504 4188383.913 0.0  
 LOCATION L0003727 VOLUME 650439.438 4188387.570 0.0  
 LOCATION L0003728 VOLUME 650439.373 4188391.227 0.0  
 LOCATION L0003729 VOLUME 650439.308 4188394.884 0.0  
 LOCATION L0003730 VOLUME 650439.242 4188398.541 0.0  
 LOCATION L0003731 VOLUME 650439.177 4188402.198 0.0  
 LOCATION L0003732 VOLUME 650439.112 4188405.855 0.0  
 LOCATION L0003733 VOLUME 650439.047 4188409.512 0.0  
 LOCATION L0003734 VOLUME 650438.981 4188413.169 0.0  
 LOCATION L0003735 VOLUME 650438.916 4188416.826 0.0  
 LOCATION L0003736 VOLUME 650438.851 4188420.483 0.0  
 LOCATION L0003737 VOLUME 650438.785 4188424.140 0.0  
 LOCATION L0003738 VOLUME 650441.012 4188425.546 0.0  
 LOCATION L0003739 VOLUME 650444.670 4188425.546 0.0  
 LOCATION L0003740 VOLUME 650448.327 4188425.546 0.0  
 LOCATION L0003741 VOLUME 650451.985 4188425.546 0.0

LOCATION L0003742	VOLUME	650455.642	4188425.546	0.0
LOCATION L0003743	VOLUME	650459.300	4188425.546	0.0
LOCATION L0003744	VOLUME	650462.958	4188425.546	0.0
LOCATION L0003745	VOLUME	650466.615	4188425.546	0.0
LOCATION L0003746	VOLUME	650470.273	4188425.546	0.0
LOCATION L0003747	VOLUME	650473.930	4188425.546	0.0
LOCATION L0003748	VOLUME	650477.588	4188425.546	0.0
LOCATION L0003749	VOLUME	650481.246	4188425.546	0.0
LOCATION L0003750	VOLUME	650481.152	4188429.156	0.0
LOCATION L0003751	VOLUME	650481.013	4188432.811	0.0
LOCATION L0003752	VOLUME	650480.873	4188436.466	0.0
LOCATION L0003753	VOLUME	650480.734	4188440.121	0.0
LOCATION L0003754	VOLUME	650480.594	4188443.776	0.0
LOCATION L0003755	VOLUME	650480.455	4188447.431	0.0
LOCATION L0003756	VOLUME	650480.315	4188451.086	0.0
LOCATION L0003757	VOLUME	650480.176	4188454.741	0.0
LOCATION L0003758	VOLUME	650480.036	4188458.396	0.0
LOCATION L0003759	VOLUME	650479.897	4188462.051	0.0
LOCATION L0003760	VOLUME	650479.757	4188465.706	0.0
LOCATION L0003761	VOLUME	650479.618	4188469.361	0.0
LOCATION L0003762	VOLUME	650479.478	4188473.016	0.0
LOCATION L0003763	VOLUME	650479.339	4188476.671	0.0
LOCATION L0003764	VOLUME	650479.199	4188480.326	0.0
LOCATION L0003765	VOLUME	650479.060	4188483.980	0.0
LOCATION L0003766	VOLUME	650478.920	4188487.635	0.0
LOCATION L0003767	VOLUME	650478.781	4188491.290	0.0
LOCATION L0003768	VOLUME	650478.641	4188494.945	0.0
LOCATION L0003769	VOLUME	650478.502	4188498.600	0.0
LOCATION L0003770	VOLUME	650478.362	4188502.255	0.0
LOCATION L0003771	VOLUME	650478.223	4188505.910	0.0
LOCATION L0003772	VOLUME	650478.083	4188509.565	0.0
LOCATION L0003773	VOLUME	650477.944	4188513.220	0.0
LOCATION L0003774	VOLUME	650477.804	4188516.875	0.0
LOCATION L0003775	VOLUME	650477.665	4188520.530	0.0
LOCATION L0003776	VOLUME	650477.525	4188524.185	0.0
LOCATION L0003777	VOLUME	650477.386	4188527.840	0.0
LOCATION L0003778	VOLUME	650477.246	4188531.495	0.0
LOCATION L0003779	VOLUME	650477.107	4188535.150	0.0
LOCATION L0003780	VOLUME	650476.967	4188538.805	0.0
LOCATION L0003781	VOLUME	650476.828	4188542.460	0.0
LOCATION L0003782	VOLUME	650476.688	4188546.114	0.0
LOCATION L0003783	VOLUME	650476.549	4188549.769	0.0
LOCATION L0003784	VOLUME	650476.409	4188553.424	0.0
LOCATION L0003785	VOLUME	650476.270	4188557.079	0.0
LOCATION L0003786	VOLUME	650476.130	4188560.734	0.0
LOCATION L0003787	VOLUME	650479.061	4188561.434	0.0
LOCATION L0003788	VOLUME	650482.719	4188561.434	0.0
LOCATION L0003789	VOLUME	650486.376	4188561.434	0.0
LOCATION L0003790	VOLUME	650490.034	4188561.434	0.0
LOCATION L0003791	VOLUME	650493.691	4188561.434	0.0
LOCATION L0003792	VOLUME	650497.349	4188561.434	0.0
LOCATION L0003793	VOLUME	650501.007	4188561.434	0.0
LOCATION L0003794	VOLUME	650504.664	4188561.434	0.0
LOCATION L0003795	VOLUME	650508.322	4188561.434	0.0
LOCATION L0003796	VOLUME	650511.979	4188561.434	0.0

LOCATION L0003797	VOLUME	650515.637	4188561.434	0.0
LOCATION L0003798	VOLUME	650519.295	4188561.434	0.0
LOCATION L0003799	VOLUME	650522.952	4188561.434	0.0
LOCATION L0003800	VOLUME	650526.610	4188561.434	0.0
LOCATION L0003801	VOLUME	650530.267	4188561.434	0.0
LOCATION L0003802	VOLUME	650533.925	4188561.434	0.0
LOCATION L0003803	VOLUME	650537.583	4188561.434	0.0
LOCATION L0003804	VOLUME	650541.240	4188561.434	0.0
LOCATION L0003805	VOLUME	650544.898	4188561.434	0.0
LOCATION L0003806	VOLUME	650548.555	4188561.434	0.0
LOCATION L0003807	VOLUME	650552.213	4188561.434	0.0
LOCATION L0003808	VOLUME	650555.871	4188561.434	0.0
LOCATION L0003809	VOLUME	650559.528	4188561.434	0.0
LOCATION L0003810	VOLUME	650563.186	4188561.434	0.0
LOCATION L0003811	VOLUME	650566.843	4188561.434	0.0
LOCATION L0003812	VOLUME	650570.501	4188561.434	0.0
LOCATION L0003813	VOLUME	650574.159	4188561.434	0.0
LOCATION L0003814	VOLUME	650577.816	4188561.434	0.0
LOCATION L0003815	VOLUME	650581.474	4188561.434	0.0
LOCATION L0003816	VOLUME	650585.131	4188561.434	0.0
LOCATION L0003817	VOLUME	650588.789	4188561.434	0.0
LOCATION L0003818	VOLUME	650592.447	4188561.434	0.0
LOCATION L0003819	VOLUME	650596.104	4188561.434	0.0
LOCATION L0003820	VOLUME	650599.762	4188561.434	0.0
LOCATION L0003821	VOLUME	650603.419	4188561.434	0.0
LOCATION L0003822	VOLUME	650607.077	4188561.434	0.0
LOCATION L0003823	VOLUME	650610.735	4188561.434	0.0
LOCATION L0003824	VOLUME	650610.954	4188564.872	0.0
LOCATION L0003825	VOLUME	650610.954	4188568.530	0.0
LOCATION L0003826	VOLUME	650607.462	4188568.695	0.0
LOCATION L0003827	VOLUME	650603.804	4188568.695	0.0
LOCATION L0003828	VOLUME	650600.147	4188568.695	0.0
LOCATION L0003829	VOLUME	650596.489	4188568.695	0.0
LOCATION L0003830	VOLUME	650592.832	4188568.695	0.0
LOCATION L0003831	VOLUME	650589.174	4188568.695	0.0
LOCATION L0003832	VOLUME	650585.516	4188568.695	0.0
LOCATION L0003833	VOLUME	650581.859	4188568.695	0.0
LOCATION L0003834	VOLUME	650578.201	4188568.695	0.0
LOCATION L0003835	VOLUME	650574.544	4188568.695	0.0
LOCATION L0003836	VOLUME	650570.886	4188568.695	0.0
LOCATION L0003837	VOLUME	650567.228	4188568.695	0.0
LOCATION L0003838	VOLUME	650563.571	4188568.695	0.0
LOCATION L0003839	VOLUME	650559.913	4188568.695	0.0
LOCATION L0003840	VOLUME	650556.256	4188568.695	0.0
LOCATION L0003841	VOLUME	650552.598	4188568.695	0.0
LOCATION L0003842	VOLUME	650548.940	4188568.695	0.0
LOCATION L0003843	VOLUME	650545.283	4188568.695	0.0
LOCATION L0003844	VOLUME	650541.625	4188568.695	0.0
LOCATION L0003845	VOLUME	650537.968	4188568.695	0.0
LOCATION L0003846	VOLUME	650534.310	4188568.695	0.0
LOCATION L0003847	VOLUME	650530.652	4188568.695	0.0
LOCATION L0003848	VOLUME	650526.995	4188568.695	0.0
LOCATION L0003849	VOLUME	650523.337	4188568.695	0.0
LOCATION L0003850	VOLUME	650519.680	4188568.695	0.0
LOCATION L0003851	VOLUME	650516.022	4188568.695	0.0

LOCATION L0003852	VOLUME	650512.364	4188568.695	0.0
LOCATION L0003853	VOLUME	650508.707	4188568.695	0.0
LOCATION L0003854	VOLUME	650505.049	4188568.695	0.0
LOCATION L0003855	VOLUME	650501.392	4188568.695	0.0
LOCATION L0003856	VOLUME	650497.734	4188568.695	0.0
LOCATION L0003857	VOLUME	650494.076	4188568.695	0.0
LOCATION L0003858	VOLUME	650490.419	4188568.695	0.0
LOCATION L0003859	VOLUME	650486.761	4188568.695	0.0
LOCATION L0003860	VOLUME	650483.104	4188568.695	0.0
LOCATION L0003861	VOLUME	650479.446	4188568.695	0.0
LOCATION L0003862	VOLUME	650475.788	4188568.695	0.0
LOCATION L0003863	VOLUME	650474.995	4188571.630	0.0
LOCATION L0003864	VOLUME	650474.907	4188575.286	0.0
LOCATION L0003865	VOLUME	650474.819	4188578.943	0.0
LOCATION L0003866	VOLUME	650474.731	4188582.599	0.0
LOCATION L0003867	VOLUME	650474.643	4188586.256	0.0
LOCATION L0003868	VOLUME	650474.555	4188589.912	0.0
LOCATION L0003869	VOLUME	650474.467	4188593.569	0.0
LOCATION L0003870	VOLUME	650474.379	4188597.225	0.0
LOCATION L0003871	VOLUME	650474.291	4188600.882	0.0
LOCATION L0003872	VOLUME	650474.202	4188604.538	0.0
LOCATION L0003873	VOLUME	650474.114	4188608.195	0.0
LOCATION L0003874	VOLUME	650474.026	4188611.852	0.0
LOCATION L0003875	VOLUME	650473.938	4188615.508	0.0
LOCATION L0003876	VOLUME	650473.850	4188619.165	0.0
LOCATION L0003877	VOLUME	650473.762	4188622.821	0.0
LOCATION L0003878	VOLUME	650473.674	4188626.478	0.0
LOCATION L0003879	VOLUME	650473.586	4188630.134	0.0
LOCATION L0003880	VOLUME	650473.498	4188633.791	0.0
LOCATION L0003881	VOLUME	650473.409	4188637.447	0.0
LOCATION L0003882	VOLUME	650473.321	4188641.104	0.0
LOCATION L0003883	VOLUME	650473.233	4188644.760	0.0
LOCATION L0003884	VOLUME	650473.145	4188648.417	0.0
LOCATION L0003885	VOLUME	650473.057	4188652.073	0.0
LOCATION L0003886	VOLUME	650472.053	4188654.782	0.0
LOCATION L0003887	VOLUME	650468.396	4188654.745	0.0
LOCATION L0003888	VOLUME	650464.738	4188654.707	0.0
LOCATION L0003889	VOLUME	650461.081	4188654.670	0.0
LOCATION L0003890	VOLUME	650457.424	4188654.632	0.0
LOCATION L0003891	VOLUME	650453.766	4188654.595	0.0
LOCATION L0003892	VOLUME	650450.109	4188654.557	0.0
LOCATION L0003893	VOLUME	650446.451	4188654.520	0.0
LOCATION L0003894	VOLUME	650442.794	4188654.482	0.0
LOCATION L0003895	VOLUME	650439.137	4188654.445	0.0
LOCATION L0003896	VOLUME	650435.479	4188654.407	0.0
LOCATION L0003897	VOLUME	650431.822	4188654.370	0.0
LOCATION L0003898	VOLUME	650428.164	4188654.332	0.0
LOCATION L0003899	VOLUME	650424.507	4188654.295	0.0
LOCATION L0003900	VOLUME	650420.850	4188654.257	0.0
LOCATION L0003901	VOLUME	650417.192	4188654.220	0.0
LOCATION L0003902	VOLUME	650413.535	4188654.182	0.0
LOCATION L0003903	VOLUME	650409.877	4188654.145	0.0
LOCATION L0003904	VOLUME	650406.220	4188654.107	0.0
LOCATION L0003905	VOLUME	650402.562	4188654.070	0.0
LOCATION L0003906	VOLUME	650398.905	4188654.032	0.0

LOCATION L0003907	VOLUME	650395.248	4188653.995	0.0
LOCATION L0003908	VOLUME	650391.590	4188653.957	0.0
LOCATION L0003909	VOLUME	650387.933	4188653.920	0.0
LOCATION L0003910	VOLUME	650384.275	4188653.882	0.0
LOCATION L0003911	VOLUME	650380.618	4188653.845	0.0
LOCATION L0003912	VOLUME	650376.961	4188653.807	0.0
LOCATION L0003913	VOLUME	650373.303	4188653.769	0.0
LOCATION L0003914	VOLUME	650369.646	4188653.732	0.0
LOCATION L0003915	VOLUME	650365.988	4188653.694	0.0
LOCATION L0003916	VOLUME	650362.331	4188653.657	0.0
LOCATION L0003917	VOLUME	650358.674	4188653.619	0.0
LOCATION L0003918	VOLUME	650355.016	4188653.582	0.0
LOCATION L0003919	VOLUME	650351.359	4188653.544	0.0
LOCATION L0003920	VOLUME	650347.701	4188653.507	0.0
LOCATION L0003921	VOLUME	650344.044	4188653.469	0.0
LOCATION L0003922	VOLUME	650340.387	4188653.432	0.0
LOCATION L0003923	VOLUME	650336.729	4188653.394	0.0
LOCATION L0003924	VOLUME	650333.072	4188653.357	0.0
LOCATION L0003925	VOLUME	650329.414	4188653.319	0.0
LOCATION L0003926	VOLUME	650325.757	4188653.282	0.0
LOCATION L0003927	VOLUME	650322.100	4188653.244	0.0
LOCATION L0003928	VOLUME	650318.442	4188653.207	0.0
LOCATION L0003929	VOLUME	650314.785	4188653.169	0.0
LOCATION L0003930	VOLUME	650311.127	4188653.132	0.0
LOCATION L0003931	VOLUME	650307.470	4188653.094	0.0
LOCATION L0003932	VOLUME	650303.812	4188653.057	0.0
LOCATION L0003933	VOLUME	650300.155	4188653.019	0.0
LOCATION L0003934	VOLUME	650296.498	4188652.982	0.0
LOCATION L0003935	VOLUME	650292.840	4188652.944	0.0
LOCATION L0003936	VOLUME	650289.183	4188652.907	0.0
LOCATION L0003937	VOLUME	650285.525	4188652.869	0.0
LOCATION L0003938	VOLUME	650281.868	4188652.832	0.0
LOCATION L0003939	VOLUME	650278.211	4188652.794	0.0
LOCATION L0003940	VOLUME	650274.553	4188652.757	0.0
LOCATION L0003941	VOLUME	650270.896	4188652.719	0.0
LOCATION L0003942	VOLUME	650267.238	4188652.682	0.0
LOCATION L0003943	VOLUME	650263.581	4188652.644	0.0
LOCATION L0003944	VOLUME	650259.924	4188652.607	0.0
LOCATION L0003945	VOLUME	650256.266	4188652.569	0.0
LOCATION L0003946	VOLUME	650252.609	4188652.532	0.0
LOCATION L0003947	VOLUME	650248.951	4188652.494	0.0
LOCATION L0003948	VOLUME	650245.294	4188652.457	0.0
LOCATION L0003949	VOLUME	650241.637	4188652.419	0.0
LOCATION L0003950	VOLUME	650237.979	4188652.382	0.0
LOCATION L0003951	VOLUME	650234.322	4188652.344	0.0
LOCATION L0003952	VOLUME	650230.664	4188652.307	0.0
LOCATION L0003953	VOLUME	650227.007	4188652.269	0.0
LOCATION L0003954	VOLUME	650223.350	4188652.231	0.0
LOCATION L0003955	VOLUME	650219.692	4188652.194	0.0
LOCATION L0003956	VOLUME	650216.035	4188652.156	0.0
LOCATION L0003957	VOLUME	650212.377	4188652.119	0.0
LOCATION L0003958	VOLUME	650208.720	4188652.081	0.0
LOCATION L0003959	VOLUME	650205.062	4188652.044	0.0
LOCATION L0003960	VOLUME	650201.405	4188652.006	0.0
LOCATION L0003961	VOLUME	650197.748	4188651.969	0.0



LOCATION L0003962	VOLUME	650194.090	4188651.931	0.0
LOCATION L0003963	VOLUME	650190.433	4188651.894	0.0
LOCATION L0003964	VOLUME	650186.775	4188651.856	0.0
LOCATION L0003965	VOLUME	650183.118	4188651.819	0.0
LOCATION L0003966	VOLUME	650179.461	4188651.781	0.0
LOCATION L0003967	VOLUME	650175.803	4188651.744	0.0
LOCATION L0003968	VOLUME	650172.146	4188651.706	0.0
LOCATION L0003969	VOLUME	650168.488	4188651.669	0.0
LOCATION L0003970	VOLUME	650164.831	4188651.631	0.0
LOCATION L0003971	VOLUME	650161.174	4188651.594	0.0
LOCATION L0003972	VOLUME	650157.516	4188651.556	0.0
LOCATION L0003973	VOLUME	650153.859	4188651.519	0.0
LOCATION L0003974	VOLUME	650150.201	4188651.481	0.0
LOCATION L0003975	VOLUME	650146.544	4188651.444	0.0
LOCATION L0003976	VOLUME	650142.887	4188651.406	0.0
LOCATION L0003977	VOLUME	650139.229	4188651.369	0.0
LOCATION L0003978	VOLUME	650135.572	4188651.331	0.0
LOCATION L0003979	VOLUME	650131.914	4188651.294	0.0
LOCATION L0003980	VOLUME	650128.257	4188651.256	0.0
LOCATION L0003981	VOLUME	650124.600	4188651.219	0.0
LOCATION L0003982	VOLUME	650120.942	4188651.181	0.0
LOCATION L0003983	VOLUME	650117.285	4188651.144	0.0
LOCATION L0003984	VOLUME	650113.627	4188651.106	0.0
LOCATION L0003985	VOLUME	650109.970	4188651.069	0.0
LOCATION L0003986	VOLUME	650106.312	4188651.031	0.0
LOCATION L0003987	VOLUME	650102.655	4188650.994	0.0
LOCATION L0003988	VOLUME	650098.998	4188650.956	0.0
LOCATION L0003989	VOLUME	650095.340	4188650.919	0.0
LOCATION L0003990	VOLUME	650091.683	4188650.881	0.0
LOCATION L0003991	VOLUME	650088.025	4188650.844	0.0
LOCATION L0003992	VOLUME	650084.368	4188650.806	0.0
LOCATION L0003993	VOLUME	650080.711	4188650.769	0.0
LOCATION L0003994	VOLUME	650077.053	4188650.731	0.0
LOCATION L0003995	VOLUME	650073.396	4188650.694	0.0
LOCATION L0003996	VOLUME	650069.738	4188650.656	0.0
LOCATION L0003997	VOLUME	650066.081	4188650.618	0.0
LOCATION L0003998	VOLUME	650062.424	4188650.581	0.0
LOCATION L0003999	VOLUME	650058.766	4188650.543	0.0
LOCATION L0004000	VOLUME	650055.109	4188650.506	0.0
LOCATION L0004001	VOLUME	650051.451	4188650.468	0.0
LOCATION L0004002	VOLUME	650047.794	4188650.431	0.0
LOCATION L0004003	VOLUME	650044.137	4188650.393	0.0
LOCATION L0004004	VOLUME	650040.479	4188650.356	0.0
LOCATION L0004005	VOLUME	650036.822	4188650.318	0.0
LOCATION L0004006	VOLUME	650033.164	4188650.281	0.0
LOCATION L0004007	VOLUME	650029.507	4188650.243	0.0
LOCATION L0004008	VOLUME	650025.850	4188650.206	0.0
LOCATION L0004009	VOLUME	650022.192	4188650.168	0.0
LOCATION L0004010	VOLUME	650018.535	4188650.131	0.0
LOCATION L0004011	VOLUME	650014.877	4188650.093	0.0
LOCATION L0004012	VOLUME	650011.220	4188650.056	0.0
LOCATION L0004013	VOLUME	650007.562	4188650.018	0.0
LOCATION L0004014	VOLUME	650003.905	4188649.981	0.0
LOCATION L0004015	VOLUME	650000.248	4188649.943	0.0
LOCATION L0004016	VOLUME	649996.590	4188649.906	0.0

LOCATION L0004017	VOLUME	649992.933	4188649.868	0.0
LOCATION L0004018	VOLUME	649989.275	4188649.831	0.0
LOCATION L0004019	VOLUME	649985.618	4188649.793	0.0
LOCATION L0004020	VOLUME	649981.961	4188649.756	0.0
LOCATION L0004021	VOLUME	649978.303	4188649.718	0.0
LOCATION L0004022	VOLUME	649974.646	4188649.681	0.0
LOCATION L0004023	VOLUME	649970.988	4188649.643	0.0
LOCATION L0004024	VOLUME	649967.331	4188649.606	0.0
LOCATION L0004025	VOLUME	649963.674	4188649.568	0.0
LOCATION L0004026	VOLUME	649960.016	4188649.531	0.0
LOCATION L0004027	VOLUME	649956.359	4188649.493	0.0
LOCATION L0004028	VOLUME	649952.701	4188649.456	0.0
LOCATION L0004029	VOLUME	649949.044	4188649.418	0.0
LOCATION L0004030	VOLUME	649945.387	4188649.381	0.0
LOCATION L0004031	VOLUME	649941.729	4188649.343	0.0
LOCATION L0004032	VOLUME	649938.072	4188649.306	0.0
LOCATION L0004033	VOLUME	649934.414	4188649.268	0.0
LOCATION L0004034	VOLUME	649930.757	4188649.231	0.0
LOCATION L0004035	VOLUME	649927.100	4188649.193	0.0
LOCATION L0004036	VOLUME	649923.442	4188649.156	0.0
LOCATION L0004037	VOLUME	649919.785	4188649.118	0.0
LOCATION L0004038	VOLUME	649916.127	4188649.080	0.0
LOCATION L0004039	VOLUME	649912.470	4188649.043	0.0
LOCATION L0004040	VOLUME	649908.812	4188649.005	0.0
LOCATION L0004041	VOLUME	649905.155	4188648.968	0.0
LOCATION L0004042	VOLUME	649901.498	4188648.930	0.0
LOCATION L0004043	VOLUME	649897.840	4188648.893	0.0
LOCATION L0004044	VOLUME	649894.183	4188648.855	0.0
LOCATION L0004045	VOLUME	649890.525	4188648.818	0.0
LOCATION L0004046	VOLUME	649886.868	4188648.780	0.0
LOCATION L0004047	VOLUME	649883.211	4188648.743	0.0
LOCATION L0004048	VOLUME	649879.553	4188648.705	0.0
LOCATION L0004049	VOLUME	649875.896	4188648.668	0.0
LOCATION L0004050	VOLUME	649872.238	4188648.630	0.0
LOCATION L0004051	VOLUME	649868.581	4188648.593	0.0
LOCATION L0004052	VOLUME	649864.924	4188648.555	0.0
LOCATION L0004053	VOLUME	649861.266	4188648.518	0.0
LOCATION L0004054	VOLUME	649857.609	4188648.480	0.0
LOCATION L0004055	VOLUME	649853.951	4188648.443	0.0
LOCATION L0004056	VOLUME	649850.294	4188648.405	0.0
LOCATION L0004057	VOLUME	649846.637	4188648.368	0.0
LOCATION L0004058	VOLUME	649842.979	4188648.330	0.0
LOCATION L0004059	VOLUME	649839.322	4188648.293	0.0
LOCATION L0004060	VOLUME	649835.664	4188648.255	0.0
LOCATION L0004061	VOLUME	649832.007	4188648.218	0.0
LOCATION L0004062	VOLUME	649828.349	4188648.180	0.0
LOCATION L0004063	VOLUME	649824.692	4188648.143	0.0
LOCATION L0004064	VOLUME	649821.035	4188648.105	0.0
LOCATION L0004065	VOLUME	649817.377	4188648.068	0.0
LOCATION L0004066	VOLUME	649813.720	4188648.030	0.0
LOCATION L0004067	VOLUME	649810.062	4188647.993	0.0
LOCATION L0004068	VOLUME	649806.405	4188647.955	0.0
LOCATION L0004069	VOLUME	649802.748	4188647.918	0.0
LOCATION L0004070	VOLUME	649799.090	4188647.880	0.0
LOCATION L0004071	VOLUME	649795.433	4188647.843	0.0

LOCATION L0004072	VOLUME	649791.775	4188647.805	0.0
LOCATION L0004073	VOLUME	649788.118	4188647.768	0.0
LOCATION L0004074	VOLUME	649784.461	4188647.730	0.0
LOCATION L0004075	VOLUME	649780.803	4188647.693	0.0
LOCATION L0004076	VOLUME	649777.146	4188647.655	0.0
LOCATION L0004077	VOLUME	649773.488	4188647.618	0.0
LOCATION L0004078	VOLUME	649769.831	4188647.580	0.0
LOCATION L0004079	VOLUME	649766.174	4188647.543	0.0
LOCATION L0004080	VOLUME	649762.516	4188647.505	0.0
LOCATION L0004081	VOLUME	649758.859	4188647.467	0.0
LOCATION L0004082	VOLUME	649755.201	4188647.430	0.0
LOCATION L0004083	VOLUME	649751.544	4188647.392	0.0
LOCATION L0004084	VOLUME	649747.887	4188647.355	0.0
LOCATION L0004085	VOLUME	649744.229	4188647.317	0.0
LOCATION L0004086	VOLUME	649740.572	4188647.280	0.0
LOCATION L0004087	VOLUME	649736.914	4188647.242	0.0
LOCATION L0004088	VOLUME	649733.257	4188647.205	0.0
LOCATION L0004089	VOLUME	649729.599	4188647.167	0.0
LOCATION L0004090	VOLUME	649725.942	4188647.130	0.0
LOCATION L0004091	VOLUME	649722.285	4188647.092	0.0
LOCATION L0004092	VOLUME	649718.627	4188647.055	0.0
LOCATION L0004093	VOLUME	649714.970	4188647.017	0.0
LOCATION L0004094	VOLUME	649711.312	4188646.980	0.0
LOCATION L0004095	VOLUME	649707.655	4188646.942	0.0
LOCATION L0004096	VOLUME	649703.998	4188646.905	0.0
LOCATION L0004097	VOLUME	649700.340	4188646.867	0.0
LOCATION L0004098	VOLUME	649696.683	4188646.830	0.0
LOCATION L0004099	VOLUME	649693.025	4188646.792	0.0
LOCATION L0004100	VOLUME	649689.368	4188646.755	0.0
LOCATION L0004101	VOLUME	649685.711	4188646.717	0.0
LOCATION L0004102	VOLUME	649682.053	4188646.680	0.0
LOCATION L0004103	VOLUME	649678.396	4188646.642	0.0
LOCATION L0004104	VOLUME	649674.738	4188646.605	0.0
LOCATION L0004105	VOLUME	649671.081	4188646.567	0.0
LOCATION L0004106	VOLUME	649667.424	4188646.530	0.0
LOCATION L0004107	VOLUME	649663.889	4188646.371	0.0
LOCATION L0004108	VOLUME	649663.902	4188642.714	0.0
LOCATION L0004109	VOLUME	649663.915	4188639.056	0.0
LOCATION L0004110	VOLUME	649663.928	4188635.399	0.0
LOCATION L0004111	VOLUME	649663.940	4188631.741	0.0
LOCATION L0004112	VOLUME	649663.953	4188628.084	0.0
LOCATION L0004113	VOLUME	649663.966	4188624.426	0.0
LOCATION L0004114	VOLUME	649663.979	4188620.768	0.0
LOCATION L0004115	VOLUME	649663.992	4188617.111	0.0
LOCATION L0004116	VOLUME	649664.005	4188613.453	0.0
LOCATION L0004117	VOLUME	649664.018	4188609.796	0.0
LOCATION L0004118	VOLUME	649664.031	4188606.138	0.0
LOCATION L0004119	VOLUME	649664.044	4188602.480	0.0
LOCATION L0004120	VOLUME	649664.057	4188598.823	0.0
LOCATION L0004121	VOLUME	649664.070	4188595.165	0.0
LOCATION L0004122	VOLUME	649664.083	4188591.508	0.0
LOCATION L0004123	VOLUME	649664.096	4188587.850	0.0
LOCATION L0004124	VOLUME	649664.109	4188584.193	0.0
LOCATION L0004125	VOLUME	649664.122	4188580.535	0.0
LOCATION L0004126	VOLUME	649664.135	4188576.877	0.0

LOCATION L0004127	VOLUME	649664.148	4188573.220	0.0
LOCATION L0004128	VOLUME	649664.161	4188569.562	0.0
LOCATION L0004129	VOLUME	649664.174	4188565.905	0.0
LOCATION L0004130	VOLUME	649664.187	4188562.247	0.0
LOCATION L0004131	VOLUME	649664.200	4188558.590	0.0
LOCATION L0004132	VOLUME	649664.213	4188554.932	0.0
LOCATION L0004133	VOLUME	649664.226	4188551.274	0.0
LOCATION L0004134	VOLUME	649664.239	4188547.617	0.0
LOCATION L0004135	VOLUME	649664.252	4188543.959	0.0
LOCATION L0004136	VOLUME	649664.265	4188540.302	0.0
LOCATION L0004137	VOLUME	649664.278	4188536.644	0.0
LOCATION L0004138	VOLUME	649664.291	4188532.987	0.0
LOCATION L0004139	VOLUME	649664.304	4188529.329	0.0
LOCATION L0004140	VOLUME	649664.317	4188525.671	0.0
LOCATION L0004141	VOLUME	649664.330	4188522.014	0.0
LOCATION L0004142	VOLUME	649664.343	4188518.356	0.0
LOCATION L0004143	VOLUME	649664.356	4188514.699	0.0
LOCATION L0004144	VOLUME	649664.368	4188511.041	0.0
LOCATION L0004145	VOLUME	649664.381	4188507.383	0.0
LOCATION L0004146	VOLUME	649664.394	4188503.726	0.0
LOCATION L0004147	VOLUME	649664.407	4188500.068	0.0
LOCATION L0004148	VOLUME	649664.420	4188496.411	0.0
LOCATION L0004149	VOLUME	649664.433	4188492.753	0.0
LOCATION L0004150	VOLUME	649664.446	4188489.096	0.0
LOCATION L0004151	VOLUME	649664.459	4188485.438	0.0
LOCATION L0004152	VOLUME	649664.472	4188481.780	0.0
LOCATION L0004153	VOLUME	649664.485	4188478.123	0.0
LOCATION L0004154	VOLUME	649664.498	4188474.465	0.0
LOCATION L0004155	VOLUME	649664.511	4188470.808	0.0
LOCATION L0004156	VOLUME	649664.524	4188467.150	0.0
LOCATION L0004157	VOLUME	649664.537	4188463.493	0.0
LOCATION L0004158	VOLUME	649664.550	4188459.835	0.0
LOCATION L0004159	VOLUME	649664.563	4188456.177	0.0
LOCATION L0004160	VOLUME	649664.576	4188452.520	0.0
LOCATION L0004161	VOLUME	649664.589	4188448.862	0.0
LOCATION L0004162	VOLUME	649664.602	4188445.205	0.0
LOCATION L0004163	VOLUME	649664.615	4188441.547	0.0
LOCATION L0004164	VOLUME	649664.628	4188437.890	0.0
LOCATION L0004165	VOLUME	649664.641	4188434.232	0.0
LOCATION L0004166	VOLUME	649664.654	4188430.574	0.0
LOCATION L0004167	VOLUME	649664.667	4188426.917	0.0
LOCATION L0004168	VOLUME	649664.680	4188423.259	0.0
LOCATION L0004169	VOLUME	649664.693	4188419.602	0.0
LOCATION L0004170	VOLUME	649664.706	4188415.944	0.0
LOCATION L0004171	VOLUME	649664.719	4188412.286	0.0
LOCATION L0004172	VOLUME	649664.732	4188408.629	0.0
LOCATION L0004173	VOLUME	649664.745	4188404.971	0.0
LOCATION L0004174	VOLUME	649664.758	4188401.314	0.0
LOCATION L0004175	VOLUME	649664.771	4188397.656	0.0
LOCATION L0004176	VOLUME	649664.784	4188393.999	0.0
LOCATION L0004177	VOLUME	649664.797	4188390.341	0.0
LOCATION L0004178	VOLUME	649664.809	4188386.683	0.0
LOCATION L0004179	VOLUME	649664.822	4188383.026	0.0
LOCATION L0004180	VOLUME	649664.835	4188379.368	0.0
LOCATION L0004181	VOLUME	649664.848	4188375.711	0.0

LOCATION L0004182	VOLUME	649664.861	4188372.053	0.0
LOCATION L0004183	VOLUME	649664.874	4188368.396	0.0
LOCATION L0004184	VOLUME	649664.887	4188364.738	0.0
LOCATION L0004185	VOLUME	649664.900	4188361.080	0.0
LOCATION L0004186	VOLUME	649664.913	4188357.423	0.0
LOCATION L0004187	VOLUME	649665.129	4188353.938	0.0
LOCATION L0004188	VOLUME	649668.737	4188353.336	0.0
LOCATION L0004189	VOLUME	649671.109	4188354.145	0.0
LOCATION L0004190	VOLUME	649670.987	4188357.801	0.0
LOCATION L0004191	VOLUME	649670.865	4188361.456	0.0
LOCATION L0004192	VOLUME	649670.743	4188365.112	0.0
LOCATION L0004193	VOLUME	649670.622	4188368.767	0.0
LOCATION L0004194	VOLUME	649670.500	4188372.423	0.0
LOCATION L0004195	VOLUME	649670.378	4188376.079	0.0
LOCATION L0004196	VOLUME	649670.256	4188379.734	0.0
LOCATION L0004197	VOLUME	649670.134	4188383.390	0.0
LOCATION L0004198	VOLUME	649670.012	4188387.045	0.0
LOCATION L0004199	VOLUME	649669.890	4188390.701	0.0
LOCATION L0004200	VOLUME	649669.769	4188394.356	0.0
LOCATION L0004201	VOLUME	649669.647	4188398.012	0.0
LOCATION L0004202	VOLUME	649669.525	4188401.668	0.0
LOCATION L0004203	VOLUME	649669.403	4188405.323	0.0
LOCATION L0004204	VOLUME	649669.281	4188408.979	0.0
LOCATION L0004205	VOLUME	649669.159	4188412.634	0.0
LOCATION L0004206	VOLUME	649670.192	4188415.186	0.0
LOCATION L0004207	VOLUME	649673.850	4188415.231	0.0
LOCATION L0004208	VOLUME	649677.507	4188415.276	0.0
LOCATION L0004209	VOLUME	649681.164	4188415.320	0.0
LOCATION L0004210	VOLUME	649684.822	4188415.365	0.0
LOCATION L0004211	VOLUME	649688.479	4188415.409	0.0
LOCATION L0004212	VOLUME	649692.136	4188415.454	0.0
LOCATION L0004213	VOLUME	649695.794	4188415.499	0.0
LOCATION L0004214	VOLUME	649699.451	4188415.543	0.0
LOCATION L0004215	VOLUME	649703.108	4188415.588	0.0
LOCATION L0004216	VOLUME	649706.766	4188415.632	0.0
LOCATION L0004217	VOLUME	649710.423	4188415.677	0.0
LOCATION L0004218	VOLUME	649714.080	4188415.722	0.0
LOCATION L0004219	VOLUME	649717.737	4188415.766	0.0
LOCATION L0004220	VOLUME	649721.395	4188415.811	0.0
LOCATION L0004221	VOLUME	649725.052	4188415.855	0.0
LOCATION L0004222	VOLUME	649728.709	4188415.900	0.0
LOCATION L0004223	VOLUME	649732.367	4188415.945	0.0
LOCATION L0004224	VOLUME	649736.024	4188415.989	0.0
LOCATION L0004225	VOLUME	649739.681	4188416.034	0.0
LOCATION L0004226	VOLUME	649743.339	4188416.079	0.0
LOCATION L0004227	VOLUME	649746.996	4188416.123	0.0
LOCATION L0004228	VOLUME	649750.653	4188416.168	0.0
LOCATION L0004229	VOLUME	649754.311	4188416.212	0.0
LOCATION L0004230	VOLUME	649757.968	4188416.257	0.0
LOCATION L0004231	VOLUME	649761.625	4188416.302	0.0
LOCATION L0004232	VOLUME	649765.283	4188416.346	0.0
LOCATION L0004233	VOLUME	649768.940	4188416.391	0.0
LOCATION L0004234	VOLUME	649772.597	4188416.435	0.0
LOCATION L0004235	VOLUME	649776.255	4188416.480	0.0
LOCATION L0004236	VOLUME	649779.912	4188416.525	0.0

LOCATION L0004237	VOLUME	649783.569	4188416.569	0.0
LOCATION L0004238	VOLUME	649787.227	4188416.614	0.0
LOCATION L0004239	VOLUME	649790.884	4188416.658	0.0
LOCATION L0004240	VOLUME	649794.541	4188416.703	0.0
LOCATION L0004241	VOLUME	649798.199	4188416.748	0.0
LOCATION L0004242	VOLUME	649801.856	4188416.792	0.0
LOCATION L0004243	VOLUME	649805.513	4188416.837	0.0
LOCATION L0004244	VOLUME	649809.171	4188416.881	0.0
LOCATION L0004245	VOLUME	649812.828	4188416.926	0.0
LOCATION L0004246	VOLUME	649816.485	4188416.971	0.0
LOCATION L0004247	VOLUME	649820.143	4188417.015	0.0
LOCATION L0004248	VOLUME	649823.800	4188417.060	0.0
LOCATION L0004249	VOLUME	649827.457	4188417.104	0.0
LOCATION L0004250	VOLUME	649831.115	4188417.149	0.0
LOCATION L0004251	VOLUME	649834.772	4188417.194	0.0
LOCATION L0004252	VOLUME	649838.429	4188417.238	0.0
LOCATION L0004253	VOLUME	649842.087	4188417.283	0.0
LOCATION L0004254	VOLUME	649845.744	4188417.327	0.0
LOCATION L0004255	VOLUME	649849.401	4188417.372	0.0
LOCATION L0004256	VOLUME	649853.059	4188417.417	0.0
LOCATION L0004257	VOLUME	649856.716	4188417.461	0.0
LOCATION L0004258	VOLUME	649860.373	4188417.506	0.0
LOCATION L0004259	VOLUME	649864.031	4188417.550	0.0
LOCATION L0004260	VOLUME	649867.688	4188417.595	0.0
LOCATION L0004261	VOLUME	649871.345	4188417.640	0.0
LOCATION L0004262	VOLUME	649875.003	4188417.684	0.0
LOCATION L0004263	VOLUME	649878.660	4188417.729	0.0
LOCATION L0004264	VOLUME	649882.317	4188417.773	0.0
LOCATION L0004265	VOLUME	649885.975	4188417.818	0.0
LOCATION L0004266	VOLUME	649889.632	4188417.863	0.0
LOCATION L0004267	VOLUME	649893.289	4188417.907	0.0
LOCATION L0004268	VOLUME	649896.947	4188417.952	0.0
LOCATION L0004269	VOLUME	649900.604	4188417.996	0.0
LOCATION L0004270	VOLUME	649904.261	4188418.041	0.0
LOCATION L0004271	VOLUME	649907.919	4188418.086	0.0
LOCATION L0004272	VOLUME	649911.576	4188418.130	0.0
LOCATION L0004273	VOLUME	649915.233	4188418.175	0.0
LOCATION L0004274	VOLUME	649918.891	4188418.219	0.0
LOCATION L0004275	VOLUME	649922.548	4188418.264	0.0
LOCATION L0004276	VOLUME	649926.205	4188418.309	0.0
LOCATION L0004277	VOLUME	649929.863	4188418.353	0.0
LOCATION L0004278	VOLUME	649933.520	4188418.398	0.0
LOCATION L0004279	VOLUME	649937.177	4188418.442	0.0
LOCATION L0004280	VOLUME	649940.835	4188418.487	0.0
LOCATION L0004281	VOLUME	649944.492	4188418.532	0.0
LOCATION L0004282	VOLUME	649948.149	4188418.576	0.0
LOCATION L0004283	VOLUME	649951.806	4188418.621	0.0
LOCATION L0004284	VOLUME	649955.464	4188418.665	0.0
LOCATION L0004285	VOLUME	649959.121	4188418.710	0.0
LOCATION L0004286	VOLUME	649962.778	4188418.755	0.0
LOCATION L0004287	VOLUME	649966.436	4188418.799	0.0
LOCATION L0004288	VOLUME	649970.093	4188418.844	0.0
LOCATION L0004289	VOLUME	649973.750	4188418.888	0.0
LOCATION L0004290	VOLUME	649977.408	4188418.933	0.0
LOCATION L0004291	VOLUME	649981.065	4188418.978	0.0

LOCATION L0004292	VOLUME	649984.722	4188419.022	0.0
LOCATION L0004293	VOLUME	649988.380	4188419.067	0.0
LOCATION L0004294	VOLUME	649992.037	4188419.111	0.0
LOCATION L0004295	VOLUME	649995.694	4188419.156	0.0
LOCATION L0004296	VOLUME	649999.352	4188419.201	0.0
LOCATION L0004297	VOLUME	650003.009	4188419.245	0.0
LOCATION L0004298	VOLUME	650006.666	4188419.290	0.0
LOCATION L0004299	VOLUME	650010.324	4188419.334	0.0
LOCATION L0004300	VOLUME	650013.981	4188419.379	0.0
LOCATION L0004301	VOLUME	650017.638	4188419.424	0.0
LOCATION L0004302	VOLUME	650021.296	4188419.468	0.0
LOCATION L0004303	VOLUME	650024.953	4188419.513	0.0
LOCATION L0004304	VOLUME	650028.610	4188419.557	0.0
LOCATION L0004305	VOLUME	650032.268	4188419.602	0.0
LOCATION L0004306	VOLUME	650035.925	4188419.647	0.0
LOCATION L0004307	VOLUME	650039.582	4188419.691	0.0
LOCATION L0004308	VOLUME	650043.240	4188419.736	0.0
LOCATION L0004309	VOLUME	650046.897	4188419.780	0.0
LOCATION L0004310	VOLUME	650050.554	4188419.825	0.0
LOCATION L0004311	VOLUME	650054.212	4188419.870	0.0
LOCATION L0004312	VOLUME	650057.869	4188419.914	0.0
LOCATION L0004313	VOLUME	650061.526	4188419.959	0.0
LOCATION L0004314	VOLUME	650065.184	4188420.003	0.0
LOCATION L0004315	VOLUME	650068.841	4188420.048	0.0
LOCATION L0004316	VOLUME	650072.498	4188420.093	0.0
LOCATION L0004317	VOLUME	650076.156	4188420.137	0.0
LOCATION L0004318	VOLUME	650079.813	4188420.182	0.0
LOCATION L0004319	VOLUME	650083.470	4188420.226	0.0
LOCATION L0004320	VOLUME	650087.128	4188420.271	0.0
LOCATION L0004321	VOLUME	650090.785	4188420.316	0.0
LOCATION L0004322	VOLUME	650094.442	4188420.360	0.0
LOCATION L0004323	VOLUME	650098.100	4188420.405	0.0
LOCATION L0004324	VOLUME	650101.757	4188420.449	0.0
LOCATION L0004325	VOLUME	650105.414	4188420.494	0.0
LOCATION L0004326	VOLUME	650109.072	4188420.539	0.0
LOCATION L0004327	VOLUME	650112.729	4188420.583	0.0
LOCATION L0004328	VOLUME	650116.386	4188420.628	0.0
LOCATION L0004329	VOLUME	650120.044	4188420.672	0.0
LOCATION L0004330	VOLUME	650123.701	4188420.717	0.0
LOCATION L0004331	VOLUME	650127.358	4188420.762	0.0
LOCATION L0004332	VOLUME	650131.016	4188420.806	0.0
LOCATION L0004333	VOLUME	650134.673	4188420.851	0.0
LOCATION L0004334	VOLUME	650138.330	4188420.895	0.0
LOCATION L0004335	VOLUME	650141.988	4188420.940	0.0
LOCATION L0004336	VOLUME	650145.645	4188420.985	0.0
LOCATION L0004337	VOLUME	650149.302	4188421.029	0.0
LOCATION L0004338	VOLUME	650152.960	4188421.074	0.0
LOCATION L0004339	VOLUME	650156.617	4188421.118	0.0
LOCATION L0004340	VOLUME	650160.274	4188421.163	0.0
LOCATION L0004341	VOLUME	650163.932	4188421.208	0.0
LOCATION L0004342	VOLUME	650167.589	4188421.252	0.0
LOCATION L0004343	VOLUME	650171.246	4188421.297	0.0
LOCATION L0004344	VOLUME	650174.903	4188421.341	0.0
LOCATION L0004345	VOLUME	650178.561	4188421.386	0.0
LOCATION L0004346	VOLUME	650182.218	4188421.431	0.0

LOCATION L0004347	VOLUME	650185.875	4188421.475	0.0
LOCATION L0004348	VOLUME	650189.533	4188421.520	0.0
LOCATION L0004349	VOLUME	650193.190	4188421.564	0.0
LOCATION L0004350	VOLUME	650196.847	4188421.609	0.0
LOCATION L0004351	VOLUME	650200.505	4188421.654	0.0
LOCATION L0004352	VOLUME	650204.162	4188421.698	0.0
LOCATION L0004353	VOLUME	650207.819	4188421.743	0.0
LOCATION L0004354	VOLUME	650211.477	4188421.788	0.0
LOCATION L0004355	VOLUME	650215.134	4188421.832	0.0
LOCATION L0004356	VOLUME	650218.791	4188421.877	0.0
LOCATION L0004357	VOLUME	650222.449	4188421.921	0.0
LOCATION L0004358	VOLUME	650226.106	4188421.966	0.0
LOCATION L0004359	VOLUME	650229.763	4188422.011	0.0
LOCATION L0004360	VOLUME	650233.421	4188422.055	0.0
LOCATION L0004361	VOLUME	650237.078	4188422.100	0.0
LOCATION L0004362	VOLUME	650240.735	4188422.144	0.0
LOCATION L0004363	VOLUME	650244.393	4188422.189	0.0
LOCATION L0004364	VOLUME	650248.050	4188422.234	0.0
LOCATION L0004365	VOLUME	650251.707	4188422.278	0.0
LOCATION L0004366	VOLUME	650255.365	4188422.323	0.0
LOCATION L0004367	VOLUME	650259.022	4188422.367	0.0
LOCATION L0004368	VOLUME	650262.679	4188422.412	0.0
LOCATION L0004369	VOLUME	650266.337	4188422.457	0.0
LOCATION L0004370	VOLUME	650269.994	4188422.501	0.0
LOCATION L0004371	VOLUME	650273.651	4188422.546	0.0
LOCATION L0004372	VOLUME	650277.309	4188422.590	0.0
LOCATION L0004373	VOLUME	650280.966	4188422.635	0.0
LOCATION L0004374	VOLUME	650284.623	4188422.680	0.0
LOCATION L0004375	VOLUME	650288.281	4188422.724	0.0
LOCATION L0004376	VOLUME	650291.938	4188422.769	0.0
LOCATION L0004377	VOLUME	650295.595	4188422.813	0.0
LOCATION L0004378	VOLUME	650299.253	4188422.858	0.0
LOCATION L0004379	VOLUME	650302.910	4188422.903	0.0
LOCATION L0004380	VOLUME	650306.567	4188422.947	0.0
LOCATION L0004381	VOLUME	650310.225	4188422.992	0.0
LOCATION L0004382	VOLUME	650313.882	4188423.036	0.0
LOCATION L0004383	VOLUME	650317.539	4188423.081	0.0
LOCATION L0004384	VOLUME	650321.197	4188423.126	0.0
LOCATION L0004385	VOLUME	650324.854	4188423.170	0.0
LOCATION L0004386	VOLUME	650328.511	4188423.215	0.0
LOCATION L0004387	VOLUME	650332.169	4188423.259	0.0
LOCATION L0004388	VOLUME	650335.826	4188423.304	0.0
LOCATION L0004389	VOLUME	650339.483	4188423.349	0.0
LOCATION L0004390	VOLUME	650343.141	4188423.393	0.0
LOCATION L0004391	VOLUME	650346.798	4188423.438	0.0
LOCATION L0004392	VOLUME	650350.455	4188423.482	0.0
LOCATION L0004393	VOLUME	650354.113	4188423.527	0.0
LOCATION L0004394	VOLUME	650357.770	4188423.572	0.0
LOCATION L0004395	VOLUME	650361.427	4188423.616	0.0
LOCATION L0004396	VOLUME	650365.085	4188423.661	0.0
LOCATION L0004397	VOLUME	650368.742	4188423.705	0.0
LOCATION L0004398	VOLUME	650372.399	4188423.750	0.0
LOCATION L0004399	VOLUME	650376.057	4188423.795	0.0
LOCATION L0004400	VOLUME	650379.714	4188423.839	0.0
LOCATION L0004401	VOLUME	650383.371	4188423.884	0.0



LOCATION L0004402	VOLUME	650387.029	4188423.928	0.0
LOCATION L0004403	VOLUME	650390.686	4188423.973	0.0
LOCATION L0004404	VOLUME	650394.343	4188424.018	0.0
LOCATION L0004405	VOLUME	650398.001	4188424.062	0.0
LOCATION L0004406	VOLUME	650401.658	4188424.107	0.0
LOCATION L0004407	VOLUME	650405.315	4188424.151	0.0
LOCATION L0004408	VOLUME	650408.972	4188424.196	0.0
LOCATION L0004409	VOLUME	650412.630	4188424.241	0.0
LOCATION L0004410	VOLUME	650416.287	4188424.285	0.0
LOCATION L0004411	VOLUME	650419.944	4188424.330	0.0
LOCATION L0004412	VOLUME	650423.602	4188424.374	0.0
LOCATION L0004413	VOLUME	650427.259	4188424.419	0.0
LOCATION L0004414	VOLUME	650430.916	4188424.464	0.0
LOCATION L0004415	VOLUME	650434.574	4188424.508	0.0
LOCATION L0004416	VOLUME	650434.743	4188420.891	0.0
LOCATION L0004417	VOLUME	650434.875	4188417.235	0.0
LOCATION L0004418	VOLUME	650435.008	4188413.580	0.0
LOCATION L0004419	VOLUME	650435.141	4188409.925	0.0
LOCATION L0004420	VOLUME	650435.274	4188406.270	0.0
LOCATION L0004421	VOLUME	650435.407	4188402.615	0.0
LOCATION L0004422	VOLUME	650435.540	4188398.960	0.0
LOCATION L0004423	VOLUME	650435.673	4188395.304	0.0
LOCATION L0004424	VOLUME	650435.806	4188391.649	0.0
LOCATION L0004425	VOLUME	650435.939	4188387.994	0.0
LOCATION L0004426	VOLUME	650436.072	4188384.339	0.0
LOCATION L0004427	VOLUME	650436.205	4188380.684	0.0
LOCATION L0004428	VOLUME	650436.338	4188377.028	0.0
LOCATION L0004429	VOLUME	650436.470	4188373.373	0.0
LOCATION L0004430	VOLUME	650436.603	4188369.718	0.0

\*\* End of LINE VOLUME Source ID = SLINE7

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE8

\*\* DESCRSRC Off-site (Manthey Road - North)

\*\* PREFIX

\*\* Length of Side = 3.66

\*\* Configuration = Adjacent

\*\* Emission Rate = 1.0

\*\* Vertical Dimension = 3.66

\*\* SZINIT = 1.70

\*\* Nodes = 4

\*\* 650474.787, 4188657.184, 0.00, 1.83, 1.70

\*\* 650650.218, 4188660.839, 0.00, 1.83, 1.70

\*\* 650680.675, 4188780.229, 0.00, 1.83, 1.70

\*\* 650801.284, 4189509.974, 0.00, 1.83, 1.70

\*\* -----

LOCATION L0004431	VOLUME	650476.616	4188657.222	0.0
LOCATION L0004432	VOLUME	650480.272	4188657.298	0.0
LOCATION L0004433	VOLUME	650483.929	4188657.374	0.0
LOCATION L0004434	VOLUME	650487.586	4188657.450	0.0
LOCATION L0004435	VOLUME	650491.243	4188657.527	0.0
LOCATION L0004436	VOLUME	650494.900	4188657.603	0.0
LOCATION L0004437	VOLUME	650498.557	4188657.679	0.0
LOCATION L0004438	VOLUME	650502.213	4188657.755	0.0
LOCATION L0004439	VOLUME	650505.870	4188657.831	0.0

LOCATION L0004440	VOLUME	650509.527	4188657.907	0.0
LOCATION L0004441	VOLUME	650513.184	4188657.984	0.0
LOCATION L0004442	VOLUME	650516.841	4188658.060	0.0
LOCATION L0004443	VOLUME	650520.497	4188658.136	0.0
LOCATION L0004444	VOLUME	650524.154	4188658.212	0.0
LOCATION L0004445	VOLUME	650527.811	4188658.288	0.0
LOCATION L0004446	VOLUME	650531.468	4188658.365	0.0
LOCATION L0004447	VOLUME	650535.125	4188658.441	0.0
LOCATION L0004448	VOLUME	650538.781	4188658.517	0.0
LOCATION L0004449	VOLUME	650542.438	4188658.593	0.0
LOCATION L0004450	VOLUME	650546.095	4188658.669	0.0
LOCATION L0004451	VOLUME	650549.752	4188658.745	0.0
LOCATION L0004452	VOLUME	650553.409	4188658.822	0.0
LOCATION L0004453	VOLUME	650557.065	4188658.898	0.0
LOCATION L0004454	VOLUME	650560.722	4188658.974	0.0
LOCATION L0004455	VOLUME	650564.379	4188659.050	0.0
LOCATION L0004456	VOLUME	650568.036	4188659.126	0.0
LOCATION L0004457	VOLUME	650571.693	4188659.203	0.0
LOCATION L0004458	VOLUME	650575.349	4188659.279	0.0
LOCATION L0004459	VOLUME	650579.006	4188659.355	0.0
LOCATION L0004460	VOLUME	650582.663	4188659.431	0.0
LOCATION L0004461	VOLUME	650586.320	4188659.507	0.0
LOCATION L0004462	VOLUME	650589.977	4188659.583	0.0
LOCATION L0004463	VOLUME	650593.633	4188659.660	0.0
LOCATION L0004464	VOLUME	650597.290	4188659.736	0.0
LOCATION L0004465	VOLUME	650600.947	4188659.812	0.0
LOCATION L0004466	VOLUME	650604.604	4188659.888	0.0
LOCATION L0004467	VOLUME	650608.261	4188659.964	0.0
LOCATION L0004468	VOLUME	650611.918	4188660.041	0.0
LOCATION L0004469	VOLUME	650615.574	4188660.117	0.0
LOCATION L0004470	VOLUME	650619.231	4188660.193	0.0
LOCATION L0004471	VOLUME	650622.888	4188660.269	0.0
LOCATION L0004472	VOLUME	650626.545	4188660.345	0.0
LOCATION L0004473	VOLUME	650630.202	4188660.421	0.0
LOCATION L0004474	VOLUME	650633.858	4188660.498	0.0
LOCATION L0004475	VOLUME	650637.515	4188660.574	0.0
LOCATION L0004476	VOLUME	650641.172	4188660.650	0.0
LOCATION L0004477	VOLUME	650644.829	4188660.726	0.0
LOCATION L0004478	VOLUME	650648.486	4188660.802	0.0
LOCATION L0004479	VOLUME	650650.694	4188662.703	0.0
LOCATION L0004480	VOLUME	650651.598	4188666.247	0.0
LOCATION L0004481	VOLUME	650652.502	4188669.791	0.0
LOCATION L0004482	VOLUME	650653.406	4188673.336	0.0
LOCATION L0004483	VOLUME	650654.311	4188676.880	0.0
LOCATION L0004484	VOLUME	650655.215	4188680.424	0.0
LOCATION L0004485	VOLUME	650656.119	4188683.968	0.0
LOCATION L0004486	VOLUME	650657.023	4188687.512	0.0
LOCATION L0004487	VOLUME	650657.927	4188691.056	0.0
LOCATION L0004488	VOLUME	650658.831	4188694.600	0.0
LOCATION L0004489	VOLUME	650659.735	4188698.144	0.0
LOCATION L0004490	VOLUME	650660.639	4188701.688	0.0
LOCATION L0004491	VOLUME	650661.543	4188705.232	0.0
LOCATION L0004492	VOLUME	650662.447	4188708.776	0.0
LOCATION L0004493	VOLUME	650663.352	4188712.321	0.0
LOCATION L0004494	VOLUME	650664.256	4188715.865	0.0

LOCATION L0004495	VOLUME	650665.160	4188719.409	0.0
LOCATION L0004496	VOLUME	650666.064	4188722.953	0.0
LOCATION L0004497	VOLUME	650666.968	4188726.497	0.0
LOCATION L0004498	VOLUME	650667.872	4188730.041	0.0
LOCATION L0004499	VOLUME	650668.776	4188733.585	0.0
LOCATION L0004500	VOLUME	650669.680	4188737.129	0.0
LOCATION L0004501	VOLUME	650670.584	4188740.673	0.0
LOCATION L0004502	VOLUME	650671.489	4188744.217	0.0
LOCATION L0004503	VOLUME	650672.393	4188747.762	0.0
LOCATION L0004504	VOLUME	650673.297	4188751.306	0.0
LOCATION L0004505	VOLUME	650674.201	4188754.850	0.0
LOCATION L0004506	VOLUME	650675.105	4188758.394	0.0
LOCATION L0004507	VOLUME	650676.009	4188761.938	0.0
LOCATION L0004508	VOLUME	650676.913	4188765.482	0.0
LOCATION L0004509	VOLUME	650677.817	4188769.026	0.0
LOCATION L0004510	VOLUME	650678.721	4188772.570	0.0
LOCATION L0004511	VOLUME	650679.625	4188776.114	0.0
LOCATION L0004512	VOLUME	650680.530	4188779.658	0.0
LOCATION L0004513	VOLUME	650681.176	4188783.257	0.0
LOCATION L0004514	VOLUME	650681.772	4188786.865	0.0
LOCATION L0004515	VOLUME	650682.368	4188790.474	0.0
LOCATION L0004516	VOLUME	650682.965	4188794.083	0.0
LOCATION L0004517	VOLUME	650683.561	4188797.691	0.0
LOCATION L0004518	VOLUME	650684.158	4188801.300	0.0
LOCATION L0004519	VOLUME	650684.754	4188804.909	0.0
LOCATION L0004520	VOLUME	650685.351	4188808.517	0.0
LOCATION L0004521	VOLUME	650685.947	4188812.126	0.0
LOCATION L0004522	VOLUME	650686.543	4188815.734	0.0
LOCATION L0004523	VOLUME	650687.140	4188819.343	0.0
LOCATION L0004524	VOLUME	650687.736	4188822.952	0.0
LOCATION L0004525	VOLUME	650688.333	4188826.560	0.0
LOCATION L0004526	VOLUME	650688.929	4188830.169	0.0
LOCATION L0004527	VOLUME	650689.525	4188833.778	0.0
LOCATION L0004528	VOLUME	650690.122	4188837.386	0.0
LOCATION L0004529	VOLUME	650690.718	4188840.995	0.0
LOCATION L0004530	VOLUME	650691.315	4188844.604	0.0
LOCATION L0004531	VOLUME	650691.911	4188848.212	0.0
LOCATION L0004532	VOLUME	650692.508	4188851.821	0.0
LOCATION L0004533	VOLUME	650693.104	4188855.430	0.0
LOCATION L0004534	VOLUME	650693.700	4188859.038	0.0
LOCATION L0004535	VOLUME	650694.297	4188862.647	0.0
LOCATION L0004536	VOLUME	650694.893	4188866.256	0.0
LOCATION L0004537	VOLUME	650695.490	4188869.864	0.0
LOCATION L0004538	VOLUME	650696.086	4188873.473	0.0
LOCATION L0004539	VOLUME	650696.682	4188877.081	0.0
LOCATION L0004540	VOLUME	650697.279	4188880.690	0.0
LOCATION L0004541	VOLUME	650697.875	4188884.299	0.0
LOCATION L0004542	VOLUME	650698.472	4188887.907	0.0
LOCATION L0004543	VOLUME	650699.068	4188891.516	0.0
LOCATION L0004544	VOLUME	650699.665	4188895.125	0.0
LOCATION L0004545	VOLUME	650700.261	4188898.733	0.0
LOCATION L0004546	VOLUME	650700.857	4188902.342	0.0
LOCATION L0004547	VOLUME	650701.454	4188905.951	0.0
LOCATION L0004548	VOLUME	650702.050	4188909.559	0.0
LOCATION L0004549	VOLUME	650702.647	4188913.168	0.0

LOCATION L0004550	VOLUME	650703.243	4188916.777	0.0
LOCATION L0004551	VOLUME	650703.840	4188920.385	0.0
LOCATION L0004552	VOLUME	650704.436	4188923.994	0.0
LOCATION L0004553	VOLUME	650705.032	4188927.603	0.0
LOCATION L0004554	VOLUME	650705.629	4188931.211	0.0
LOCATION L0004555	VOLUME	650706.225	4188934.820	0.0
LOCATION L0004556	VOLUME	650706.822	4188938.428	0.0
LOCATION L0004557	VOLUME	650707.418	4188942.037	0.0
LOCATION L0004558	VOLUME	650708.014	4188945.646	0.0
LOCATION L0004559	VOLUME	650708.611	4188949.254	0.0
LOCATION L0004560	VOLUME	650709.207	4188952.863	0.0
LOCATION L0004561	VOLUME	650709.804	4188956.472	0.0
LOCATION L0004562	VOLUME	650710.400	4188960.080	0.0
LOCATION L0004563	VOLUME	650710.997	4188963.689	0.0
LOCATION L0004564	VOLUME	650711.593	4188967.298	0.0
LOCATION L0004565	VOLUME	650712.189	4188970.906	0.0
LOCATION L0004566	VOLUME	650712.786	4188974.515	0.0
LOCATION L0004567	VOLUME	650713.382	4188978.124	0.0
LOCATION L0004568	VOLUME	650713.979	4188981.732	0.0
LOCATION L0004569	VOLUME	650714.575	4188985.341	0.0
LOCATION L0004570	VOLUME	650715.172	4188988.949	0.0
LOCATION L0004571	VOLUME	650715.768	4188992.558	0.0
LOCATION L0004572	VOLUME	650716.364	4188996.167	0.0
LOCATION L0004573	VOLUME	650716.961	4188999.775	0.0
LOCATION L0004574	VOLUME	650717.557	4189003.384	0.0
LOCATION L0004575	VOLUME	650718.154	4189006.993	0.0
LOCATION L0004576	VOLUME	650718.750	4189010.601	0.0
LOCATION L0004577	VOLUME	650719.346	4189014.210	0.0
LOCATION L0004578	VOLUME	650719.943	4189017.819	0.0
LOCATION L0004579	VOLUME	650720.539	4189021.427	0.0
LOCATION L0004580	VOLUME	650721.136	4189025.036	0.0
LOCATION L0004581	VOLUME	650721.732	4189028.645	0.0
LOCATION L0004582	VOLUME	650722.329	4189032.253	0.0
LOCATION L0004583	VOLUME	650722.925	4189035.862	0.0
LOCATION L0004584	VOLUME	650723.521	4189039.471	0.0
LOCATION L0004585	VOLUME	650724.118	4189043.079	0.0
LOCATION L0004586	VOLUME	650724.714	4189046.688	0.0
LOCATION L0004587	VOLUME	650725.311	4189050.296	0.0
LOCATION L0004588	VOLUME	650725.907	4189053.905	0.0
LOCATION L0004589	VOLUME	650726.504	4189057.514	0.0
LOCATION L0004590	VOLUME	650727.100	4189061.122	0.0
LOCATION L0004591	VOLUME	650727.696	4189064.731	0.0
LOCATION L0004592	VOLUME	650728.293	4189068.340	0.0
LOCATION L0004593	VOLUME	650728.889	4189071.948	0.0
LOCATION L0004594	VOLUME	650729.486	4189075.557	0.0
LOCATION L0004595	VOLUME	650730.082	4189079.166	0.0
LOCATION L0004596	VOLUME	650730.678	4189082.774	0.0
LOCATION L0004597	VOLUME	650731.275	4189086.383	0.0
LOCATION L0004598	VOLUME	650731.871	4189089.992	0.0
LOCATION L0004599	VOLUME	650732.468	4189093.600	0.0
LOCATION L0004600	VOLUME	650733.064	4189097.209	0.0
LOCATION L0004601	VOLUME	650733.661	4189100.817	0.0
LOCATION L0004602	VOLUME	650734.257	4189104.426	0.0
LOCATION L0004603	VOLUME	650734.853	4189108.035	0.0
LOCATION L0004604	VOLUME	650735.450	4189111.643	0.0

LOCATION L0004605	VOLUME	650736.046	4189115.252	0.0
LOCATION L0004606	VOLUME	650736.643	4189118.861	0.0
LOCATION L0004607	VOLUME	650737.239	4189122.469	0.0
LOCATION L0004608	VOLUME	650737.836	4189126.078	0.0
LOCATION L0004609	VOLUME	650738.432	4189129.687	0.0
LOCATION L0004610	VOLUME	650739.028	4189133.295	0.0
LOCATION L0004611	VOLUME	650739.625	4189136.904	0.0
LOCATION L0004612	VOLUME	650740.221	4189140.513	0.0
LOCATION L0004613	VOLUME	650740.818	4189144.121	0.0
LOCATION L0004614	VOLUME	650741.414	4189147.730	0.0
LOCATION L0004615	VOLUME	650742.010	4189151.339	0.0
LOCATION L0004616	VOLUME	650742.607	4189154.947	0.0
LOCATION L0004617	VOLUME	650743.203	4189158.556	0.0
LOCATION L0004618	VOLUME	650743.800	4189162.164	0.0
LOCATION L0004619	VOLUME	650744.396	4189165.773	0.0
LOCATION L0004620	VOLUME	650744.993	4189169.382	0.0
LOCATION L0004621	VOLUME	650745.589	4189172.990	0.0
LOCATION L0004622	VOLUME	650746.185	4189176.599	0.0
LOCATION L0004623	VOLUME	650746.782	4189180.208	0.0
LOCATION L0004624	VOLUME	650747.378	4189183.816	0.0
LOCATION L0004625	VOLUME	650747.975	4189187.425	0.0
LOCATION L0004626	VOLUME	650748.571	4189191.034	0.0
LOCATION L0004627	VOLUME	650749.167	4189194.642	0.0
LOCATION L0004628	VOLUME	650749.764	4189198.251	0.0
LOCATION L0004629	VOLUME	650750.360	4189201.860	0.0
LOCATION L0004630	VOLUME	650750.957	4189205.468	0.0
LOCATION L0004631	VOLUME	650751.553	4189209.077	0.0
LOCATION L0004632	VOLUME	650752.150	4189212.685	0.0
LOCATION L0004633	VOLUME	650752.746	4189216.294	0.0
LOCATION L0004634	VOLUME	650753.342	4189219.903	0.0
LOCATION L0004635	VOLUME	650753.939	4189223.511	0.0
LOCATION L0004636	VOLUME	650754.535	4189227.120	0.0
LOCATION L0004637	VOLUME	650755.132	4189230.729	0.0
LOCATION L0004638	VOLUME	650755.728	4189234.337	0.0
LOCATION L0004639	VOLUME	650756.325	4189237.946	0.0
LOCATION L0004640	VOLUME	650756.921	4189241.555	0.0
LOCATION L0004641	VOLUME	650757.517	4189245.163	0.0
LOCATION L0004642	VOLUME	650758.114	4189248.772	0.0
LOCATION L0004643	VOLUME	650758.710	4189252.381	0.0
LOCATION L0004644	VOLUME	650759.307	4189255.989	0.0
LOCATION L0004645	VOLUME	650759.903	4189259.598	0.0
LOCATION L0004646	VOLUME	650760.499	4189263.207	0.0
LOCATION L0004647	VOLUME	650761.096	4189266.815	0.0
LOCATION L0004648	VOLUME	650761.692	4189270.424	0.0
LOCATION L0004649	VOLUME	650762.289	4189274.032	0.0
LOCATION L0004650	VOLUME	650762.885	4189277.641	0.0
LOCATION L0004651	VOLUME	650763.482	4189281.250	0.0
LOCATION L0004652	VOLUME	650764.078	4189284.858	0.0
LOCATION L0004653	VOLUME	650764.674	4189288.467	0.0
LOCATION L0004654	VOLUME	650765.271	4189292.076	0.0
LOCATION L0004655	VOLUME	650765.867	4189295.684	0.0
LOCATION L0004656	VOLUME	650766.464	4189299.293	0.0
LOCATION L0004657	VOLUME	650767.060	4189302.902	0.0
LOCATION L0004658	VOLUME	650767.657	4189306.510	0.0
LOCATION L0004659	VOLUME	650768.253	4189310.119	0.0

LOCATION L0004660	VOLUME	650768.849	4189313.728	0.0
LOCATION L0004661	VOLUME	650769.446	4189317.336	0.0
LOCATION L0004662	VOLUME	650770.042	4189320.945	0.0
LOCATION L0004663	VOLUME	650770.639	4189324.553	0.0
LOCATION L0004664	VOLUME	650771.235	4189328.162	0.0
LOCATION L0004665	VOLUME	650771.831	4189331.771	0.0
LOCATION L0004666	VOLUME	650772.428	4189335.379	0.0
LOCATION L0004667	VOLUME	650773.024	4189338.988	0.0
LOCATION L0004668	VOLUME	650773.621	4189342.597	0.0
LOCATION L0004669	VOLUME	650774.217	4189346.205	0.0
LOCATION L0004670	VOLUME	650774.814	4189349.814	0.0
LOCATION L0004671	VOLUME	650775.410	4189353.423	0.0
LOCATION L0004672	VOLUME	650776.006	4189357.031	0.0
LOCATION L0004673	VOLUME	650776.603	4189360.640	0.0
LOCATION L0004674	VOLUME	650777.199	4189364.249	0.0
LOCATION L0004675	VOLUME	650777.796	4189367.857	0.0
LOCATION L0004676	VOLUME	650778.392	4189371.466	0.0
LOCATION L0004677	VOLUME	650778.989	4189375.075	0.0
LOCATION L0004678	VOLUME	650779.585	4189378.683	0.0
LOCATION L0004679	VOLUME	650780.181	4189382.292	0.0
LOCATION L0004680	VOLUME	650780.778	4189385.900	0.0
LOCATION L0004681	VOLUME	650781.374	4189389.509	0.0
LOCATION L0004682	VOLUME	650781.971	4189393.118	0.0
LOCATION L0004683	VOLUME	650782.567	4189396.726	0.0
LOCATION L0004684	VOLUME	650783.163	4189400.335	0.0
LOCATION L0004685	VOLUME	650783.760	4189403.944	0.0
LOCATION L0004686	VOLUME	650784.356	4189407.552	0.0
LOCATION L0004687	VOLUME	650784.953	4189411.161	0.0
LOCATION L0004688	VOLUME	650785.549	4189414.770	0.0
LOCATION L0004689	VOLUME	650786.146	4189418.378	0.0
LOCATION L0004690	VOLUME	650786.742	4189421.987	0.0
LOCATION L0004691	VOLUME	650787.338	4189425.596	0.0
LOCATION L0004692	VOLUME	650787.935	4189429.204	0.0
LOCATION L0004693	VOLUME	650788.531	4189432.813	0.0
LOCATION L0004694	VOLUME	650789.128	4189436.421	0.0
LOCATION L0004695	VOLUME	650789.724	4189440.030	0.0
LOCATION L0004696	VOLUME	650790.321	4189443.639	0.0
LOCATION L0004697	VOLUME	650790.917	4189447.247	0.0
LOCATION L0004698	VOLUME	650791.513	4189450.856	0.0
LOCATION L0004699	VOLUME	650792.110	4189454.465	0.0
LOCATION L0004700	VOLUME	650792.706	4189458.073	0.0
LOCATION L0004701	VOLUME	650793.303	4189461.682	0.0
LOCATION L0004702	VOLUME	650793.899	4189465.291	0.0
LOCATION L0004703	VOLUME	650794.495	4189468.899	0.0
LOCATION L0004704	VOLUME	650795.092	4189472.508	0.0
LOCATION L0004705	VOLUME	650795.688	4189476.117	0.0
LOCATION L0004706	VOLUME	650796.285	4189479.725	0.0
LOCATION L0004707	VOLUME	650796.881	4189483.334	0.0
LOCATION L0004708	VOLUME	650797.478	4189486.943	0.0
LOCATION L0004709	VOLUME	650798.074	4189490.551	0.0
LOCATION L0004710	VOLUME	650798.670	4189494.160	0.0
LOCATION L0004711	VOLUME	650799.267	4189497.768	0.0
LOCATION L0004712	VOLUME	650799.863	4189501.377	0.0
LOCATION L0004713	VOLUME	650800.460	4189504.986	0.0
LOCATION L0004714	VOLUME	650801.056	4189508.594	0.0

\*\* End of LINE VOLUME Source ID = SLINE8

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE9

\*\* DESCRSRC Off-site (Manthey Road - South)

\*\* PREFIX

\*\* Length of Side = 3.66

\*\* Configuration = Adjacent

\*\* Emission Rate = 1.0

\*\* Vertical Dimension = 3.66

\*\* SZINIT = 1.70

\*\* Nodes = 4

\*\* 650474.787, 4188657.184, 0.00, 1.83, 1.70

\*\* 650650.218, 4188660.839, 0.00, 1.83, 1.70

\*\* 650680.675, 4188780.229, 0.00, 1.83, 1.70

\*\* 650801.284, 4189509.974, 0.00, 1.83, 1.70

\*\* -----

LOCATION L0005283	VOLUME	650476.616	4188657.222	0.0
LOCATION L0005284	VOLUME	650480.272	4188657.298	0.0
LOCATION L0005285	VOLUME	650483.929	4188657.374	0.0
LOCATION L0005286	VOLUME	650487.586	4188657.450	0.0
LOCATION L0005287	VOLUME	650491.243	4188657.527	0.0
LOCATION L0005288	VOLUME	650494.900	4188657.603	0.0
LOCATION L0005289	VOLUME	650498.557	4188657.679	0.0
LOCATION L0005290	VOLUME	650502.213	4188657.755	0.0
LOCATION L0005291	VOLUME	650505.870	4188657.831	0.0
LOCATION L0005292	VOLUME	650509.527	4188657.907	0.0
LOCATION L0005293	VOLUME	650513.184	4188657.984	0.0
LOCATION L0005294	VOLUME	650516.841	4188658.060	0.0
LOCATION L0005295	VOLUME	650520.497	4188658.136	0.0
LOCATION L0005296	VOLUME	650524.154	4188658.212	0.0
LOCATION L0005297	VOLUME	650527.811	4188658.288	0.0
LOCATION L0005298	VOLUME	650531.468	4188658.365	0.0
LOCATION L0005299	VOLUME	650535.125	4188658.441	0.0
LOCATION L0005300	VOLUME	650538.781	4188658.517	0.0
LOCATION L0005301	VOLUME	650542.438	4188658.593	0.0
LOCATION L0005302	VOLUME	650546.095	4188658.669	0.0
LOCATION L0005303	VOLUME	650549.752	4188658.745	0.0
LOCATION L0005304	VOLUME	650553.409	4188658.822	0.0
LOCATION L0005305	VOLUME	650557.065	4188658.898	0.0
LOCATION L0005306	VOLUME	650560.722	4188658.974	0.0
LOCATION L0005307	VOLUME	650564.379	4188659.050	0.0
LOCATION L0005308	VOLUME	650568.036	4188659.126	0.0
LOCATION L0005309	VOLUME	650571.693	4188659.203	0.0
LOCATION L0005310	VOLUME	650575.349	4188659.279	0.0
LOCATION L0005311	VOLUME	650579.006	4188659.355	0.0
LOCATION L0005312	VOLUME	650582.663	4188659.431	0.0
LOCATION L0005313	VOLUME	650586.320	4188659.507	0.0
LOCATION L0005314	VOLUME	650589.977	4188659.583	0.0
LOCATION L0005315	VOLUME	650593.633	4188659.660	0.0
LOCATION L0005316	VOLUME	650597.290	4188659.736	0.0
LOCATION L0005317	VOLUME	650600.947	4188659.812	0.0
LOCATION L0005318	VOLUME	650604.604	4188659.888	0.0
LOCATION L0005319	VOLUME	650608.261	4188659.964	0.0
LOCATION L0005320	VOLUME	650611.918	4188660.041	0.0

LOCATION L0005321	VOLUME	650615.574	4188660.117	0.0
LOCATION L0005322	VOLUME	650619.231	4188660.193	0.0
LOCATION L0005323	VOLUME	650622.888	4188660.269	0.0
LOCATION L0005324	VOLUME	650626.545	4188660.345	0.0
LOCATION L0005325	VOLUME	650630.202	4188660.421	0.0
LOCATION L0005326	VOLUME	650633.858	4188660.498	0.0
LOCATION L0005327	VOLUME	650637.515	4188660.574	0.0
LOCATION L0005328	VOLUME	650641.172	4188660.650	0.0
LOCATION L0005329	VOLUME	650644.829	4188660.726	0.0
LOCATION L0005330	VOLUME	650648.486	4188660.802	0.0
LOCATION L0005331	VOLUME	650650.694	4188662.703	0.0
LOCATION L0005332	VOLUME	650651.598	4188666.247	0.0
LOCATION L0005333	VOLUME	650652.502	4188669.791	0.0
LOCATION L0005334	VOLUME	650653.406	4188673.336	0.0
LOCATION L0005335	VOLUME	650654.311	4188676.880	0.0
LOCATION L0005336	VOLUME	650655.215	4188680.424	0.0
LOCATION L0005337	VOLUME	650656.119	4188683.968	0.0
LOCATION L0005338	VOLUME	650657.023	4188687.512	0.0
LOCATION L0005339	VOLUME	650657.927	4188691.056	0.0
LOCATION L0005340	VOLUME	650658.831	4188694.600	0.0
LOCATION L0005341	VOLUME	650659.735	4188698.144	0.0
LOCATION L0005342	VOLUME	650660.639	4188701.688	0.0
LOCATION L0005343	VOLUME	650661.543	4188705.232	0.0
LOCATION L0005344	VOLUME	650662.447	4188708.776	0.0
LOCATION L0005345	VOLUME	650663.352	4188712.321	0.0
LOCATION L0005346	VOLUME	650664.256	4188715.865	0.0
LOCATION L0005347	VOLUME	650665.160	4188719.409	0.0
LOCATION L0005348	VOLUME	650666.064	4188722.953	0.0
LOCATION L0005349	VOLUME	650666.968	4188726.497	0.0
LOCATION L0005350	VOLUME	650667.872	4188730.041	0.0
LOCATION L0005351	VOLUME	650668.776	4188733.585	0.0
LOCATION L0005352	VOLUME	650669.680	4188737.129	0.0
LOCATION L0005353	VOLUME	650670.584	4188740.673	0.0
LOCATION L0005354	VOLUME	650671.489	4188744.217	0.0
LOCATION L0005355	VOLUME	650672.393	4188747.762	0.0
LOCATION L0005356	VOLUME	650673.297	4188751.306	0.0
LOCATION L0005357	VOLUME	650674.201	4188754.850	0.0
LOCATION L0005358	VOLUME	650675.105	4188758.394	0.0
LOCATION L0005359	VOLUME	650676.009	4188761.938	0.0
LOCATION L0005360	VOLUME	650676.913	4188765.482	0.0
LOCATION L0005361	VOLUME	650677.817	4188769.026	0.0
LOCATION L0005362	VOLUME	650678.721	4188772.570	0.0
LOCATION L0005363	VOLUME	650679.625	4188776.114	0.0
LOCATION L0005364	VOLUME	650680.530	4188779.658	0.0
LOCATION L0005365	VOLUME	650681.176	4188783.257	0.0
LOCATION L0005366	VOLUME	650681.772	4188786.865	0.0
LOCATION L0005367	VOLUME	650682.368	4188790.474	0.0
LOCATION L0005368	VOLUME	650682.965	4188794.083	0.0
LOCATION L0005369	VOLUME	650683.561	4188797.691	0.0
LOCATION L0005370	VOLUME	650684.158	4188801.300	0.0
LOCATION L0005371	VOLUME	650684.754	4188804.909	0.0
LOCATION L0005372	VOLUME	650685.351	4188808.517	0.0
LOCATION L0005373	VOLUME	650685.947	4188812.126	0.0
LOCATION L0005374	VOLUME	650686.543	4188815.734	0.0
LOCATION L0005375	VOLUME	650687.140	4188819.343	0.0



LOCATION L0005376	VOLUME	650687.736	4188822.952	0.0
LOCATION L0005377	VOLUME	650688.333	4188826.560	0.0
LOCATION L0005378	VOLUME	650688.929	4188830.169	0.0
LOCATION L0005379	VOLUME	650689.525	4188833.778	0.0
LOCATION L0005380	VOLUME	650690.122	4188837.386	0.0
LOCATION L0005381	VOLUME	650690.718	4188840.995	0.0
LOCATION L0005382	VOLUME	650691.315	4188844.604	0.0
LOCATION L0005383	VOLUME	650691.911	4188848.212	0.0
LOCATION L0005384	VOLUME	650692.508	4188851.821	0.0
LOCATION L0005385	VOLUME	650693.104	4188855.430	0.0
LOCATION L0005386	VOLUME	650693.700	4188859.038	0.0
LOCATION L0005387	VOLUME	650694.297	4188862.647	0.0
LOCATION L0005388	VOLUME	650694.893	4188866.256	0.0
LOCATION L0005389	VOLUME	650695.490	4188869.864	0.0
LOCATION L0005390	VOLUME	650696.086	4188873.473	0.0
LOCATION L0005391	VOLUME	650696.682	4188877.081	0.0
LOCATION L0005392	VOLUME	650697.279	4188880.690	0.0
LOCATION L0005393	VOLUME	650697.875	4188884.299	0.0
LOCATION L0005394	VOLUME	650698.472	4188887.907	0.0
LOCATION L0005395	VOLUME	650699.068	4188891.516	0.0
LOCATION L0005396	VOLUME	650699.665	4188895.125	0.0
LOCATION L0005397	VOLUME	650700.261	4188898.733	0.0
LOCATION L0005398	VOLUME	650700.857	4188902.342	0.0
LOCATION L0005399	VOLUME	650701.454	4188905.951	0.0
LOCATION L0005400	VOLUME	650702.050	4188909.559	0.0
LOCATION L0005401	VOLUME	650702.647	4188913.168	0.0
LOCATION L0005402	VOLUME	650703.243	4188916.777	0.0
LOCATION L0005403	VOLUME	650703.840	4188920.385	0.0
LOCATION L0005404	VOLUME	650704.436	4188923.994	0.0
LOCATION L0005405	VOLUME	650705.032	4188927.603	0.0
LOCATION L0005406	VOLUME	650705.629	4188931.211	0.0
LOCATION L0005407	VOLUME	650706.225	4188934.820	0.0
LOCATION L0005408	VOLUME	650706.822	4188938.428	0.0
LOCATION L0005409	VOLUME	650707.418	4188942.037	0.0
LOCATION L0005410	VOLUME	650708.014	4188945.646	0.0
LOCATION L0005411	VOLUME	650708.611	4188949.254	0.0
LOCATION L0005412	VOLUME	650709.207	4188952.863	0.0
LOCATION L0005413	VOLUME	650709.804	4188956.472	0.0
LOCATION L0005414	VOLUME	650710.400	4188960.080	0.0
LOCATION L0005415	VOLUME	650710.997	4188963.689	0.0
LOCATION L0005416	VOLUME	650711.593	4188967.298	0.0
LOCATION L0005417	VOLUME	650712.189	4188970.906	0.0
LOCATION L0005418	VOLUME	650712.786	4188974.515	0.0
LOCATION L0005419	VOLUME	650713.382	4188978.124	0.0
LOCATION L0005420	VOLUME	650713.979	4188981.732	0.0
LOCATION L0005421	VOLUME	650714.575	4188985.341	0.0
LOCATION L0005422	VOLUME	650715.172	4188988.949	0.0
LOCATION L0005423	VOLUME	650715.768	4188992.558	0.0
LOCATION L0005424	VOLUME	650716.364	4188996.167	0.0
LOCATION L0005425	VOLUME	650716.961	4188999.775	0.0
LOCATION L0005426	VOLUME	650717.557	4189003.384	0.0
LOCATION L0005427	VOLUME	650718.154	4189006.993	0.0
LOCATION L0005428	VOLUME	650718.750	4189010.601	0.0
LOCATION L0005429	VOLUME	650719.346	4189014.210	0.0
LOCATION L0005430	VOLUME	650719.943	4189017.819	0.0

LOCATION L0005431	VOLUME	650720.539	4189021.427	0.0
LOCATION L0005432	VOLUME	650721.136	4189025.036	0.0
LOCATION L0005433	VOLUME	650721.732	4189028.645	0.0
LOCATION L0005434	VOLUME	650722.329	4189032.253	0.0
LOCATION L0005435	VOLUME	650722.925	4189035.862	0.0
LOCATION L0005436	VOLUME	650723.521	4189039.471	0.0
LOCATION L0005437	VOLUME	650724.118	4189043.079	0.0
LOCATION L0005438	VOLUME	650724.714	4189046.688	0.0
LOCATION L0005439	VOLUME	650725.311	4189050.296	0.0
LOCATION L0005440	VOLUME	650725.907	4189053.905	0.0
LOCATION L0005441	VOLUME	650726.504	4189057.514	0.0
LOCATION L0005442	VOLUME	650727.100	4189061.122	0.0
LOCATION L0005443	VOLUME	650727.696	4189064.731	0.0
LOCATION L0005444	VOLUME	650728.293	4189068.340	0.0
LOCATION L0005445	VOLUME	650728.889	4189071.948	0.0
LOCATION L0005446	VOLUME	650729.486	4189075.557	0.0
LOCATION L0005447	VOLUME	650730.082	4189079.166	0.0
LOCATION L0005448	VOLUME	650730.678	4189082.774	0.0
LOCATION L0005449	VOLUME	650731.275	4189086.383	0.0
LOCATION L0005450	VOLUME	650731.871	4189089.992	0.0
LOCATION L0005451	VOLUME	650732.468	4189093.600	0.0
LOCATION L0005452	VOLUME	650733.064	4189097.209	0.0
LOCATION L0005453	VOLUME	650733.661	4189100.817	0.0
LOCATION L0005454	VOLUME	650734.257	4189104.426	0.0
LOCATION L0005455	VOLUME	650734.853	4189108.035	0.0
LOCATION L0005456	VOLUME	650735.450	4189111.643	0.0
LOCATION L0005457	VOLUME	650736.046	4189115.252	0.0
LOCATION L0005458	VOLUME	650736.643	4189118.861	0.0
LOCATION L0005459	VOLUME	650737.239	4189122.469	0.0
LOCATION L0005460	VOLUME	650737.836	4189126.078	0.0
LOCATION L0005461	VOLUME	650738.432	4189129.687	0.0
LOCATION L0005462	VOLUME	650739.028	4189133.295	0.0
LOCATION L0005463	VOLUME	650739.625	4189136.904	0.0
LOCATION L0005464	VOLUME	650740.221	4189140.513	0.0
LOCATION L0005465	VOLUME	650740.818	4189144.121	0.0
LOCATION L0005466	VOLUME	650741.414	4189147.730	0.0
LOCATION L0005467	VOLUME	650742.010	4189151.339	0.0
LOCATION L0005468	VOLUME	650742.607	4189154.947	0.0
LOCATION L0005469	VOLUME	650743.203	4189158.556	0.0
LOCATION L0005470	VOLUME	650743.800	4189162.164	0.0
LOCATION L0005471	VOLUME	650744.396	4189165.773	0.0
LOCATION L0005472	VOLUME	650744.993	4189169.382	0.0
LOCATION L0005473	VOLUME	650745.589	4189172.990	0.0
LOCATION L0005474	VOLUME	650746.185	4189176.599	0.0
LOCATION L0005475	VOLUME	650746.782	4189180.208	0.0
LOCATION L0005476	VOLUME	650747.378	4189183.816	0.0
LOCATION L0005477	VOLUME	650747.975	4189187.425	0.0
LOCATION L0005478	VOLUME	650748.571	4189191.034	0.0
LOCATION L0005479	VOLUME	650749.167	4189194.642	0.0
LOCATION L0005480	VOLUME	650749.764	4189198.251	0.0
LOCATION L0005481	VOLUME	650750.360	4189201.860	0.0
LOCATION L0005482	VOLUME	650750.957	4189205.468	0.0
LOCATION L0005483	VOLUME	650751.553	4189209.077	0.0
LOCATION L0005484	VOLUME	650752.150	4189212.685	0.0
LOCATION L0005485	VOLUME	650752.746	4189216.294	0.0

LOCATION L0005486	VOLUME	650753.342	4189219.903	0.0
LOCATION L0005487	VOLUME	650753.939	4189223.511	0.0
LOCATION L0005488	VOLUME	650754.535	4189227.120	0.0
LOCATION L0005489	VOLUME	650755.132	4189230.729	0.0
LOCATION L0005490	VOLUME	650755.728	4189234.337	0.0
LOCATION L0005491	VOLUME	650756.325	4189237.946	0.0
LOCATION L0005492	VOLUME	650756.921	4189241.555	0.0
LOCATION L0005493	VOLUME	650757.517	4189245.163	0.0
LOCATION L0005494	VOLUME	650758.114	4189248.772	0.0
LOCATION L0005495	VOLUME	650758.710	4189252.381	0.0
LOCATION L0005496	VOLUME	650759.307	4189255.989	0.0
LOCATION L0005497	VOLUME	650759.903	4189259.598	0.0
LOCATION L0005498	VOLUME	650760.499	4189263.207	0.0
LOCATION L0005499	VOLUME	650761.096	4189266.815	0.0
LOCATION L0005500	VOLUME	650761.692	4189270.424	0.0
LOCATION L0005501	VOLUME	650762.289	4189274.032	0.0
LOCATION L0005502	VOLUME	650762.885	4189277.641	0.0
LOCATION L0005503	VOLUME	650763.482	4189281.250	0.0
LOCATION L0005504	VOLUME	650764.078	4189284.858	0.0
LOCATION L0005505	VOLUME	650764.674	4189288.467	0.0
LOCATION L0005506	VOLUME	650765.271	4189292.076	0.0
LOCATION L0005507	VOLUME	650765.867	4189295.684	0.0
LOCATION L0005508	VOLUME	650766.464	4189299.293	0.0
LOCATION L0005509	VOLUME	650767.060	4189302.902	0.0
LOCATION L0005510	VOLUME	650767.657	4189306.510	0.0
LOCATION L0005511	VOLUME	650768.253	4189310.119	0.0
LOCATION L0005512	VOLUME	650768.849	4189313.728	0.0
LOCATION L0005513	VOLUME	650769.446	4189317.336	0.0
LOCATION L0005514	VOLUME	650770.042	4189320.945	0.0
LOCATION L0005515	VOLUME	650770.639	4189324.553	0.0
LOCATION L0005516	VOLUME	650771.235	4189328.162	0.0
LOCATION L0005517	VOLUME	650771.831	4189331.771	0.0
LOCATION L0005518	VOLUME	650772.428	4189335.379	0.0
LOCATION L0005519	VOLUME	650773.024	4189338.988	0.0
LOCATION L0005520	VOLUME	650773.621	4189342.597	0.0
LOCATION L0005521	VOLUME	650774.217	4189346.205	0.0
LOCATION L0005522	VOLUME	650774.814	4189349.814	0.0
LOCATION L0005523	VOLUME	650775.410	4189353.423	0.0
LOCATION L0005524	VOLUME	650776.006	4189357.031	0.0
LOCATION L0005525	VOLUME	650776.603	4189360.640	0.0
LOCATION L0005526	VOLUME	650777.199	4189364.249	0.0
LOCATION L0005527	VOLUME	650777.796	4189367.857	0.0
LOCATION L0005528	VOLUME	650778.392	4189371.466	0.0
LOCATION L0005529	VOLUME	650778.989	4189375.075	0.0
LOCATION L0005530	VOLUME	650779.585	4189378.683	0.0
LOCATION L0005531	VOLUME	650780.181	4189382.292	0.0
LOCATION L0005532	VOLUME	650780.778	4189385.900	0.0
LOCATION L0005533	VOLUME	650781.374	4189389.509	0.0
LOCATION L0005534	VOLUME	650781.971	4189393.118	0.0
LOCATION L0005535	VOLUME	650782.567	4189396.726	0.0
LOCATION L0005536	VOLUME	650783.163	4189400.335	0.0
LOCATION L0005537	VOLUME	650783.760	4189403.944	0.0
LOCATION L0005538	VOLUME	650784.356	4189407.552	0.0
LOCATION L0005539	VOLUME	650784.953	4189411.161	0.0
LOCATION L0005540	VOLUME	650785.549	4189414.770	0.0

LOCATION L0005541	VOLUME	650786.146	4189418.378	0.0
LOCATION L0005542	VOLUME	650786.742	4189421.987	0.0
LOCATION L0005543	VOLUME	650787.338	4189425.596	0.0
LOCATION L0005544	VOLUME	650787.935	4189429.204	0.0
LOCATION L0005545	VOLUME	650788.531	4189432.813	0.0
LOCATION L0005546	VOLUME	650789.128	4189436.421	0.0
LOCATION L0005547	VOLUME	650789.724	4189440.030	0.0
LOCATION L0005548	VOLUME	650790.321	4189443.639	0.0
LOCATION L0005549	VOLUME	650790.917	4189447.247	0.0
LOCATION L0005550	VOLUME	650791.513	4189450.856	0.0
LOCATION L0005551	VOLUME	650792.110	4189454.465	0.0
LOCATION L0005552	VOLUME	650792.706	4189458.073	0.0
LOCATION L0005553	VOLUME	650793.303	4189461.682	0.0
LOCATION L0005554	VOLUME	650793.899	4189465.291	0.0
LOCATION L0005555	VOLUME	650794.495	4189468.899	0.0
LOCATION L0005556	VOLUME	650795.092	4189472.508	0.0
LOCATION L0005557	VOLUME	650795.688	4189476.117	0.0
LOCATION L0005558	VOLUME	650796.285	4189479.725	0.0
LOCATION L0005559	VOLUME	650796.881	4189483.334	0.0
LOCATION L0005560	VOLUME	650797.478	4189486.943	0.0
LOCATION L0005561	VOLUME	650798.074	4189490.551	0.0
LOCATION L0005562	VOLUME	650798.670	4189494.160	0.0
LOCATION L0005563	VOLUME	650799.267	4189497.768	0.0
LOCATION L0005564	VOLUME	650799.863	4189501.377	0.0
LOCATION L0005565	VOLUME	650800.460	4189504.986	0.0
LOCATION L0005566	VOLUME	650801.056	4189508.594	0.0

\*\* End of LINE VOLUME Source ID = SLINE9

\*\* Source Parameters \*\*

SRCPARAM STCK1	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK2	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK3	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK4	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK5	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK6	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK7	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK8	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK9	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK10	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK11	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK12	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK13	1.0	3.658	366.000	57.1	0.1
SRCPARAM STCK14	1.0	3.658	366.000	57.1	0.1

\*\* LINE VOLUME Source ID = SLINE7

SRCPARAM L0003722	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003723	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003724	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003725	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003726	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003727	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003728	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003729	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003730	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003731	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003732	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003733	0.0014104372	1.83	1.70	1.70

SRCPARAM L0003734	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003735	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003736	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003737	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003738	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003739	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003740	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003741	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003742	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003743	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003744	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003745	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003746	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003747	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003748	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003749	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003750	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003751	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003752	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003753	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003754	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003755	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003756	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003757	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003758	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003759	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003760	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003761	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003762	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003763	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003764	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003765	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003766	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003767	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003768	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003769	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003770	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003771	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003772	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003773	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003774	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003775	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003776	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003777	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003778	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003779	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003780	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003781	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003782	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003783	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003784	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003785	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003786	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003787	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003788	0.0014104372	1.83	1.70	1.70

SRCPARAM L0003789	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003790	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003791	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003792	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003793	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003794	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003795	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003796	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003797	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003798	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003799	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003800	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003801	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003802	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003803	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003804	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003805	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003806	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003807	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003808	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003809	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003810	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003811	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003812	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003813	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003814	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003815	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003816	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003817	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003818	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003819	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003820	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003821	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003822	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003823	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003824	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003825	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003826	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003827	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003828	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003829	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003830	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003831	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003832	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003833	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003834	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003835	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003836	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003837	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003838	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003839	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003840	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003841	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003842	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003843	0.0014104372	1.83	1.70	1.70

SRCPARAM L0003844	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003845	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003846	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003847	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003848	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003849	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003850	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003851	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003852	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003853	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003854	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003855	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003856	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003857	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003858	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003859	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003860	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003861	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003862	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003863	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003864	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003865	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003866	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003867	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003868	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003869	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003870	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003871	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003872	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003873	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003874	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003875	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003876	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003877	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003878	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003879	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003880	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003881	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003882	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003883	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003884	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003885	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003886	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003887	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003888	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003889	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003890	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003891	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003892	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003893	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003894	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003895	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003896	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003897	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003898	0.0014104372	1.83	1.70	1.70

SRCPARAM L0003899	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003900	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003901	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003902	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003903	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003904	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003905	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003906	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003907	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003908	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003909	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003910	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003911	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003912	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003913	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003914	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003915	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003916	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003917	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003918	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003919	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003920	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003921	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003922	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003923	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003924	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003925	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003926	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003927	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003928	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003929	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003930	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003931	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003932	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003933	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003934	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003935	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003936	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003937	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003938	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003939	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003940	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003941	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003942	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003943	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003944	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003945	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003946	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003947	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003948	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003949	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003950	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003951	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003952	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003953	0.0014104372	1.83	1.70	1.70



SRCPARAM L0003954	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003955	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003956	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003957	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003958	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003959	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003960	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003961	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003962	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003963	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003964	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003965	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003966	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003967	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003968	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003969	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003970	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003971	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003972	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003973	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003974	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003975	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003976	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003977	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003978	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003979	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003980	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003981	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003982	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003983	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003984	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003985	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003986	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003987	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003988	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003989	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003990	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003991	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003992	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003993	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003994	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003995	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003996	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003997	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003998	0.0014104372	1.83	1.70	1.70
SRCPARAM L0003999	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004000	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004001	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004002	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004003	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004004	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004005	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004006	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004007	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004008	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004009	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004010	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004011	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004012	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004013	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004014	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004015	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004016	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004017	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004018	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004019	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004020	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004021	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004022	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004023	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004024	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004025	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004026	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004027	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004028	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004029	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004030	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004031	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004032	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004033	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004034	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004035	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004036	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004037	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004038	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004039	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004040	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004041	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004042	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004043	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004044	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004045	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004046	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004047	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004048	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004049	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004050	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004051	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004052	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004053	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004054	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004055	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004056	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004057	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004058	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004059	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004060	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004061	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004062	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004063	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004064	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004065	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004066	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004067	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004068	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004069	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004070	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004071	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004072	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004073	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004074	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004075	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004076	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004077	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004078	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004079	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004080	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004081	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004082	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004083	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004084	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004085	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004086	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004087	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004088	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004089	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004090	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004091	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004092	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004093	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004094	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004095	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004096	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004097	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004098	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004099	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004100	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004101	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004102	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004103	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004104	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004105	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004106	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004107	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004108	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004109	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004110	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004111	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004112	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004113	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004114	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004115	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004116	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004117	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004118	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004119	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004120	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004121	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004122	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004123	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004124	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004125	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004126	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004127	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004128	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004129	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004130	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004131	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004132	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004133	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004134	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004135	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004136	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004137	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004138	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004139	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004140	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004141	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004142	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004143	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004144	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004145	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004146	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004147	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004148	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004149	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004150	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004151	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004152	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004153	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004154	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004155	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004156	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004157	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004158	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004159	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004160	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004161	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004162	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004163	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004164	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004165	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004166	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004167	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004168	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004169	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004170	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004171	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004172	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004173	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004174	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004175	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004176	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004177	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004178	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004179	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004180	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004181	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004182	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004183	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004184	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004185	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004186	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004187	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004188	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004189	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004190	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004191	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004192	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004193	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004194	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004195	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004196	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004197	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004198	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004199	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004200	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004201	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004202	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004203	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004204	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004205	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004206	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004207	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004208	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004209	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004210	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004211	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004212	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004213	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004214	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004215	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004216	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004217	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004218	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004219	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004220	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004221	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004222	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004223	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004224	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004225	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004226	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004227	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004228	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004229	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004230	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004231	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004232	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004233	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004234	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004235	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004236	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004237	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004238	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004239	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004240	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004241	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004242	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004243	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004244	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004245	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004246	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004247	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004248	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004249	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004250	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004251	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004252	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004253	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004254	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004255	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004256	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004257	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004258	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004259	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004260	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004261	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004262	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004263	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004264	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004265	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004266	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004267	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004268	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004269	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004270	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004271	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004272	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004273	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004274	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004275	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004276	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004277	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004278	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004279	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004280	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004281	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004282	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004283	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004284	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004285	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004286	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004287	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004288	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004289	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004290	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004291	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004292	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004293	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004294	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004295	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004296	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004297	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004298	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004299	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004300	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004301	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004302	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004303	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004304	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004305	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004306	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004307	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004308	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004309	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004310	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004311	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004312	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004313	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004314	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004315	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004316	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004317	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004318	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004319	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004320	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004321	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004322	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004323	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004324	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004325	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004326	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004327	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004328	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004329	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004330	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004331	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004332	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004333	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004334	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004335	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004336	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004337	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004338	0.0014104372	1.83	1.70	1.70

SRCPARAM L0004339	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004340	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004341	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004342	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004343	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004344	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004345	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004346	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004347	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004348	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004349	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004350	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004351	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004352	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004353	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004354	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004355	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004356	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004357	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004358	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004359	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004360	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004361	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004362	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004363	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004364	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004365	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004366	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004367	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004368	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004369	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004370	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004371	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004372	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004373	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004374	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004375	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004376	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004377	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004378	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004379	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004380	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004381	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004382	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004383	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004384	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004385	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004386	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004387	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004388	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004389	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004390	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004391	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004392	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004393	0.0014104372	1.83	1.70	1.70



SRCPARAM L0004394	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004395	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004396	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004397	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004398	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004399	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004400	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004401	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004402	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004403	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004404	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004405	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004406	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004407	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004408	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004409	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004410	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004411	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004412	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004413	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004414	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004415	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004416	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004417	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004418	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004419	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004420	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004421	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004422	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004423	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004424	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004425	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004426	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004427	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004428	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004429	0.0014104372	1.83	1.70	1.70
SRCPARAM L0004430	0.0014104372	1.83	1.70	1.70

\*\* -----

\*\* LINE VOLUME Source ID = SLINE8

SRCPARAM L0004431	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004432	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004433	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004434	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004435	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004436	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004437	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004438	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004439	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004440	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004441	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004442	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004443	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004444	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004445	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004446	0.0035211268	1.83	1.70	1.70

SRCPARAM L0004447	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004448	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004449	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004450	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004451	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004452	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004453	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004454	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004455	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004456	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004457	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004458	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004459	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004460	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004461	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004462	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004463	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004464	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004465	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004466	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004467	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004468	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004469	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004470	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004471	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004472	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004473	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004474	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004475	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004476	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004477	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004478	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004479	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004480	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004481	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004482	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004483	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004484	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004485	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004486	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004487	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004488	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004489	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004490	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004491	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004492	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004493	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004494	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004495	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004496	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004497	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004498	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004499	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004500	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004501	0.0035211268	1.83	1.70	1.70

SRCPARAM L0004502	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004503	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004504	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004505	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004506	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004507	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004508	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004509	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004510	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004511	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004512	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004513	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004514	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004515	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004516	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004517	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004518	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004519	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004520	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004521	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004522	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004523	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004524	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004525	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004526	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004527	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004528	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004529	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004530	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004531	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004532	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004533	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004534	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004535	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004536	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004537	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004538	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004539	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004540	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004541	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004542	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004543	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004544	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004545	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004546	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004547	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004548	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004549	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004550	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004551	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004552	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004553	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004554	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004555	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004556	0.0035211268	1.83	1.70	1.70

SRCPARAM L0004557	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004558	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004559	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004560	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004561	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004562	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004563	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004564	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004565	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004566	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004567	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004568	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004569	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004570	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004571	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004572	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004573	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004574	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004575	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004576	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004577	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004578	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004579	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004580	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004581	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004582	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004583	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004584	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004585	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004586	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004587	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004588	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004589	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004590	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004591	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004592	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004593	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004594	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004595	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004596	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004597	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004598	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004599	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004600	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004601	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004602	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004603	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004604	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004605	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004606	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004607	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004608	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004609	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004610	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004611	0.0035211268	1.83	1.70	1.70

SRCPARAM L0004612	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004613	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004614	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004615	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004616	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004617	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004618	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004619	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004620	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004621	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004622	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004623	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004624	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004625	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004626	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004627	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004628	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004629	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004630	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004631	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004632	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004633	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004634	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004635	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004636	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004637	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004638	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004639	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004640	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004641	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004642	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004643	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004644	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004645	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004646	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004647	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004648	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004649	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004650	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004651	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004652	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004653	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004654	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004655	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004656	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004657	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004658	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004659	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004660	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004661	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004662	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004663	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004664	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004665	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004666	0.0035211268	1.83	1.70	1.70

SRCPARAM L0004667	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004668	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004669	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004670	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004671	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004672	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004673	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004674	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004675	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004676	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004677	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004678	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004679	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004680	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004681	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004682	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004683	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004684	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004685	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004686	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004687	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004688	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004689	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004690	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004691	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004692	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004693	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004694	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004695	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004696	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004697	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004698	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004699	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004700	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004701	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004702	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004703	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004704	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004705	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004706	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004707	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004708	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004709	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004710	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004711	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004712	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004713	0.0035211268	1.83	1.70	1.70
SRCPARAM L0004714	0.0035211268	1.83	1.70	1.70

\*\* -----

\*\* LINE VOLUME Source ID = SLINE9

SRCPARAM L0005283	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005284	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005285	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005286	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005287	0.0035211268	1.83	1.70	1.70

SRCPARAM L0005288	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005289	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005290	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005291	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005292	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005293	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005294	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005295	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005296	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005297	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005298	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005299	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005300	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005301	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005302	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005303	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005304	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005305	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005306	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005307	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005308	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005309	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005310	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005311	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005312	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005313	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005314	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005315	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005316	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005317	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005318	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005319	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005320	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005321	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005322	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005323	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005324	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005325	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005326	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005327	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005328	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005329	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005330	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005331	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005332	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005333	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005334	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005335	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005336	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005337	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005338	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005339	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005340	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005341	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005342	0.0035211268	1.83	1.70	1.70

SRCPARAM L0005343	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005344	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005345	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005346	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005347	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005348	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005349	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005350	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005351	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005352	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005353	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005354	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005355	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005356	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005357	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005358	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005359	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005360	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005361	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005362	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005363	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005364	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005365	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005366	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005367	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005368	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005369	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005370	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005371	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005372	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005373	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005374	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005375	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005376	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005377	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005378	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005379	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005380	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005381	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005382	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005383	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005384	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005385	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005386	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005387	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005388	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005389	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005390	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005391	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005392	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005393	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005394	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005395	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005396	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005397	0.0035211268	1.83	1.70	1.70



SRCPARAM L0005398	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005399	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005400	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005401	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005402	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005403	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005404	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005405	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005406	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005407	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005408	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005409	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005410	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005411	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005412	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005413	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005414	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005415	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005416	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005417	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005418	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005419	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005420	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005421	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005422	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005423	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005424	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005425	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005426	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005427	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005428	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005429	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005430	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005431	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005432	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005433	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005434	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005435	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005436	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005437	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005438	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005439	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005440	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005441	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005442	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005443	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005444	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005445	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005446	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005447	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005448	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005449	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005450	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005451	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005452	0.0035211268	1.83	1.70	1.70

SRCPARAM L0005453	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005454	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005455	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005456	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005457	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005458	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005459	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005460	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005461	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005462	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005463	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005464	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005465	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005466	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005467	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005468	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005469	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005470	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005471	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005472	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005473	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005474	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005475	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005476	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005477	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005478	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005479	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005480	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005481	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005482	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005483	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005484	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005485	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005486	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005487	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005488	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005489	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005490	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005491	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005492	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005493	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005494	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005495	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005496	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005497	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005498	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005499	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005500	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005501	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005502	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005503	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005504	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005505	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005506	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005507	0.0035211268	1.83	1.70	1.70

SRCPARAM L0005508	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005509	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005510	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005511	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005512	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005513	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005514	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005515	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005516	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005517	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005518	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005519	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005520	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005521	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005522	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005523	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005524	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005525	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005526	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005527	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005528	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005529	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005530	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005531	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005532	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005533	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005534	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005535	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005536	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005537	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005538	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005539	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005540	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005541	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005542	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005543	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005544	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005545	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005546	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005547	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005548	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005549	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005550	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005551	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005552	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005553	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005554	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005555	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005556	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005557	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005558	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005559	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005560	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005561	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005562	0.0035211268	1.83	1.70	1.70

SRCPARAM L0005563	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005564	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005565	0.0035211268	1.83	1.70	1.70
SRCPARAM L0005566	0.0035211268	1.83	1.70	1.70

\*\*-----

SRCGROUP SLINE7	L0003722	L0003723	L0003724	L0003725	L0003726	L0003727
SRCGROUP SLINE7	L0003728	L0003729	L0003730	L0003731	L0003732	L0003733
SRCGROUP SLINE7	L0003734	L0003735	L0003736	L0003737	L0003738	L0003739
SRCGROUP SLINE7	L0003740	L0003741	L0003742	L0003743	L0003744	L0003745
SRCGROUP SLINE7	L0003746	L0003747	L0003748	L0003749	L0003750	L0003751
SRCGROUP SLINE7	L0003752	L0003753	L0003754	L0003755	L0003756	L0003757
SRCGROUP SLINE7	L0003758	L0003759	L0003760	L0003761	L0003762	L0003763
SRCGROUP SLINE7	L0003764	L0003765	L0003766	L0003767	L0003768	L0003769
SRCGROUP SLINE7	L0003770	L0003771	L0003772	L0003773	L0003774	L0003775
SRCGROUP SLINE7	L0003776	L0003777	L0003778	L0003779	L0003780	L0003781
SRCGROUP SLINE7	L0003782	L0003783	L0003784	L0003785	L0003786	L0003787
SRCGROUP SLINE7	L0003788	L0003789	L0003790	L0003791	L0003792	L0003793
SRCGROUP SLINE7	L0003794	L0003795	L0003796	L0003797	L0003798	L0003799
SRCGROUP SLINE7	L0003800	L0003801	L0003802	L0003803	L0003804	L0003805
SRCGROUP SLINE7	L0003806	L0003807	L0003808	L0003809	L0003810	L0003811
SRCGROUP SLINE7	L0003812	L0003813	L0003814	L0003815	L0003816	L0003817
SRCGROUP SLINE7	L0003818	L0003819	L0003820	L0003821	L0003822	L0003823
SRCGROUP SLINE7	L0003824	L0003825	L0003826	L0003827	L0003828	L0003829
SRCGROUP SLINE7	L0003830	L0003831	L0003832	L0003833	L0003834	L0003835
SRCGROUP SLINE7	L0003836	L0003837	L0003838	L0003839	L0003840	L0003841
SRCGROUP SLINE7	L0003842	L0003843	L0003844	L0003845	L0003846	L0003847
SRCGROUP SLINE7	L0003848	L0003849	L0003850	L0003851	L0003852	L0003853
SRCGROUP SLINE7	L0003854	L0003855	L0003856	L0003857	L0003858	L0003859
SRCGROUP SLINE7	L0003860	L0003861	L0003862	L0003863	L0003864	L0003865
SRCGROUP SLINE7	L0003866	L0003867	L0003868	L0003869	L0003870	L0003871
SRCGROUP SLINE7	L0003872	L0003873	L0003874	L0003875	L0003876	L0003877
SRCGROUP SLINE7	L0003878	L0003879	L0003880	L0003881	L0003882	L0003883
SRCGROUP SLINE7	L0003884	L0003885	L0003886	L0003887	L0003888	L0003889
SRCGROUP SLINE7	L0003890	L0003891	L0003892	L0003893	L0003894	L0003895
SRCGROUP SLINE7	L0003896	L0003897	L0003898	L0003899	L0003900	L0003901
SRCGROUP SLINE7	L0003902	L0003903	L0003904	L0003905	L0003906	L0003907
SRCGROUP SLINE7	L0003908	L0003909	L0003910	L0003911	L0003912	L0003913
SRCGROUP SLINE7	L0003914	L0003915	L0003916	L0003917	L0003918	L0003919
SRCGROUP SLINE7	L0003920	L0003921	L0003922	L0003923	L0003924	L0003925
SRCGROUP SLINE7	L0003926	L0003927	L0003928	L0003929	L0003930	L0003931
SRCGROUP SLINE7	L0003932	L0003933	L0003934	L0003935	L0003936	L0003937
SRCGROUP SLINE7	L0003938	L0003939	L0003940	L0003941	L0003942	L0003943
SRCGROUP SLINE7	L0003944	L0003945	L0003946	L0003947	L0003948	L0003949
SRCGROUP SLINE7	L0003950	L0003951	L0003952	L0003953	L0003954	L0003955
SRCGROUP SLINE7	L0003956	L0003957	L0003958	L0003959	L0003960	L0003961
SRCGROUP SLINE7	L0003962	L0003963	L0003964	L0003965	L0003966	L0003967
SRCGROUP SLINE7	L0003968	L0003969	L0003970	L0003971	L0003972	L0003973
SRCGROUP SLINE7	L0003974	L0003975	L0003976	L0003977	L0003978	L0003979
SRCGROUP SLINE7	L0003980	L0003981	L0003982	L0003983	L0003984	L0003985
SRCGROUP SLINE7	L0003986	L0003987	L0003988	L0003989	L0003990	L0003991
SRCGROUP SLINE7	L0003992	L0003993	L0003994	L0003995	L0003996	L0003997
SRCGROUP SLINE7	L0003998	L0003999	L0004000	L0004001	L0004002	L0004003
SRCGROUP SLINE7	L0004004	L0004005	L0004006	L0004007	L0004008	L0004009
SRCGROUP SLINE7	L0004010	L0004011	L0004012	L0004013	L0004014	L0004015
SRCGROUP SLINE7	L0004016	L0004017	L0004018	L0004019	L0004020	L0004021

SRCGROUP SLINE7 L0004022 L0004023 L0004024 L0004025 L0004026 L0004027  
SRCGROUP SLINE7 L0004028 L0004029 L0004030 L0004031 L0004032 L0004033  
SRCGROUP SLINE7 L0004034 L0004035 L0004036 L0004037 L0004038 L0004039  
SRCGROUP SLINE7 L0004040 L0004041 L0004042 L0004043 L0004044 L0004045  
SRCGROUP SLINE7 L0004046 L0004047 L0004048 L0004049 L0004050 L0004051  
SRCGROUP SLINE7 L0004052 L0004053 L0004054 L0004055 L0004056 L0004057  
SRCGROUP SLINE7 L0004058 L0004059 L0004060 L0004061 L0004062 L0004063  
SRCGROUP SLINE7 L0004064 L0004065 L0004066 L0004067 L0004068 L0004069  
SRCGROUP SLINE7 L0004070 L0004071 L0004072 L0004073 L0004074 L0004075  
SRCGROUP SLINE7 L0004076 L0004077 L0004078 L0004079 L0004080 L0004081  
SRCGROUP SLINE7 L0004082 L0004083 L0004084 L0004085 L0004086 L0004087  
SRCGROUP SLINE7 L0004088 L0004089 L0004090 L0004091 L0004092 L0004093  
SRCGROUP SLINE7 L0004094 L0004095 L0004096 L0004097 L0004098 L0004099  
SRCGROUP SLINE7 L0004100 L0004101 L0004102 L0004103 L0004104 L0004105  
SRCGROUP SLINE7 L0004106 L0004107 L0004108 L0004109 L0004110 L0004111  
SRCGROUP SLINE7 L0004112 L0004113 L0004114 L0004115 L0004116 L0004117  
SRCGROUP SLINE7 L0004118 L0004119 L0004120 L0004121 L0004122 L0004123  
SRCGROUP SLINE7 L0004124 L0004125 L0004126 L0004127 L0004128 L0004129  
SRCGROUP SLINE7 L0004130 L0004131 L0004132 L0004133 L0004134 L0004135  
SRCGROUP SLINE7 L0004136 L0004137 L0004138 L0004139 L0004140 L0004141  
SRCGROUP SLINE7 L0004142 L0004143 L0004144 L0004145 L0004146 L0004147  
SRCGROUP SLINE7 L0004148 L0004149 L0004150 L0004151 L0004152 L0004153  
SRCGROUP SLINE7 L0004154 L0004155 L0004156 L0004157 L0004158 L0004159  
SRCGROUP SLINE7 L0004160 L0004161 L0004162 L0004163 L0004164 L0004165  
SRCGROUP SLINE7 L0004166 L0004167 L0004168 L0004169 L0004170 L0004171  
SRCGROUP SLINE7 L0004172 L0004173 L0004174 L0004175 L0004176 L0004177  
SRCGROUP SLINE7 L0004178 L0004179 L0004180 L0004181 L0004182 L0004183  
SRCGROUP SLINE7 L0004184 L0004185 L0004186 L0004187 L0004188 L0004189  
SRCGROUP SLINE7 L0004190 L0004191 L0004192 L0004193 L0004194 L0004195  
SRCGROUP SLINE7 L0004196 L0004197 L0004198 L0004199 L0004200 L0004201  
SRCGROUP SLINE7 L0004202 L0004203 L0004204 L0004205 L0004206 L0004207  
SRCGROUP SLINE7 L0004208 L0004209 L0004210 L0004211 L0004212 L0004213  
SRCGROUP SLINE7 L0004214 L0004215 L0004216 L0004217 L0004218 L0004219  
SRCGROUP SLINE7 L0004220 L0004221 L0004222 L0004223 L0004224 L0004225  
SRCGROUP SLINE7 L0004226 L0004227 L0004228 L0004229 L0004230 L0004231  
SRCGROUP SLINE7 L0004232 L0004233 L0004234 L0004235 L0004236 L0004237  
SRCGROUP SLINE7 L0004238 L0004239 L0004240 L0004241 L0004242 L0004243  
SRCGROUP SLINE7 L0004244 L0004245 L0004246 L0004247 L0004248 L0004249  
SRCGROUP SLINE7 L0004250 L0004251 L0004252 L0004253 L0004254 L0004255  
SRCGROUP SLINE7 L0004256 L0004257 L0004258 L0004259 L0004260 L0004261  
SRCGROUP SLINE7 L0004262 L0004263 L0004264 L0004265 L0004266 L0004267  
SRCGROUP SLINE7 L0004268 L0004269 L0004270 L0004271 L0004272 L0004273  
SRCGROUP SLINE7 L0004274 L0004275 L0004276 L0004277 L0004278 L0004279  
SRCGROUP SLINE7 L0004280 L0004281 L0004282 L0004283 L0004284 L0004285  
SRCGROUP SLINE7 L0004286 L0004287 L0004288 L0004289 L0004290 L0004291  
SRCGROUP SLINE7 L0004292 L0004293 L0004294 L0004295 L0004296 L0004297  
SRCGROUP SLINE7 L0004298 L0004299 L0004300 L0004301 L0004302 L0004303  
SRCGROUP SLINE7 L0004304 L0004305 L0004306 L0004307 L0004308 L0004309  
SRCGROUP SLINE7 L0004310 L0004311 L0004312 L0004313 L0004314 L0004315  
SRCGROUP SLINE7 L0004316 L0004317 L0004318 L0004319 L0004320 L0004321  
SRCGROUP SLINE7 L0004322 L0004323 L0004324 L0004325 L0004326 L0004327  
SRCGROUP SLINE7 L0004328 L0004329 L0004330 L0004331 L0004332 L0004333  
SRCGROUP SLINE7 L0004334 L0004335 L0004336 L0004337 L0004338 L0004339  
SRCGROUP SLINE7 L0004340 L0004341 L0004342 L0004343 L0004344 L0004345  
SRCGROUP SLINE7 L0004346 L0004347 L0004348 L0004349 L0004350 L0004351

SRCGROUP SLINE7 L0004352 L0004353 L0004354 L0004355 L0004356 L0004357  
SRCGROUP SLINE7 L0004358 L0004359 L0004360 L0004361 L0004362 L0004363  
SRCGROUP SLINE7 L0004364 L0004365 L0004366 L0004367 L0004368 L0004369  
SRCGROUP SLINE7 L0004370 L0004371 L0004372 L0004373 L0004374 L0004375  
SRCGROUP SLINE7 L0004376 L0004377 L0004378 L0004379 L0004380 L0004381  
SRCGROUP SLINE7 L0004382 L0004383 L0004384 L0004385 L0004386 L0004387  
SRCGROUP SLINE7 L0004388 L0004389 L0004390 L0004391 L0004392 L0004393  
SRCGROUP SLINE7 L0004394 L0004395 L0004396 L0004397 L0004398 L0004399  
SRCGROUP SLINE7 L0004400 L0004401 L0004402 L0004403 L0004404 L0004405  
SRCGROUP SLINE7 L0004406 L0004407 L0004408 L0004409 L0004410 L0004411  
SRCGROUP SLINE7 L0004412 L0004413 L0004414 L0004415 L0004416 L0004417  
SRCGROUP SLINE7 L0004418 L0004419 L0004420 L0004421 L0004422 L0004423  
SRCGROUP SLINE7 L0004424 L0004425 L0004426 L0004427 L0004428 L0004429  
SRCGROUP SLINE7 L0004430  
SRCGROUP SLINE8 L0004431 L0004432 L0004433 L0004434 L0004435 L0004436  
SRCGROUP SLINE8 L0004437 L0004438 L0004439 L0004440 L0004441 L0004442  
SRCGROUP SLINE8 L0004443 L0004444 L0004445 L0004446 L0004447 L0004448  
SRCGROUP SLINE8 L0004449 L0004450 L0004451 L0004452 L0004453 L0004454  
SRCGROUP SLINE8 L0004455 L0004456 L0004457 L0004458 L0004459 L0004460  
SRCGROUP SLINE8 L0004461 L0004462 L0004463 L0004464 L0004465 L0004466  
SRCGROUP SLINE8 L0004467 L0004468 L0004469 L0004470 L0004471 L0004472  
SRCGROUP SLINE8 L0004473 L0004474 L0004475 L0004476 L0004477 L0004478  
SRCGROUP SLINE8 L0004479 L0004480 L0004481 L0004482 L0004483 L0004484  
SRCGROUP SLINE8 L0004485 L0004486 L0004487 L0004488 L0004489 L0004490  
SRCGROUP SLINE8 L0004491 L0004492 L0004493 L0004494 L0004495 L0004496  
SRCGROUP SLINE8 L0004497 L0004498 L0004499 L0004500 L0004501 L0004502  
SRCGROUP SLINE8 L0004503 L0004504 L0004505 L0004506 L0004507 L0004508  
SRCGROUP SLINE8 L0004509 L0004510 L0004511 L0004512 L0004513 L0004514  
SRCGROUP SLINE8 L0004515 L0004516 L0004517 L0004518 L0004519 L0004520  
SRCGROUP SLINE8 L0004521 L0004522 L0004523 L0004524 L0004525 L0004526  
SRCGROUP SLINE8 L0004527 L0004528 L0004529 L0004530 L0004531 L0004532  
SRCGROUP SLINE8 L0004533 L0004534 L0004535 L0004536 L0004537 L0004538  
SRCGROUP SLINE8 L0004539 L0004540 L0004541 L0004542 L0004543 L0004544  
SRCGROUP SLINE8 L0004545 L0004546 L0004547 L0004548 L0004549 L0004550  
SRCGROUP SLINE8 L0004551 L0004552 L0004553 L0004554 L0004555 L0004556  
SRCGROUP SLINE8 L0004557 L0004558 L0004559 L0004560 L0004561 L0004562  
SRCGROUP SLINE8 L0004563 L0004564 L0004565 L0004566 L0004567 L0004568  
SRCGROUP SLINE8 L0004569 L0004570 L0004571 L0004572 L0004573 L0004574  
SRCGROUP SLINE8 L0004575 L0004576 L0004577 L0004578 L0004579 L0004580  
SRCGROUP SLINE8 L0004581 L0004582 L0004583 L0004584 L0004585 L0004586  
SRCGROUP SLINE8 L0004587 L0004588 L0004589 L0004590 L0004591 L0004592  
SRCGROUP SLINE8 L0004593 L0004594 L0004595 L0004596 L0004597 L0004598  
SRCGROUP SLINE8 L0004599 L0004600 L0004601 L0004602 L0004603 L0004604  
SRCGROUP SLINE8 L0004605 L0004606 L0004607 L0004608 L0004609 L0004610  
SRCGROUP SLINE8 L0004611 L0004612 L0004613 L0004614 L0004615 L0004616  
SRCGROUP SLINE8 L0004617 L0004618 L0004619 L0004620 L0004621 L0004622  
SRCGROUP SLINE8 L0004623 L0004624 L0004625 L0004626 L0004627 L0004628  
SRCGROUP SLINE8 L0004629 L0004630 L0004631 L0004632 L0004633 L0004634  
SRCGROUP SLINE8 L0004635 L0004636 L0004637 L0004638 L0004639 L0004640  
SRCGROUP SLINE8 L0004641 L0004642 L0004643 L0004644 L0004645 L0004646  
SRCGROUP SLINE8 L0004647 L0004648 L0004649 L0004650 L0004651 L0004652  
SRCGROUP SLINE8 L0004653 L0004654 L0004655 L0004656 L0004657 L0004658  
SRCGROUP SLINE8 L0004659 L0004660 L0004661 L0004662 L0004663 L0004664  
SRCGROUP SLINE8 L0004665 L0004666 L0004667 L0004668 L0004669 L0004670  
SRCGROUP SLINE8 L0004671 L0004672 L0004673 L0004674 L0004675 L0004676

SRCGROUP SLINE8 L0004677 L0004678 L0004679 L0004680 L0004681 L0004682  
SRCGROUP SLINE8 L0004683 L0004684 L0004685 L0004686 L0004687 L0004688  
SRCGROUP SLINE8 L0004689 L0004690 L0004691 L0004692 L0004693 L0004694  
SRCGROUP SLINE8 L0004695 L0004696 L0004697 L0004698 L0004699 L0004700  
SRCGROUP SLINE8 L0004701 L0004702 L0004703 L0004704 L0004705 L0004706  
SRCGROUP SLINE8 L0004707 L0004708 L0004709 L0004710 L0004711 L0004712  
SRCGROUP SLINE8 L0004713 L0004714  
SRCGROUP SLINE9 L0005283 L0005284 L0005285 L0005286 L0005287 L0005288  
SRCGROUP SLINE9 L0005289 L0005290 L0005291 L0005292 L0005293 L0005294  
SRCGROUP SLINE9 L0005295 L0005296 L0005297 L0005298 L0005299 L0005300  
SRCGROUP SLINE9 L0005301 L0005302 L0005303 L0005304 L0005305 L0005306  
SRCGROUP SLINE9 L0005307 L0005308 L0005309 L0005310 L0005311 L0005312  
SRCGROUP SLINE9 L0005313 L0005314 L0005315 L0005316 L0005317 L0005318  
SRCGROUP SLINE9 L0005319 L0005320 L0005321 L0005322 L0005323 L0005324  
SRCGROUP SLINE9 L0005325 L0005326 L0005327 L0005328 L0005329 L0005330  
SRCGROUP SLINE9 L0005331 L0005332 L0005333 L0005334 L0005335 L0005336  
SRCGROUP SLINE9 L0005337 L0005338 L0005339 L0005340 L0005341 L0005342  
SRCGROUP SLINE9 L0005343 L0005344 L0005345 L0005346 L0005347 L0005348  
SRCGROUP SLINE9 L0005349 L0005350 L0005351 L0005352 L0005353 L0005354  
SRCGROUP SLINE9 L0005355 L0005356 L0005357 L0005358 L0005359 L0005360  
SRCGROUP SLINE9 L0005361 L0005362 L0005363 L0005364 L0005365 L0005366  
SRCGROUP SLINE9 L0005367 L0005368 L0005369 L0005370 L0005371 L0005372  
SRCGROUP SLINE9 L0005373 L0005374 L0005375 L0005376 L0005377 L0005378  
SRCGROUP SLINE9 L0005379 L0005380 L0005381 L0005382 L0005383 L0005384  
SRCGROUP SLINE9 L0005385 L0005386 L0005387 L0005388 L0005389 L0005390  
SRCGROUP SLINE9 L0005391 L0005392 L0005393 L0005394 L0005395 L0005396  
SRCGROUP SLINE9 L0005397 L0005398 L0005399 L0005400 L0005401 L0005402  
SRCGROUP SLINE9 L0005403 L0005404 L0005405 L0005406 L0005407 L0005408  
SRCGROUP SLINE9 L0005409 L0005410 L0005411 L0005412 L0005413 L0005414  
SRCGROUP SLINE9 L0005415 L0005416 L0005417 L0005418 L0005419 L0005420  
SRCGROUP SLINE9 L0005421 L0005422 L0005423 L0005424 L0005425 L0005426  
SRCGROUP SLINE9 L0005427 L0005428 L0005429 L0005430 L0005431 L0005432  
SRCGROUP SLINE9 L0005433 L0005434 L0005435 L0005436 L0005437 L0005438  
SRCGROUP SLINE9 L0005439 L0005440 L0005441 L0005442 L0005443 L0005444  
SRCGROUP SLINE9 L0005445 L0005446 L0005447 L0005448 L0005449 L0005450  
SRCGROUP SLINE9 L0005451 L0005452 L0005453 L0005454 L0005455 L0005456  
SRCGROUP SLINE9 L0005457 L0005458 L0005459 L0005460 L0005461 L0005462  
SRCGROUP SLINE9 L0005463 L0005464 L0005465 L0005466 L0005467 L0005468  
SRCGROUP SLINE9 L0005469 L0005470 L0005471 L0005472 L0005473 L0005474  
SRCGROUP SLINE9 L0005475 L0005476 L0005477 L0005478 L0005479 L0005480  
SRCGROUP SLINE9 L0005481 L0005482 L0005483 L0005484 L0005485 L0005486  
SRCGROUP SLINE9 L0005487 L0005488 L0005489 L0005490 L0005491 L0005492  
SRCGROUP SLINE9 L0005493 L0005494 L0005495 L0005496 L0005497 L0005498  
SRCGROUP SLINE9 L0005499 L0005500 L0005501 L0005502 L0005503 L0005504  
SRCGROUP SLINE9 L0005505 L0005506 L0005507 L0005508 L0005509 L0005510  
SRCGROUP SLINE9 L0005511 L0005512 L0005513 L0005514 L0005515 L0005516  
SRCGROUP SLINE9 L0005517 L0005518 L0005519 L0005520 L0005521 L0005522  
SRCGROUP SLINE9 L0005523 L0005524 L0005525 L0005526 L0005527 L0005528  
SRCGROUP SLINE9 L0005529 L0005530 L0005531 L0005532 L0005533 L0005534  
SRCGROUP SLINE9 L0005535 L0005536 L0005537 L0005538 L0005539 L0005540  
SRCGROUP SLINE9 L0005541 L0005542 L0005543 L0005544 L0005545 L0005546  
SRCGROUP SLINE9 L0005547 L0005548 L0005549 L0005550 L0005551 L0005552  
SRCGROUP SLINE9 L0005553 L0005554 L0005555 L0005556 L0005557 L0005558  
SRCGROUP SLINE9 L0005559 L0005560 L0005561 L0005562 L0005563 L0005564  
SRCGROUP SLINE9 L0005565 L0005566

SRCGROUP STCK1 STCK1  
SRCGROUP STCK10 STCK10  
SRCGROUP STCK11 STCK11  
SRCGROUP STCK12 STCK12  
SRCGROUP STCK13 STCK13  
SRCGROUP STCK14 STCK14  
SRCGROUP STCK2 STCK2  
SRCGROUP STCK3 STCK3  
SRCGROUP STCK4 STCK4  
SRCGROUP STCK5 STCK5  
SRCGROUP STCK6 STCK6  
SRCGROUP STCK7 STCK7  
SRCGROUP STCK8 STCK8  
SRCGROUP STCK9 STCK9

SO FINISHED

\*\*  
\*\*\*\*\*  
\*\* AERMOD Receptor Pathway  
\*\*\*\*\*  
\*\*  
\*\*

RE STARTING

\*\* DESCRREC "" ""

DISCCART	649676.34	4188314.55
DISCCART	649629.66	4188294.84
DISCCART	649810.15	4188312.48
DISCCART	649364.10	4188360.20
DISCCART	649327.80	4188355.01
DISCCART	649380.70	4188758.52
DISCCART	650495.81	4188841.51
DISCCART	650597.47	4188832.17
DISCCART	650536.27	4188878.85
DISCCART	650577.76	4188877.81
DISCCART	650602.66	4188860.18
DISCCART	650610.95	4188880.93
DISCCART	650638.10	4188858.53
DISCCART	650664.10	4188331.03
DISCCART	650668.72	4188350.83
DISCCART	650677.96	4188379.86
DISCCART	650699.74	4188414.84
DISCCART	650758.47	4188658.36
DISCCART	650765.73	4188678.82
DISCCART	650773.65	4188706.54
DISCCART	650778.27	4188726.34
DISCCART	650805.33	4188805.53
DISCCART	650806.65	4188824.01
DISCCART	650811.27	4188843.81
DISCCART	650814.57	4188862.29
DISCCART	650846.24	4188924.98
DISCCART	650850.86	4188951.38
DISCCART	650854.82	4188976.46
DISCCART	650698.00	4188307.32
DISCCART	650692.60	4188291.80
DISCCART	650724.82	4189245.80
DISCCART	650726.07	4189273.37



DISCCART	650856.27	4189006.30
DISCCART	650857.23	4189022.60
DISCCART	650859.15	4189041.29
DISCCART	650859.15	4189058.54
DISCCART	650860.58	4189076.28
DISCCART	650861.54	4189094.49
DISCCART	650857.71	4189113.19
DISCCART	650847.16	4189118.94
DISCCART	650848.12	4189134.76
DISCCART	650850.04	4189155.37
DISCCART	650851.48	4189171.66
DISCCART	650853.87	4189184.12
DISCCART	650856.75	4189199.46
DISCCART	650857.71	4189213.36
DISCCART	650860.58	4189226.30
DISCCART	650862.50	4189242.60
DISCCART	650865.38	4189258.42
DISCCART	650867.77	4189275.19
DISCCART	650868.73	4189291.49
DISCCART	650872.09	4189309.23
DISCCART	650874.00	4189325.04
DISCCART	650875.92	4189340.38
DISCCART	650878.80	4189355.24
DISCCART	650881.19	4189373.45
DISCCART	650884.55	4189390.71
DISCCART	650888.86	4189407.01
DISCCART	650889.82	4189427.14
DISCCART	650891.74	4189443.43
DISCCART	650895.09	4189461.17
DISCCART	650898.45	4189475.55
DISCCART	650898.45	4189489.93
DISCCART	650902.28	4189504.31
DISCCART	650709.41	4188344.56
DISCCART	650722.45	4188284.03
DISCCART	650745.73	4188280.30
DISCCART	650735.49	4188223.50
DISCCART	650721.52	4188167.62

\*\* DESCRREC "UCART1" "Receptors generated from Uniform Cartesian Grid"

DISCCART	650525.76	4188133.34
DISCCART	651125.76	4188133.34
DISCCART	649125.76	4188183.34
DISCCART	649225.76	4188183.34
DISCCART	649325.76	4188183.34
DISCCART	649425.76	4188183.34
DISCCART	649525.76	4188183.34
DISCCART	649625.76	4188183.34
DISCCART	649725.76	4188183.34
DISCCART	649825.76	4188183.34
DISCCART	649925.76	4188183.34
DISCCART	650025.76	4188183.34
DISCCART	650125.76	4188183.34
DISCCART	650225.76	4188183.34
DISCCART	650325.76	4188183.34
DISCCART	650425.76	4188183.34
DISCCART	650525.76	4188183.34

DISCCART	650625.76	4188183.34
DISCCART	650725.76	4188183.34
DISCCART	650825.76	4188183.34
DISCCART	651125.76	4188183.34
DISCCART	649125.76	4188233.34
DISCCART	649225.76	4188233.34
DISCCART	649325.76	4188233.34
DISCCART	649425.76	4188233.34
DISCCART	649525.76	4188233.34
DISCCART	649625.76	4188233.34
DISCCART	649725.76	4188233.34
DISCCART	649825.76	4188233.34
DISCCART	649925.76	4188233.34
DISCCART	650025.76	4188233.34
DISCCART	650125.76	4188233.34
DISCCART	650225.76	4188233.34
DISCCART	650325.76	4188233.34
DISCCART	650425.76	4188233.34
DISCCART	650525.76	4188233.34
DISCCART	650625.76	4188233.34
DISCCART	650725.76	4188233.34
DISCCART	650825.76	4188233.34
DISCCART	651125.76	4188233.34
DISCCART	649125.76	4188283.34
DISCCART	649225.76	4188283.34
DISCCART	649325.76	4188283.34
DISCCART	649425.76	4188283.34
DISCCART	649525.76	4188283.34
DISCCART	649625.76	4188283.34
DISCCART	649725.76	4188283.34
DISCCART	649825.76	4188283.34
DISCCART	649925.76	4188283.34
DISCCART	650025.76	4188283.34
DISCCART	650125.76	4188283.34
DISCCART	650225.76	4188283.34
DISCCART	650325.76	4188283.34
DISCCART	650425.76	4188283.34
DISCCART	650525.76	4188283.34
DISCCART	650625.76	4188283.34
DISCCART	650725.76	4188283.34
DISCCART	650825.76	4188283.34
DISCCART	651125.76	4188283.34
DISCCART	649125.76	4188333.34
DISCCART	649225.76	4188333.34
DISCCART	649325.76	4188333.34
DISCCART	649425.76	4188333.34
DISCCART	649525.76	4188333.34
DISCCART	649625.76	4188333.34
DISCCART	649725.76	4188333.34
DISCCART	649825.76	4188333.34
DISCCART	649925.76	4188333.34
DISCCART	650025.76	4188333.34
DISCCART	650125.76	4188333.34
DISCCART	650225.76	4188333.34
DISCCART	650325.76	4188333.34

DISCCART	650425.76	4188333.34
DISCCART	650525.76	4188333.34
DISCCART	650625.76	4188333.34
DISCCART	650725.76	4188333.34
DISCCART	650825.76	4188333.34
DISCCART	651125.76	4188333.34
DISCCART	649125.76	4188383.34
DISCCART	649225.76	4188383.34
DISCCART	649325.76	4188383.34
DISCCART	649425.76	4188383.34
DISCCART	649525.76	4188383.34
DISCCART	649625.76	4188383.34
DISCCART	649725.76	4188383.34
DISCCART	649825.76	4188383.34
DISCCART	649925.76	4188383.34
DISCCART	650025.76	4188383.34
DISCCART	650125.76	4188383.34
DISCCART	650225.76	4188383.34
DISCCART	650325.76	4188383.34
DISCCART	650425.76	4188383.34
DISCCART	650525.76	4188383.34
DISCCART	650625.76	4188383.34
DISCCART	650725.76	4188383.34
DISCCART	650825.76	4188383.34
DISCCART	651125.76	4188383.34
DISCCART	649125.76	4188433.34
DISCCART	649225.76	4188433.34
DISCCART	649325.76	4188433.34
DISCCART	649425.76	4188433.34
DISCCART	649525.76	4188433.34
DISCCART	649625.76	4188433.34
DISCCART	649725.76	4188433.34
DISCCART	649825.76	4188433.34
DISCCART	649925.76	4188433.34
DISCCART	650025.76	4188433.34
DISCCART	650125.76	4188433.34
DISCCART	650225.76	4188433.34
DISCCART	650325.76	4188433.34
DISCCART	650425.76	4188433.34
DISCCART	650525.76	4188433.34
DISCCART	650625.76	4188433.34
DISCCART	650725.76	4188433.34
DISCCART	650825.76	4188433.34
DISCCART	651125.76	4188433.34
DISCCART	649125.76	4188483.34
DISCCART	649225.76	4188483.34
DISCCART	649325.76	4188483.34
DISCCART	649425.76	4188483.34
DISCCART	649525.76	4188483.34
DISCCART	649625.76	4188483.34
DISCCART	649725.76	4188483.34
DISCCART	650425.76	4188483.34
DISCCART	650525.76	4188483.34
DISCCART	650625.76	4188483.34
DISCCART	650725.76	4188483.34

DISCCART	650825.76	4188483.34
DISCCART	651125.76	4188483.34
DISCCART	649125.76	4188533.34
DISCCART	649225.76	4188533.34
DISCCART	649325.76	4188533.34
DISCCART	649425.76	4188533.34
DISCCART	649525.76	4188533.34
DISCCART	649625.76	4188533.34
DISCCART	649725.76	4188533.34
DISCCART	650425.76	4188533.34
DISCCART	650525.76	4188533.34
DISCCART	650625.76	4188533.34
DISCCART	650725.76	4188533.34
DISCCART	650825.76	4188533.34
DISCCART	651125.76	4188533.34
DISCCART	649125.76	4188583.34
DISCCART	649225.76	4188583.34
DISCCART	649325.76	4188583.34
DISCCART	649425.76	4188583.34
DISCCART	649525.76	4188583.34
DISCCART	649625.76	4188583.34
DISCCART	649725.76	4188583.34
DISCCART	650425.76	4188583.34
DISCCART	650525.76	4188583.34
DISCCART	650625.76	4188583.34
DISCCART	650725.76	4188583.34
DISCCART	650825.76	4188583.34
DISCCART	651125.76	4188583.34
DISCCART	649125.76	4188633.34
DISCCART	649225.76	4188633.34
DISCCART	649325.76	4188633.34
DISCCART	649425.76	4188633.34
DISCCART	649525.76	4188633.34
DISCCART	649625.76	4188633.34
DISCCART	649725.76	4188633.34
DISCCART	649825.76	4188633.34
DISCCART	649925.76	4188633.34
DISCCART	650025.76	4188633.34
DISCCART	650125.76	4188633.34
DISCCART	650225.76	4188633.34
DISCCART	650325.76	4188633.34
DISCCART	650425.76	4188633.34
DISCCART	650525.76	4188633.34
DISCCART	650625.76	4188633.34
DISCCART	650725.76	4188633.34
DISCCART	650825.76	4188633.34
DISCCART	651125.76	4188633.34
DISCCART	649125.76	4188683.34
DISCCART	649225.76	4188683.34
DISCCART	649325.76	4188683.34
DISCCART	649425.76	4188683.34
DISCCART	649525.76	4188683.34
DISCCART	649625.76	4188683.34
DISCCART	649725.76	4188683.34
DISCCART	649825.76	4188683.34

DISCCART	649925.76	4188683.34
DISCCART	650025.76	4188683.34
DISCCART	650125.76	4188683.34
DISCCART	650225.76	4188683.34
DISCCART	650325.76	4188683.34
DISCCART	650425.76	4188683.34
DISCCART	650525.76	4188683.34
DISCCART	650625.76	4188683.34
DISCCART	650725.76	4188683.34
DISCCART	650825.76	4188683.34
DISCCART	651125.76	4188683.34
DISCCART	649125.76	4188733.34
DISCCART	649225.76	4188733.34
DISCCART	649325.76	4188733.34
DISCCART	649425.76	4188733.34
DISCCART	649525.76	4188733.34
DISCCART	649625.76	4188733.34
DISCCART	649725.76	4188733.34
DISCCART	649825.76	4188733.34
DISCCART	649925.76	4188733.34
DISCCART	650025.76	4188733.34
DISCCART	650125.76	4188733.34
DISCCART	650225.76	4188733.34
DISCCART	650325.76	4188733.34
DISCCART	650425.76	4188733.34
DISCCART	650525.76	4188733.34
DISCCART	650625.76	4188733.34
DISCCART	650725.76	4188733.34
DISCCART	650825.76	4188733.34
DISCCART	651125.76	4188733.34
DISCCART	649125.76	4188783.34
DISCCART	649225.76	4188783.34
DISCCART	649325.76	4188783.34
DISCCART	649425.76	4188783.34
DISCCART	649525.76	4188783.34
DISCCART	649625.76	4188783.34
DISCCART	649725.76	4188783.34
DISCCART	649825.76	4188783.34
DISCCART	649925.76	4188783.34
DISCCART	650025.76	4188783.34
DISCCART	650125.76	4188783.34
DISCCART	650225.76	4188783.34
DISCCART	650325.76	4188783.34
DISCCART	650425.76	4188783.34
DISCCART	650525.76	4188783.34
DISCCART	650625.76	4188783.34
DISCCART	650725.76	4188783.34
DISCCART	650825.76	4188783.34
DISCCART	651125.76	4188783.34
DISCCART	649125.76	4188833.34
DISCCART	649225.76	4188833.34
DISCCART	649325.76	4188833.34
DISCCART	649425.76	4188833.34
DISCCART	649525.76	4188833.34
DISCCART	649625.76	4188833.34

DISCCART	649725.76	4188833.34
DISCCART	649825.76	4188833.34
DISCCART	649925.76	4188833.34
DISCCART	650025.76	4188833.34
DISCCART	650125.76	4188833.34
DISCCART	650225.76	4188833.34
DISCCART	650325.76	4188833.34
DISCCART	650425.76	4188833.34
DISCCART	650525.76	4188833.34
DISCCART	650625.76	4188833.34
DISCCART	650725.76	4188833.34
DISCCART	650825.76	4188833.34
DISCCART	651125.76	4188833.34
DISCCART	649125.76	4188883.34
DISCCART	649225.76	4188883.34
DISCCART	649325.76	4188883.34
DISCCART	649425.76	4188883.34
DISCCART	649525.76	4188883.34
DISCCART	649625.76	4188883.34
DISCCART	649725.76	4188883.34
DISCCART	649825.76	4188883.34
DISCCART	649925.76	4188883.34
DISCCART	650025.76	4188883.34
DISCCART	650125.76	4188883.34
DISCCART	650225.76	4188883.34
DISCCART	650325.76	4188883.34
DISCCART	650425.76	4188883.34
DISCCART	650525.76	4188883.34
DISCCART	650625.76	4188883.34
DISCCART	650725.76	4188883.34
DISCCART	650825.76	4188883.34
DISCCART	651125.76	4188883.34
DISCCART	650125.76	4188933.34
DISCCART	650225.76	4188933.34
DISCCART	650325.76	4188933.34
DISCCART	650425.76	4188933.34
DISCCART	650525.76	4188933.34
DISCCART	650625.76	4188933.34
DISCCART	650725.76	4188933.34
DISCCART	650825.76	4188933.34
DISCCART	651125.76	4188933.34
DISCCART	650425.76	4188983.34
DISCCART	650525.76	4188983.34
DISCCART	650625.76	4188983.34
DISCCART	650725.76	4188983.34
DISCCART	650825.76	4188983.34
DISCCART	651125.76	4188983.34
DISCCART	650525.76	4189033.34
DISCCART	650625.76	4189033.34
DISCCART	650725.76	4189033.34
DISCCART	650825.76	4189033.34
DISCCART	651125.76	4189033.34
DISCCART	650525.76	4189083.34
DISCCART	650625.76	4189083.34
DISCCART	650725.76	4189083.34

DISCCART 650825.76 4189083.34  
DISCCART 651125.76 4189083.34  
DISCCART 650525.76 4189133.34  
DISCCART 650625.76 4189133.34  
DISCCART 650725.76 4189133.34  
DISCCART 650825.76 4189133.34  
DISCCART 651125.76 4189133.34

\*\* DESCRREC "" ""

DISCCART 650781.98 4189510.65  
DISCCART 650760.33 4189397.50

RE FINISHED

\*\*  
\*\*\*\*\*

\*\* AERMOD Meteorology Pathway

\*\*\*\*\*

\*\*

\*\*

ME STARTING

SURFFILE AERMET\Stockton\_2013-2017.SFC  
PROFFILE AERMET\Stockton\_2013-2017.PFL  
SURFDATA 23237 2013 Stockton\_International\_Airport  
UAIRDATA 23230 2013 OAKLAND/WSO\_AP  
PROFBASE 10.06 METERS

ME FINISHED

\*\*  
\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST  
RECTABLE 1 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 SLINE7 1ST "Ashley Warehouse.AD\01H1G001.PLT" 31  
PLOTFILE 1 SLINE8 1ST "Ashley Warehouse.AD\01H1G002.PLT" 32  
PLOTFILE 1 SLINE9 1ST "Ashley Warehouse.AD\01H1G003.PLT" 33  
PLOTFILE 1 STCK1 1ST "Ashley Warehouse.AD\01H1G004.PLT" 34  
PLOTFILE 1 STCK10 1ST "Ashley Warehouse.AD\01H1G005.PLT" 35  
PLOTFILE 1 STCK11 1ST "Ashley Warehouse.AD\01H1G006.PLT" 36  
PLOTFILE 1 STCK12 1ST "Ashley Warehouse.AD\01H1G007.PLT" 37  
PLOTFILE 1 STCK13 1ST "Ashley Warehouse.AD\01H1G008.PLT" 38  
PLOTFILE 1 STCK14 1ST "Ashley Warehouse.AD\01H1G009.PLT" 39  
PLOTFILE 1 STCK2 1ST "Ashley Warehouse.AD\01H1G010.PLT" 40  
PLOTFILE 1 STCK3 1ST "Ashley Warehouse.AD\01H1G011.PLT" 41  
PLOTFILE 1 STCK4 1ST "Ashley Warehouse.AD\01H1G012.PLT" 42  
PLOTFILE 1 STCK5 1ST "Ashley Warehouse.AD\01H1G013.PLT" 43  
PLOTFILE 1 STCK6 1ST "Ashley Warehouse.AD\01H1G014.PLT" 44  
PLOTFILE 1 STCK7 1ST "Ashley Warehouse.AD\01H1G015.PLT" 45  
PLOTFILE 1 STCK8 1ST "Ashley Warehouse.AD\01H1G016.PLT" 46  
PLOTFILE 1 STCK9 1ST "Ashley Warehouse.AD\01H1G017.PLT" 47  
PLOTFILE PERIOD SLINE7 "Ashley Warehouse.AD\PE00G001.PLT" 48  
PLOTFILE PERIOD SLINE8 "Ashley Warehouse.AD\PE00G002.PLT" 49  
PLOTFILE PERIOD SLINE9 "Ashley Warehouse.AD\PE00G003.PLT" 50  
PLOTFILE PERIOD STCK1 "Ashley Warehouse.AD\PE00G004.PLT" 51

PLOTFILE PERIOD STCK10 "Ashley Warehouse.AD\PE00G005.PLT" 52  
PLOTFILE PERIOD STCK11 "Ashley Warehouse.AD\PE00G006.PLT" 53  
PLOTFILE PERIOD STCK12 "Ashley Warehouse.AD\PE00G007.PLT" 54  
PLOTFILE PERIOD STCK13 "Ashley Warehouse.AD\PE00G008.PLT" 55  
PLOTFILE PERIOD STCK14 "Ashley Warehouse.AD\PE00G009.PLT" 56  
PLOTFILE PERIOD STCK2 "Ashley Warehouse.AD\PE00G010.PLT" 57  
PLOTFILE PERIOD STCK3 "Ashley Warehouse.AD\PE00G011.PLT" 58  
PLOTFILE PERIOD STCK4 "Ashley Warehouse.AD\PE00G012.PLT" 59  
PLOTFILE PERIOD STCK5 "Ashley Warehouse.AD\PE00G013.PLT" 60  
PLOTFILE PERIOD STCK6 "Ashley Warehouse.AD\PE00G014.PLT" 61  
PLOTFILE PERIOD STCK7 "Ashley Warehouse.AD\PE00G015.PLT" 62  
PLOTFILE PERIOD STCK8 "Ashley Warehouse.AD\PE00G016.PLT" 63  
PLOTFILE PERIOD STCK9 "Ashley Warehouse.AD\PE00G017.PLT" 64  
SUMMFILE "Ashley Warehouse.sum"  
OU FINISHED

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
A Total of 16 Warning Message(s)  
A Total of 0 Informational Message(s)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

SO W320	1402	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1403	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1404	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1405	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1406	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1407	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1408	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1409	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1410	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1411	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1412	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1413	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1414	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1415	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
ME W186	3322	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	3322	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	

\*\*\*\*\*

\*\*\* SETUP Finishes Successfully \*\*\*

\*\*\*\*\*

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05



\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

-----

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.

\*\*NO PARTICLE DEPOSITION Data Provided.

\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses RURAL Dispersion Only.

\*\*Model Allows User-Specified Options:

1. Stack-tip Downwash.
2. Model Assumes Receptors on FLAT Terrain.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

\*\*Other Options Specified:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET

CCVR\_Sub - Meteorological data includes CCVR substitutions

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Assumes No FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: OTHER

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR  
and Calculates PERIOD Averages

\*\*This Run Includes: 1291 Source(s); 17 Source Group(s); and 370 Receptor(s)

with: 14 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 1277 VOLUME source(s)  
and: 0 AREA type source(s)  
and: 0 LINE source(s)  
and: 0 RLINE/RLINEXT source(s)  
and: 0 OPENPIT source(s)  
and: 0 BUOYANT LINE source(s) with 0 line(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 18081

\*\*Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 10.06 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 4.4 MB of RAM.

\*\*Input Runstream File: aermod.inp  
\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: Ashley Warehouse.err

\*\*File for Summary of Results: Ashley Warehouse.sum

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*

\*\*\* 15:03:05

PAGE 2

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* POINT SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	
CAP/	EMIS RATE								
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS
SOURCE HOR	SCALAR								
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)	

VARY BY

STCK1	0	0.10000E+01	649872.8	4188437.2	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK2	0	0.10000E+01	649963.4	4188439.5	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK3	0	0.10000E+01	650052.1	4188438.3	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK4	0	0.10000E+01	650137.2	4188441.3	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK5	0	0.10000E+01	650227.8	4188441.3	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK6	0	0.10000E+01	650311.7	4188442.5	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK7	0	0.10000E+01	650385.4	4188444.4	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK8	0	0.10000E+01	649861.9	4188629.1	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK9	0	0.10000E+01	649952.5	4188629.1	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK10	0	0.10000E+01	650037.0	4188632.1	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK11	0	0.10000E+01	650125.8	4188633.3	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK12	0	0.10000E+01	650218.7	4188632.1	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK13	0	0.10000E+01	650305.1	4188634.5	10.1	3.66	366.00	57.10	0.10	NO	NO	NO
STCK14	0	0.10000E+01	650387.2	4188633.9	10.1	3.66	366.00	57.10	0.10	NO	NO	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*

\*\*\* 15:03:05

PAGE 3

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER CATS.	EMISSION RATE (GRAMS/SEC) (METERS)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	SY (METERS)	SZ (METERS)	URBAN SOURCE SCALAR VARY BY
-----------	--------------	------------------------------------	-----------------	--------------------	----------------------	-----------------------	-------------	-------------	-----------------------------

L0003722	0	0.14104E-02	650439.8	4188369.3	10.1	1.83	1.70	1.70	NO
L0003723	0	0.14104E-02	650439.7	4188372.9	10.1	1.83	1.70	1.70	NO
L0003724	0	0.14104E-02	650439.6	4188376.6	10.1	1.83	1.70	1.70	NO
L0003725	0	0.14104E-02	650439.6	4188380.3	10.1	1.83	1.70	1.70	NO
L0003726	0	0.14104E-02	650439.5	4188383.9	10.1	1.83	1.70	1.70	NO
L0003727	0	0.14104E-02	650439.4	4188387.6	10.1	1.83	1.70	1.70	NO
L0003728	0	0.14104E-02	650439.4	4188391.2	10.1	1.83	1.70	1.70	NO
L0003729	0	0.14104E-02	650439.3	4188394.9	10.1	1.83	1.70	1.70	NO
L0003730	0	0.14104E-02	650439.2	4188398.5	10.1	1.83	1.70	1.70	NO
L0003731	0	0.14104E-02	650439.2	4188402.2	10.1	1.83	1.70	1.70	NO
L0003732	0	0.14104E-02	650439.1	4188405.9	10.1	1.83	1.70	1.70	NO
L0003733	0	0.14104E-02	650439.0	4188409.5	10.1	1.83	1.70	1.70	NO
L0003734	0	0.14104E-02	650439.0	4188413.2	10.1	1.83	1.70	1.70	NO
L0003735	0	0.14104E-02	650438.9	4188416.8	10.1	1.83	1.70	1.70	NO
L0003736	0	0.14104E-02	650438.9	4188420.5	10.1	1.83	1.70	1.70	NO
L0003737	0	0.14104E-02	650438.8	4188424.1	10.1	1.83	1.70	1.70	NO
L0003738	0	0.14104E-02	650441.0	4188425.5	10.1	1.83	1.70	1.70	NO
L0003739	0	0.14104E-02	650444.7	4188425.5	10.1	1.83	1.70	1.70	NO
L0003740	0	0.14104E-02	650448.3	4188425.5	10.1	1.83	1.70	1.70	NO
L0003741	0	0.14104E-02	650452.0	4188425.5	10.1	1.83	1.70	1.70	NO
L0003742	0	0.14104E-02	650455.6	4188425.5	10.1	1.83	1.70	1.70	NO
L0003743	0	0.14104E-02	650459.3	4188425.5	10.1	1.83	1.70	1.70	NO
L0003744	0	0.14104E-02	650463.0	4188425.5	10.1	1.83	1.70	1.70	NO
L0003745	0	0.14104E-02	650466.6	4188425.5	10.1	1.83	1.70	1.70	NO
L0003746	0	0.14104E-02	650470.3	4188425.5	10.1	1.83	1.70	1.70	NO
L0003747	0	0.14104E-02	650473.9	4188425.5	10.1	1.83	1.70	1.70	NO
L0003748	0	0.14104E-02	650477.6	4188425.5	10.1	1.83	1.70	1.70	NO
L0003749	0	0.14104E-02	650481.2	4188425.5	10.1	1.83	1.70	1.70	NO
L0003750	0	0.14104E-02	650481.2	4188429.2	10.1	1.83	1.70	1.70	NO
L0003751	0	0.14104E-02	650481.0	4188432.8	10.1	1.83	1.70	1.70	NO
L0003752	0	0.14104E-02	650480.9	4188436.5	10.1	1.83	1.70	1.70	NO
L0003753	0	0.14104E-02	650480.7	4188440.1	10.1	1.83	1.70	1.70	NO
L0003754	0	0.14104E-02	650480.6	4188443.8	10.1	1.83	1.70	1.70	NO
L0003755	0	0.14104E-02	650480.5	4188447.4	10.1	1.83	1.70	1.70	NO
L0003756	0	0.14104E-02	650480.3	4188451.1	10.1	1.83	1.70	1.70	NO
L0003757	0	0.14104E-02	650480.2	4188454.7	10.1	1.83	1.70	1.70	NO
L0003758	0	0.14104E-02	650480.0	4188458.4	10.1	1.83	1.70	1.70	NO
L0003759	0	0.14104E-02	650479.9	4188462.1	10.1	1.83	1.70	1.70	NO
L0003760	0	0.14104E-02	650479.8	4188465.7	10.1	1.83	1.70	1.70	NO
L0003761	0	0.14104E-02	650479.6	4188469.4	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 4

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC) (METERS)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	SY (METERS)	SZ (METERS)	URBAN SOURCE (METERS)	EMISSION SCALAR VARY BY
-----------	--------------------	------------------------------------	-----------------	--------------------	----------------------	-----------------------	-------------	-------------	-----------------------	-------------------------

```

L0003762  0 0.14104E-02 650479.5 4188473.0 10.1 1.83 1.70 1.70 NO
L0003763  0 0.14104E-02 650479.3 4188476.7 10.1 1.83 1.70 1.70 NO
L0003764  0 0.14104E-02 650479.2 4188480.3 10.1 1.83 1.70 1.70 NO
L0003765  0 0.14104E-02 650479.1 4188484.0 10.1 1.83 1.70 1.70 NO
L0003766  0 0.14104E-02 650478.9 4188487.6 10.1 1.83 1.70 1.70 NO
L0003767  0 0.14104E-02 650478.8 4188491.3 10.1 1.83 1.70 1.70 NO
L0003768  0 0.14104E-02 650478.6 4188494.9 10.1 1.83 1.70 1.70 NO
L0003769  0 0.14104E-02 650478.5 4188498.6 10.1 1.83 1.70 1.70 NO
L0003770  0 0.14104E-02 650478.4 4188502.3 10.1 1.83 1.70 1.70 NO
L0003771  0 0.14104E-02 650478.2 4188505.9 10.1 1.83 1.70 1.70 NO
L0003772  0 0.14104E-02 650478.1 4188509.6 10.1 1.83 1.70 1.70 NO
L0003773  0 0.14104E-02 650477.9 4188513.2 10.1 1.83 1.70 1.70 NO
L0003774  0 0.14104E-02 650477.8 4188516.9 10.1 1.83 1.70 1.70 NO
L0003775  0 0.14104E-02 650477.7 4188520.5 10.1 1.83 1.70 1.70 NO
L0003776  0 0.14104E-02 650477.5 4188524.2 10.1 1.83 1.70 1.70 NO
L0003777  0 0.14104E-02 650477.4 4188527.8 10.1 1.83 1.70 1.70 NO
L0003778  0 0.14104E-02 650477.2 4188531.5 10.1 1.83 1.70 1.70 NO
L0003779  0 0.14104E-02 650477.1 4188535.1 10.1 1.83 1.70 1.70 NO
L0003780  0 0.14104E-02 650477.0 4188538.8 10.1 1.83 1.70 1.70 NO
L0003781  0 0.14104E-02 650476.8 4188542.5 10.1 1.83 1.70 1.70 NO
L0003782  0 0.14104E-02 650476.7 4188546.1 10.1 1.83 1.70 1.70 NO
L0003783  0 0.14104E-02 650476.5 4188549.8 10.1 1.83 1.70 1.70 NO
L0003784  0 0.14104E-02 650476.4 4188553.4 10.1 1.83 1.70 1.70 NO
L0003785  0 0.14104E-02 650476.3 4188557.1 10.1 1.83 1.70 1.70 NO
L0003786  0 0.14104E-02 650476.1 4188560.7 10.1 1.83 1.70 1.70 NO
L0003787  0 0.14104E-02 650479.1 4188561.4 10.1 1.83 1.70 1.70 NO
L0003788  0 0.14104E-02 650482.7 4188561.4 10.1 1.83 1.70 1.70 NO
L0003789  0 0.14104E-02 650486.4 4188561.4 10.1 1.83 1.70 1.70 NO
L0003790  0 0.14104E-02 650490.0 4188561.4 10.1 1.83 1.70 1.70 NO
L0003791  0 0.14104E-02 650493.7 4188561.4 10.1 1.83 1.70 1.70 NO
L0003792  0 0.14104E-02 650497.3 4188561.4 10.1 1.83 1.70 1.70 NO
L0003793  0 0.14104E-02 650501.0 4188561.4 10.1 1.83 1.70 1.70 NO
L0003794  0 0.14104E-02 650504.7 4188561.4 10.1 1.83 1.70 1.70 NO
L0003795  0 0.14104E-02 650508.3 4188561.4 10.1 1.83 1.70 1.70 NO
L0003796  0 0.14104E-02 650512.0 4188561.4 10.1 1.83 1.70 1.70 NO
L0003797  0 0.14104E-02 650515.6 4188561.4 10.1 1.83 1.70 1.70 NO
L0003798  0 0.14104E-02 650519.3 4188561.4 10.1 1.83 1.70 1.70 NO
L0003799  0 0.14104E-02 650523.0 4188561.4 10.1 1.83 1.70 1.70 NO
L0003800  0 0.14104E-02 650526.6 4188561.4 10.1 1.83 1.70 1.70 NO
L0003801  0 0.14104E-02 650530.3 4188561.4 10.1 1.83 1.70 1.70 NO

```

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 5

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION RATE
--------	---------------	------	---------	-------	-------	-------	---------------

SOURCE ID	PART. CATS.	(GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	ELEV. (METERS)	HEIGHT (METERS)	SY (METERS)	SZ (METERS)	SOURCE SCALAR VARY BY
-----------	-------------	----------------------	------------	------------	----------------	-----------------	-------------	-------------	-----------------------

L0003802	0	0.14104E-02	650533.9	4188561.4	10.1	1.83	1.70	1.70	NO
L0003803	0	0.14104E-02	650537.6	4188561.4	10.1	1.83	1.70	1.70	NO
L0003804	0	0.14104E-02	650541.2	4188561.4	10.1	1.83	1.70	1.70	NO
L0003805	0	0.14104E-02	650544.9	4188561.4	10.1	1.83	1.70	1.70	NO
L0003806	0	0.14104E-02	650548.6	4188561.4	10.1	1.83	1.70	1.70	NO
L0003807	0	0.14104E-02	650552.2	4188561.4	10.1	1.83	1.70	1.70	NO
L0003808	0	0.14104E-02	650555.9	4188561.4	10.1	1.83	1.70	1.70	NO
L0003809	0	0.14104E-02	650559.5	4188561.4	10.1	1.83	1.70	1.70	NO
L0003810	0	0.14104E-02	650563.2	4188561.4	10.1	1.83	1.70	1.70	NO
L0003811	0	0.14104E-02	650566.8	4188561.4	10.1	1.83	1.70	1.70	NO
L0003812	0	0.14104E-02	650570.5	4188561.4	10.1	1.83	1.70	1.70	NO
L0003813	0	0.14104E-02	650574.2	4188561.4	10.1	1.83	1.70	1.70	NO
L0003814	0	0.14104E-02	650577.8	4188561.4	10.1	1.83	1.70	1.70	NO
L0003815	0	0.14104E-02	650581.5	4188561.4	10.1	1.83	1.70	1.70	NO
L0003816	0	0.14104E-02	650585.1	4188561.4	10.1	1.83	1.70	1.70	NO
L0003817	0	0.14104E-02	650588.8	4188561.4	10.1	1.83	1.70	1.70	NO
L0003818	0	0.14104E-02	650592.4	4188561.4	10.1	1.83	1.70	1.70	NO
L0003819	0	0.14104E-02	650596.1	4188561.4	10.1	1.83	1.70	1.70	NO
L0003820	0	0.14104E-02	650599.8	4188561.4	10.1	1.83	1.70	1.70	NO
L0003821	0	0.14104E-02	650603.4	4188561.4	10.1	1.83	1.70	1.70	NO
L0003822	0	0.14104E-02	650607.1	4188561.4	10.1	1.83	1.70	1.70	NO
L0003823	0	0.14104E-02	650610.7	4188561.4	10.1	1.83	1.70	1.70	NO
L0003824	0	0.14104E-02	650611.0	4188564.9	10.1	1.83	1.70	1.70	NO
L0003825	0	0.14104E-02	650611.0	4188568.5	10.1	1.83	1.70	1.70	NO
L0003826	0	0.14104E-02	650607.5	4188568.7	10.1	1.83	1.70	1.70	NO
L0003827	0	0.14104E-02	650603.8	4188568.7	10.1	1.83	1.70	1.70	NO
L0003828	0	0.14104E-02	650600.1	4188568.7	10.1	1.83	1.70	1.70	NO
L0003829	0	0.14104E-02	650596.5	4188568.7	10.1	1.83	1.70	1.70	NO
L0003830	0	0.14104E-02	650592.8	4188568.7	10.1	1.83	1.70	1.70	NO
L0003831	0	0.14104E-02	650589.2	4188568.7	10.1	1.83	1.70	1.70	NO
L0003832	0	0.14104E-02	650585.5	4188568.7	10.1	1.83	1.70	1.70	NO
L0003833	0	0.14104E-02	650581.9	4188568.7	10.1	1.83	1.70	1.70	NO
L0003834	0	0.14104E-02	650578.2	4188568.7	10.1	1.83	1.70	1.70	NO
L0003835	0	0.14104E-02	650574.5	4188568.7	10.1	1.83	1.70	1.70	NO
L0003836	0	0.14104E-02	650570.9	4188568.7	10.1	1.83	1.70	1.70	NO
L0003837	0	0.14104E-02	650567.2	4188568.7	10.1	1.83	1.70	1.70	NO
L0003838	0	0.14104E-02	650563.6	4188568.7	10.1	1.83	1.70	1.70	NO
L0003839	0	0.14104E-02	650559.9	4188568.7	10.1	1.83	1.70	1.70	NO
L0003840	0	0.14104E-02	650556.3	4188568.7	10.1	1.83	1.70	1.70	NO
L0003841	0	0.14104E-02	650552.6	4188568.7	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 6

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE SCALAR VARY	EMISSION RATE
--------	-------------------	---	---	-------	--------	----------	----------	--------------------------	---------------

ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY
L0003842	0	0.14104E-02	650548.9	4188568.7	10.1	1.83	1.70	1.70	NO
L0003843	0	0.14104E-02	650545.3	4188568.7	10.1	1.83	1.70	1.70	NO
L0003844	0	0.14104E-02	650541.6	4188568.7	10.1	1.83	1.70	1.70	NO
L0003845	0	0.14104E-02	650538.0	4188568.7	10.1	1.83	1.70	1.70	NO
L0003846	0	0.14104E-02	650534.3	4188568.7	10.1	1.83	1.70	1.70	NO
L0003847	0	0.14104E-02	650530.7	4188568.7	10.1	1.83	1.70	1.70	NO
L0003848	0	0.14104E-02	650527.0	4188568.7	10.1	1.83	1.70	1.70	NO
L0003849	0	0.14104E-02	650523.3	4188568.7	10.1	1.83	1.70	1.70	NO
L0003850	0	0.14104E-02	650519.7	4188568.7	10.1	1.83	1.70	1.70	NO
L0003851	0	0.14104E-02	650516.0	4188568.7	10.1	1.83	1.70	1.70	NO
L0003852	0	0.14104E-02	650512.4	4188568.7	10.1	1.83	1.70	1.70	NO
L0003853	0	0.14104E-02	650508.7	4188568.7	10.1	1.83	1.70	1.70	NO
L0003854	0	0.14104E-02	650505.0	4188568.7	10.1	1.83	1.70	1.70	NO
L0003855	0	0.14104E-02	650501.4	4188568.7	10.1	1.83	1.70	1.70	NO
L0003856	0	0.14104E-02	650497.7	4188568.7	10.1	1.83	1.70	1.70	NO
L0003857	0	0.14104E-02	650494.1	4188568.7	10.1	1.83	1.70	1.70	NO
L0003858	0	0.14104E-02	650490.4	4188568.7	10.1	1.83	1.70	1.70	NO
L0003859	0	0.14104E-02	650486.8	4188568.7	10.1	1.83	1.70	1.70	NO
L0003860	0	0.14104E-02	650483.1	4188568.7	10.1	1.83	1.70	1.70	NO
L0003861	0	0.14104E-02	650479.4	4188568.7	10.1	1.83	1.70	1.70	NO
L0003862	0	0.14104E-02	650475.8	4188568.7	10.1	1.83	1.70	1.70	NO
L0003863	0	0.14104E-02	650475.0	4188571.6	10.1	1.83	1.70	1.70	NO
L0003864	0	0.14104E-02	650474.9	4188575.3	10.1	1.83	1.70	1.70	NO
L0003865	0	0.14104E-02	650474.8	4188578.9	10.1	1.83	1.70	1.70	NO
L0003866	0	0.14104E-02	650474.7	4188582.6	10.1	1.83	1.70	1.70	NO
L0003867	0	0.14104E-02	650474.6	4188586.3	10.1	1.83	1.70	1.70	NO
L0003868	0	0.14104E-02	650474.6	4188589.9	10.1	1.83	1.70	1.70	NO
L0003869	0	0.14104E-02	650474.5	4188593.6	10.1	1.83	1.70	1.70	NO
L0003870	0	0.14104E-02	650474.4	4188597.2	10.1	1.83	1.70	1.70	NO
L0003871	0	0.14104E-02	650474.3	4188600.9	10.1	1.83	1.70	1.70	NO
L0003872	0	0.14104E-02	650474.2	4188604.5	10.1	1.83	1.70	1.70	NO
L0003873	0	0.14104E-02	650474.1	4188608.2	10.1	1.83	1.70	1.70	NO
L0003874	0	0.14104E-02	650474.0	4188611.9	10.1	1.83	1.70	1.70	NO
L0003875	0	0.14104E-02	650473.9	4188615.5	10.1	1.83	1.70	1.70	NO
L0003876	0	0.14104E-02	650473.9	4188619.2	10.1	1.83	1.70	1.70	NO
L0003877	0	0.14104E-02	650473.8	4188622.8	10.1	1.83	1.70	1.70	NO
L0003878	0	0.14104E-02	650473.7	4188626.5	10.1	1.83	1.70	1.70	NO
L0003879	0	0.14104E-02	650473.6	4188630.1	10.1	1.83	1.70	1.70	NO
L0003880	0	0.14104E-02	650473.5	4188633.8	10.1	1.83	1.70	1.70	NO
L0003881	0	0.14104E-02	650473.4	4188637.4	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY

```

-----
L0003882  0  0.14104E-02  650473.3 4188641.1  10.1  1.83  1.70  1.70  NO
L0003883  0  0.14104E-02  650473.2 4188644.8  10.1  1.83  1.70  1.70  NO
L0003884  0  0.14104E-02  650473.1 4188648.4  10.1  1.83  1.70  1.70  NO
L0003885  0  0.14104E-02  650473.1 4188652.1  10.1  1.83  1.70  1.70  NO
L0003886  0  0.14104E-02  650472.1 4188654.8  10.1  1.83  1.70  1.70  NO
L0003887  0  0.14104E-02  650468.4 4188654.7  10.1  1.83  1.70  1.70  NO
L0003888  0  0.14104E-02  650464.7 4188654.7  10.1  1.83  1.70  1.70  NO
L0003889  0  0.14104E-02  650461.1 4188654.7  10.1  1.83  1.70  1.70  NO
L0003890  0  0.14104E-02  650457.4 4188654.6  10.1  1.83  1.70  1.70  NO
L0003891  0  0.14104E-02  650453.8 4188654.6  10.1  1.83  1.70  1.70  NO
L0003892  0  0.14104E-02  650450.1 4188654.6  10.1  1.83  1.70  1.70  NO
L0003893  0  0.14104E-02  650446.5 4188654.5  10.1  1.83  1.70  1.70  NO
L0003894  0  0.14104E-02  650442.8 4188654.5  10.1  1.83  1.70  1.70  NO
L0003895  0  0.14104E-02  650439.1 4188654.4  10.1  1.83  1.70  1.70  NO
L0003896  0  0.14104E-02  650435.5 4188654.4  10.1  1.83  1.70  1.70  NO
L0003897  0  0.14104E-02  650431.8 4188654.4  10.1  1.83  1.70  1.70  NO
L0003898  0  0.14104E-02  650428.2 4188654.3  10.1  1.83  1.70  1.70  NO
L0003899  0  0.14104E-02  650424.5 4188654.3  10.1  1.83  1.70  1.70  NO
L0003900  0  0.14104E-02  650420.9 4188654.3  10.1  1.83  1.70  1.70  NO
L0003901  0  0.14104E-02  650417.2 4188654.2  10.1  1.83  1.70  1.70  NO
L0003902  0  0.14104E-02  650413.5 4188654.2  10.1  1.83  1.70  1.70  NO
L0003903  0  0.14104E-02  650409.9 4188654.1  10.1  1.83  1.70  1.70  NO
L0003904  0  0.14104E-02  650406.2 4188654.1  10.1  1.83  1.70  1.70  NO
L0003905  0  0.14104E-02  650402.6 4188654.1  10.1  1.83  1.70  1.70  NO
L0003906  0  0.14104E-02  650398.9 4188654.0  10.1  1.83  1.70  1.70  NO
L0003907  0  0.14104E-02  650395.2 4188654.0  10.1  1.83  1.70  1.70  NO
L0003908  0  0.14104E-02  650391.6 4188654.0  10.1  1.83  1.70  1.70  NO
L0003909  0  0.14104E-02  650387.9 4188653.9  10.1  1.83  1.70  1.70  NO
L0003910  0  0.14104E-02  650384.3 4188653.9  10.1  1.83  1.70  1.70  NO
L0003911  0  0.14104E-02  650380.6 4188653.8  10.1  1.83  1.70  1.70  NO
L0003912  0  0.14104E-02  650377.0 4188653.8  10.1  1.83  1.70  1.70  NO
L0003913  0  0.14104E-02  650373.3 4188653.8  10.1  1.83  1.70  1.70  NO
L0003914  0  0.14104E-02  650369.6 4188653.7  10.1  1.83  1.70  1.70  NO
L0003915  0  0.14104E-02  650366.0 4188653.7  10.1  1.83  1.70  1.70  NO
L0003916  0  0.14104E-02  650362.3 4188653.7  10.1  1.83  1.70  1.70  NO
L0003917  0  0.14104E-02  650358.7 4188653.6  10.1  1.83  1.70  1.70  NO
L0003918  0  0.14104E-02  650355.0 4188653.6  10.1  1.83  1.70  1.70  NO
L0003919  0  0.14104E-02  650351.4 4188653.5  10.1  1.83  1.70  1.70  NO
L0003920  0  0.14104E-02  650347.7 4188653.5  10.1  1.83  1.70  1.70  NO
L0003921  0  0.14104E-02  650344.0 4188653.5  10.1  1.83  1.70  1.70  NO

```

```

*** AERMOD - VERSION 19191 *** *** C:\Users\Smith\Dropbox\My PC (DESKTOP-
977GSBU)\Documents\HRA\Ashley *** 07/19/23

```

```

*** AERMET - VERSION 18081 *** *** *** 15:03:05

```

PAGE 8

```

*** MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ_U*

```

\*\*\* VOLUME SOURCE DATA \*\*\*

```

NUMBER EMISSION RATE          BASE RELEASE INIT. INIT. URBAN EMISSION RATE
SOURCE PART. (GRAMS/SEC) X    Y    ELEV. HEIGHT SY    SZ    SOURCE SCALAR VARY
ID    CATS.      (METERS) (METERS) (METERS) (METERS) (METERS) (METERS)          BY
-----

```

L0003922	0	0.14104E-02	650340.4	4188653.4	10.1	1.83	1.70	1.70	NO
L0003923	0	0.14104E-02	650336.7	4188653.4	10.1	1.83	1.70	1.70	NO
L0003924	0	0.14104E-02	650333.1	4188653.4	10.1	1.83	1.70	1.70	NO
L0003925	0	0.14104E-02	650329.4	4188653.3	10.1	1.83	1.70	1.70	NO
L0003926	0	0.14104E-02	650325.8	4188653.3	10.1	1.83	1.70	1.70	NO
L0003927	0	0.14104E-02	650322.1	4188653.2	10.1	1.83	1.70	1.70	NO
L0003928	0	0.14104E-02	650318.4	4188653.2	10.1	1.83	1.70	1.70	NO
L0003929	0	0.14104E-02	650314.8	4188653.2	10.1	1.83	1.70	1.70	NO
L0003930	0	0.14104E-02	650311.1	4188653.1	10.1	1.83	1.70	1.70	NO
L0003931	0	0.14104E-02	650307.5	4188653.1	10.1	1.83	1.70	1.70	NO
L0003932	0	0.14104E-02	650303.8	4188653.1	10.1	1.83	1.70	1.70	NO
L0003933	0	0.14104E-02	650300.2	4188653.0	10.1	1.83	1.70	1.70	NO
L0003934	0	0.14104E-02	650296.5	4188653.0	10.1	1.83	1.70	1.70	NO
L0003935	0	0.14104E-02	650292.8	4188652.9	10.1	1.83	1.70	1.70	NO
L0003936	0	0.14104E-02	650289.2	4188652.9	10.1	1.83	1.70	1.70	NO
L0003937	0	0.14104E-02	650285.5	4188652.9	10.1	1.83	1.70	1.70	NO
L0003938	0	0.14104E-02	650281.9	4188652.8	10.1	1.83	1.70	1.70	NO
L0003939	0	0.14104E-02	650278.2	4188652.8	10.1	1.83	1.70	1.70	NO
L0003940	0	0.14104E-02	650274.6	4188652.8	10.1	1.83	1.70	1.70	NO
L0003941	0	0.14104E-02	650270.9	4188652.7	10.1	1.83	1.70	1.70	NO
L0003942	0	0.14104E-02	650267.2	4188652.7	10.1	1.83	1.70	1.70	NO
L0003943	0	0.14104E-02	650263.6	4188652.6	10.1	1.83	1.70	1.70	NO
L0003944	0	0.14104E-02	650259.9	4188652.6	10.1	1.83	1.70	1.70	NO
L0003945	0	0.14104E-02	650256.3	4188652.6	10.1	1.83	1.70	1.70	NO
L0003946	0	0.14104E-02	650252.6	4188652.5	10.1	1.83	1.70	1.70	NO
L0003947	0	0.14104E-02	650249.0	4188652.5	10.1	1.83	1.70	1.70	NO
L0003948	0	0.14104E-02	650245.3	4188652.5	10.1	1.83	1.70	1.70	NO
L0003949	0	0.14104E-02	650241.6	4188652.4	10.1	1.83	1.70	1.70	NO
L0003950	0	0.14104E-02	650238.0	4188652.4	10.1	1.83	1.70	1.70	NO
L0003951	0	0.14104E-02	650234.3	4188652.3	10.1	1.83	1.70	1.70	NO
L0003952	0	0.14104E-02	650230.7	4188652.3	10.1	1.83	1.70	1.70	NO
L0003953	0	0.14104E-02	650227.0	4188652.3	10.1	1.83	1.70	1.70	NO
L0003954	0	0.14104E-02	650223.4	4188652.2	10.1	1.83	1.70	1.70	NO
L0003955	0	0.14104E-02	650219.7	4188652.2	10.1	1.83	1.70	1.70	NO
L0003956	0	0.14104E-02	650216.0	4188652.2	10.1	1.83	1.70	1.70	NO
L0003957	0	0.14104E-02	650212.4	4188652.1	10.1	1.83	1.70	1.70	NO
L0003958	0	0.14104E-02	650208.7	4188652.1	10.1	1.83	1.70	1.70	NO
L0003959	0	0.14104E-02	650205.1	4188652.0	10.1	1.83	1.70	1.70	NO
L0003960	0	0.14104E-02	650201.4	4188652.0	10.1	1.83	1.70	1.70	NO
L0003961	0	0.14104E-02	650197.7	4188652.0	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\*\* 15:03:05

PAGE 9

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY
L0003962	0	0.14104E-02	650194.1	4188651.9	10.1	1.83	1.70	1.70	NO



L0003963	0	0.14104E-02	650190.4	4188651.9	10.1	1.83	1.70	1.70	NO
L0003964	0	0.14104E-02	650186.8	4188651.9	10.1	1.83	1.70	1.70	NO
L0003965	0	0.14104E-02	650183.1	4188651.8	10.1	1.83	1.70	1.70	NO
L0003966	0	0.14104E-02	650179.5	4188651.8	10.1	1.83	1.70	1.70	NO
L0003967	0	0.14104E-02	650175.8	4188651.7	10.1	1.83	1.70	1.70	NO
L0003968	0	0.14104E-02	650172.1	4188651.7	10.1	1.83	1.70	1.70	NO
L0003969	0	0.14104E-02	650168.5	4188651.7	10.1	1.83	1.70	1.70	NO
L0003970	0	0.14104E-02	650164.8	4188651.6	10.1	1.83	1.70	1.70	NO
L0003971	0	0.14104E-02	650161.2	4188651.6	10.1	1.83	1.70	1.70	NO
L0003972	0	0.14104E-02	650157.5	4188651.6	10.1	1.83	1.70	1.70	NO
L0003973	0	0.14104E-02	650153.9	4188651.5	10.1	1.83	1.70	1.70	NO
L0003974	0	0.14104E-02	650150.2	4188651.5	10.1	1.83	1.70	1.70	NO
L0003975	0	0.14104E-02	650146.5	4188651.4	10.1	1.83	1.70	1.70	NO
L0003976	0	0.14104E-02	650142.9	4188651.4	10.1	1.83	1.70	1.70	NO
L0003977	0	0.14104E-02	650139.2	4188651.4	10.1	1.83	1.70	1.70	NO
L0003978	0	0.14104E-02	650135.6	4188651.3	10.1	1.83	1.70	1.70	NO
L0003979	0	0.14104E-02	650131.9	4188651.3	10.1	1.83	1.70	1.70	NO
L0003980	0	0.14104E-02	650128.3	4188651.3	10.1	1.83	1.70	1.70	NO
L0003981	0	0.14104E-02	650124.6	4188651.2	10.1	1.83	1.70	1.70	NO
L0003982	0	0.14104E-02	650120.9	4188651.2	10.1	1.83	1.70	1.70	NO
L0003983	0	0.14104E-02	650117.3	4188651.1	10.1	1.83	1.70	1.70	NO
L0003984	0	0.14104E-02	650113.6	4188651.1	10.1	1.83	1.70	1.70	NO
L0003985	0	0.14104E-02	650110.0	4188651.1	10.1	1.83	1.70	1.70	NO
L0003986	0	0.14104E-02	650106.3	4188651.0	10.1	1.83	1.70	1.70	NO
L0003987	0	0.14104E-02	650102.7	4188651.0	10.1	1.83	1.70	1.70	NO
L0003988	0	0.14104E-02	650099.0	4188651.0	10.1	1.83	1.70	1.70	NO
L0003989	0	0.14104E-02	650095.3	4188650.9	10.1	1.83	1.70	1.70	NO
L0003990	0	0.14104E-02	650091.7	4188650.9	10.1	1.83	1.70	1.70	NO
L0003991	0	0.14104E-02	650088.0	4188650.8	10.1	1.83	1.70	1.70	NO
L0003992	0	0.14104E-02	650084.4	4188650.8	10.1	1.83	1.70	1.70	NO
L0003993	0	0.14104E-02	650080.7	4188650.8	10.1	1.83	1.70	1.70	NO
L0003994	0	0.14104E-02	650077.1	4188650.7	10.1	1.83	1.70	1.70	NO
L0003995	0	0.14104E-02	650073.4	4188650.7	10.1	1.83	1.70	1.70	NO
L0003996	0	0.14104E-02	650069.7	4188650.7	10.1	1.83	1.70	1.70	NO
L0003997	0	0.14104E-02	650066.1	4188650.6	10.1	1.83	1.70	1.70	NO
L0003998	0	0.14104E-02	650062.4	4188650.6	10.1	1.83	1.70	1.70	NO
L0003999	0	0.14104E-02	650058.8	4188650.5	10.1	1.83	1.70	1.70	NO
L0004000	0	0.14104E-02	650055.1	4188650.5	10.1	1.83	1.70	1.70	NO
L0004001	0	0.14104E-02	650051.5	4188650.5	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 10

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY
L0004002	0	0.14104E-02	650047.8	4188650.4	10.1	1.83	1.70	1.70	NO
L0004003	0	0.14104E-02	650044.1	4188650.4	10.1	1.83	1.70	1.70	NO

L0004004	0	0.14104E-02	650040.5	4188650.4	10.1	1.83	1.70	1.70	NO
L0004005	0	0.14104E-02	650036.8	4188650.3	10.1	1.83	1.70	1.70	NO
L0004006	0	0.14104E-02	650033.2	4188650.3	10.1	1.83	1.70	1.70	NO
L0004007	0	0.14104E-02	650029.5	4188650.2	10.1	1.83	1.70	1.70	NO
L0004008	0	0.14104E-02	650025.9	4188650.2	10.1	1.83	1.70	1.70	NO
L0004009	0	0.14104E-02	650022.2	4188650.2	10.1	1.83	1.70	1.70	NO
L0004010	0	0.14104E-02	650018.5	4188650.1	10.1	1.83	1.70	1.70	NO
L0004011	0	0.14104E-02	650014.9	4188650.1	10.1	1.83	1.70	1.70	NO
L0004012	0	0.14104E-02	650011.2	4188650.1	10.1	1.83	1.70	1.70	NO
L0004013	0	0.14104E-02	650007.6	4188650.0	10.1	1.83	1.70	1.70	NO
L0004014	0	0.14104E-02	650003.9	4188650.0	10.1	1.83	1.70	1.70	NO
L0004015	0	0.14104E-02	650000.2	4188649.9	10.1	1.83	1.70	1.70	NO
L0004016	0	0.14104E-02	649996.6	4188649.9	10.1	1.83	1.70	1.70	NO
L0004017	0	0.14104E-02	649992.9	4188649.9	10.1	1.83	1.70	1.70	NO
L0004018	0	0.14104E-02	649989.3	4188649.8	10.1	1.83	1.70	1.70	NO
L0004019	0	0.14104E-02	649985.6	4188649.8	10.1	1.83	1.70	1.70	NO
L0004020	0	0.14104E-02	649982.0	4188649.8	10.1	1.83	1.70	1.70	NO
L0004021	0	0.14104E-02	649978.3	4188649.7	10.1	1.83	1.70	1.70	NO
L0004022	0	0.14104E-02	649974.6	4188649.7	10.1	1.83	1.70	1.70	NO
L0004023	0	0.14104E-02	649971.0	4188649.6	10.1	1.83	1.70	1.70	NO
L0004024	0	0.14104E-02	649967.3	4188649.6	10.1	1.83	1.70	1.70	NO
L0004025	0	0.14104E-02	649963.7	4188649.6	10.1	1.83	1.70	1.70	NO
L0004026	0	0.14104E-02	649960.0	4188649.5	10.1	1.83	1.70	1.70	NO
L0004027	0	0.14104E-02	649956.4	4188649.5	10.1	1.83	1.70	1.70	NO
L0004028	0	0.14104E-02	649952.7	4188649.5	10.1	1.83	1.70	1.70	NO
L0004029	0	0.14104E-02	649949.0	4188649.4	10.1	1.83	1.70	1.70	NO
L0004030	0	0.14104E-02	649945.4	4188649.4	10.1	1.83	1.70	1.70	NO
L0004031	0	0.14104E-02	649941.7	4188649.3	10.1	1.83	1.70	1.70	NO
L0004032	0	0.14104E-02	649938.1	4188649.3	10.1	1.83	1.70	1.70	NO
L0004033	0	0.14104E-02	649934.4	4188649.3	10.1	1.83	1.70	1.70	NO
L0004034	0	0.14104E-02	649930.8	4188649.2	10.1	1.83	1.70	1.70	NO
L0004035	0	0.14104E-02	649927.1	4188649.2	10.1	1.83	1.70	1.70	NO
L0004036	0	0.14104E-02	649923.4	4188649.2	10.1	1.83	1.70	1.70	NO
L0004037	0	0.14104E-02	649919.8	4188649.1	10.1	1.83	1.70	1.70	NO
L0004038	0	0.14104E-02	649916.1	4188649.1	10.1	1.83	1.70	1.70	NO
L0004039	0	0.14104E-02	649912.5	4188649.0	10.1	1.83	1.70	1.70	NO
L0004040	0	0.14104E-02	649908.8	4188649.0	10.1	1.83	1.70	1.70	NO
L0004041	0	0.14104E-02	649905.2	4188649.0	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 11

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE SCALAR VARY BY
L0004042	0	0.14104E-02	649901.5	4188648.9	10.1	1.83	1.70	1.70	NO
L0004043	0	0.14104E-02	649897.8	4188648.9	10.1	1.83	1.70	1.70	NO
L0004044	0	0.14104E-02	649894.2	4188648.9	10.1	1.83	1.70	1.70	NO

L0004045	0	0.14104E-02	649890.5	4188648.8	10.1	1.83	1.70	1.70	NO
L0004046	0	0.14104E-02	649886.9	4188648.8	10.1	1.83	1.70	1.70	NO
L0004047	0	0.14104E-02	649883.2	4188648.7	10.1	1.83	1.70	1.70	NO
L0004048	0	0.14104E-02	649879.6	4188648.7	10.1	1.83	1.70	1.70	NO
L0004049	0	0.14104E-02	649875.9	4188648.7	10.1	1.83	1.70	1.70	NO
L0004050	0	0.14104E-02	649872.2	4188648.6	10.1	1.83	1.70	1.70	NO
L0004051	0	0.14104E-02	649868.6	4188648.6	10.1	1.83	1.70	1.70	NO
L0004052	0	0.14104E-02	649864.9	4188648.6	10.1	1.83	1.70	1.70	NO
L0004053	0	0.14104E-02	649861.3	4188648.5	10.1	1.83	1.70	1.70	NO
L0004054	0	0.14104E-02	649857.6	4188648.5	10.1	1.83	1.70	1.70	NO
L0004055	0	0.14104E-02	649854.0	4188648.4	10.1	1.83	1.70	1.70	NO
L0004056	0	0.14104E-02	649850.3	4188648.4	10.1	1.83	1.70	1.70	NO
L0004057	0	0.14104E-02	649846.6	4188648.4	10.1	1.83	1.70	1.70	NO
L0004058	0	0.14104E-02	649843.0	4188648.3	10.1	1.83	1.70	1.70	NO
L0004059	0	0.14104E-02	649839.3	4188648.3	10.1	1.83	1.70	1.70	NO
L0004060	0	0.14104E-02	649835.7	4188648.3	10.1	1.83	1.70	1.70	NO
L0004061	0	0.14104E-02	649832.0	4188648.2	10.1	1.83	1.70	1.70	NO
L0004062	0	0.14104E-02	649828.3	4188648.2	10.1	1.83	1.70	1.70	NO
L0004063	0	0.14104E-02	649824.7	4188648.1	10.1	1.83	1.70	1.70	NO
L0004064	0	0.14104E-02	649821.0	4188648.1	10.1	1.83	1.70	1.70	NO
L0004065	0	0.14104E-02	649817.4	4188648.1	10.1	1.83	1.70	1.70	NO
L0004066	0	0.14104E-02	649813.7	4188648.0	10.1	1.83	1.70	1.70	NO
L0004067	0	0.14104E-02	649810.1	4188648.0	10.1	1.83	1.70	1.70	NO
L0004068	0	0.14104E-02	649806.4	4188648.0	10.1	1.83	1.70	1.70	NO
L0004069	0	0.14104E-02	649802.7	4188647.9	10.1	1.83	1.70	1.70	NO
L0004070	0	0.14104E-02	649799.1	4188647.9	10.1	1.83	1.70	1.70	NO
L0004071	0	0.14104E-02	649795.4	4188647.8	10.1	1.83	1.70	1.70	NO
L0004072	0	0.14104E-02	649791.8	4188647.8	10.1	1.83	1.70	1.70	NO
L0004073	0	0.14104E-02	649788.1	4188647.8	10.1	1.83	1.70	1.70	NO
L0004074	0	0.14104E-02	649784.5	4188647.7	10.1	1.83	1.70	1.70	NO
L0004075	0	0.14104E-02	649780.8	4188647.7	10.1	1.83	1.70	1.70	NO
L0004076	0	0.14104E-02	649777.1	4188647.7	10.1	1.83	1.70	1.70	NO
L0004077	0	0.14104E-02	649773.5	4188647.6	10.1	1.83	1.70	1.70	NO
L0004078	0	0.14104E-02	649769.8	4188647.6	10.1	1.83	1.70	1.70	NO
L0004079	0	0.14104E-02	649766.2	4188647.5	10.1	1.83	1.70	1.70	NO
L0004080	0	0.14104E-02	649762.5	4188647.5	10.1	1.83	1.70	1.70	NO
L0004081	0	0.14104E-02	649758.9	4188647.5	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 12

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC) (METERS)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	SY (METERS)	SZ (METERS)	URBAN SOURCE SCALAR VARY
L0004082	0	0.14104E-02	649755.2	4188647.4	10.1	1.83	1.70	1.70	NO
L0004083	0	0.14104E-02	649751.5	4188647.4	10.1	1.83	1.70	1.70	NO
L0004084	0	0.14104E-02	649747.9	4188647.4	10.1	1.83	1.70	1.70	NO
L0004085	0	0.14104E-02	649744.2	4188647.3	10.1	1.83	1.70	1.70	NO

L0004086	0	0.14104E-02	649740.6	4188647.3	10.1	1.83	1.70	1.70	NO
L0004087	0	0.14104E-02	649736.9	4188647.2	10.1	1.83	1.70	1.70	NO
L0004088	0	0.14104E-02	649733.3	4188647.2	10.1	1.83	1.70	1.70	NO
L0004089	0	0.14104E-02	649729.6	4188647.2	10.1	1.83	1.70	1.70	NO
L0004090	0	0.14104E-02	649725.9	4188647.1	10.1	1.83	1.70	1.70	NO
L0004091	0	0.14104E-02	649722.3	4188647.1	10.1	1.83	1.70	1.70	NO
L0004092	0	0.14104E-02	649718.6	4188647.1	10.1	1.83	1.70	1.70	NO
L0004093	0	0.14104E-02	649715.0	4188647.0	10.1	1.83	1.70	1.70	NO
L0004094	0	0.14104E-02	649711.3	4188647.0	10.1	1.83	1.70	1.70	NO
L0004095	0	0.14104E-02	649707.7	4188646.9	10.1	1.83	1.70	1.70	NO
L0004096	0	0.14104E-02	649704.0	4188646.9	10.1	1.83	1.70	1.70	NO
L0004097	0	0.14104E-02	649700.3	4188646.9	10.1	1.83	1.70	1.70	NO
L0004098	0	0.14104E-02	649696.7	4188646.8	10.1	1.83	1.70	1.70	NO
L0004099	0	0.14104E-02	649693.0	4188646.8	10.1	1.83	1.70	1.70	NO
L0004100	0	0.14104E-02	649689.4	4188646.8	10.1	1.83	1.70	1.70	NO
L0004101	0	0.14104E-02	649685.7	4188646.7	10.1	1.83	1.70	1.70	NO
L0004102	0	0.14104E-02	649682.1	4188646.7	10.1	1.83	1.70	1.70	NO
L0004103	0	0.14104E-02	649678.4	4188646.6	10.1	1.83	1.70	1.70	NO
L0004104	0	0.14104E-02	649674.7	4188646.6	10.1	1.83	1.70	1.70	NO
L0004105	0	0.14104E-02	649671.1	4188646.6	10.1	1.83	1.70	1.70	NO
L0004106	0	0.14104E-02	649667.4	4188646.5	10.1	1.83	1.70	1.70	NO
L0004107	0	0.14104E-02	649663.9	4188646.4	10.1	1.83	1.70	1.70	NO
L0004108	0	0.14104E-02	649663.9	4188642.7	10.1	1.83	1.70	1.70	NO
L0004109	0	0.14104E-02	649663.9	4188639.1	10.1	1.83	1.70	1.70	NO
L0004110	0	0.14104E-02	649663.9	4188635.4	10.1	1.83	1.70	1.70	NO
L0004111	0	0.14104E-02	649663.9	4188631.7	10.1	1.83	1.70	1.70	NO
L0004112	0	0.14104E-02	649664.0	4188628.1	10.1	1.83	1.70	1.70	NO
L0004113	0	0.14104E-02	649664.0	4188624.4	10.1	1.83	1.70	1.70	NO
L0004114	0	0.14104E-02	649664.0	4188620.8	10.1	1.83	1.70	1.70	NO
L0004115	0	0.14104E-02	649664.0	4188617.1	10.1	1.83	1.70	1.70	NO
L0004116	0	0.14104E-02	649664.0	4188613.5	10.1	1.83	1.70	1.70	NO
L0004117	0	0.14104E-02	649664.0	4188609.8	10.1	1.83	1.70	1.70	NO
L0004118	0	0.14104E-02	649664.0	4188606.1	10.1	1.83	1.70	1.70	NO
L0004119	0	0.14104E-02	649664.0	4188602.5	10.1	1.83	1.70	1.70	NO
L0004120	0	0.14104E-02	649664.1	4188598.8	10.1	1.83	1.70	1.70	NO
L0004121	0	0.14104E-02	649664.1	4188595.2	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 13

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN EMISSION RATE SOURCE SCALAR VARY BY
L0004122	0	0.14104E-02	649664.1	4188591.5	10.1	1.83	1.70	1.70	NO
L0004123	0	0.14104E-02	649664.1	4188587.8	10.1	1.83	1.70	1.70	NO
L0004124	0	0.14104E-02	649664.1	4188584.2	10.1	1.83	1.70	1.70	NO
L0004125	0	0.14104E-02	649664.1	4188580.5	10.1	1.83	1.70	1.70	NO
L0004126	0	0.14104E-02	649664.1	4188576.9	10.1	1.83	1.70	1.70	NO

L0004127	0	0.14104E-02	649664.1	4188573.2	10.1	1.83	1.70	1.70	NO
L0004128	0	0.14104E-02	649664.2	4188569.6	10.1	1.83	1.70	1.70	NO
L0004129	0	0.14104E-02	649664.2	4188565.9	10.1	1.83	1.70	1.70	NO
L0004130	0	0.14104E-02	649664.2	4188562.2	10.1	1.83	1.70	1.70	NO
L0004131	0	0.14104E-02	649664.2	4188558.6	10.1	1.83	1.70	1.70	NO
L0004132	0	0.14104E-02	649664.2	4188554.9	10.1	1.83	1.70	1.70	NO
L0004133	0	0.14104E-02	649664.2	4188551.3	10.1	1.83	1.70	1.70	NO
L0004134	0	0.14104E-02	649664.2	4188547.6	10.1	1.83	1.70	1.70	NO
L0004135	0	0.14104E-02	649664.3	4188544.0	10.1	1.83	1.70	1.70	NO
L0004136	0	0.14104E-02	649664.3	4188540.3	10.1	1.83	1.70	1.70	NO
L0004137	0	0.14104E-02	649664.3	4188536.6	10.1	1.83	1.70	1.70	NO
L0004138	0	0.14104E-02	649664.3	4188533.0	10.1	1.83	1.70	1.70	NO
L0004139	0	0.14104E-02	649664.3	4188529.3	10.1	1.83	1.70	1.70	NO
L0004140	0	0.14104E-02	649664.3	4188525.7	10.1	1.83	1.70	1.70	NO
L0004141	0	0.14104E-02	649664.3	4188522.0	10.1	1.83	1.70	1.70	NO
L0004142	0	0.14104E-02	649664.3	4188518.4	10.1	1.83	1.70	1.70	NO
L0004143	0	0.14104E-02	649664.4	4188514.7	10.1	1.83	1.70	1.70	NO
L0004144	0	0.14104E-02	649664.4	4188511.0	10.1	1.83	1.70	1.70	NO
L0004145	0	0.14104E-02	649664.4	4188507.4	10.1	1.83	1.70	1.70	NO
L0004146	0	0.14104E-02	649664.4	4188503.7	10.1	1.83	1.70	1.70	NO
L0004147	0	0.14104E-02	649664.4	4188500.1	10.1	1.83	1.70	1.70	NO
L0004148	0	0.14104E-02	649664.4	4188496.4	10.1	1.83	1.70	1.70	NO
L0004149	0	0.14104E-02	649664.4	4188492.8	10.1	1.83	1.70	1.70	NO
L0004150	0	0.14104E-02	649664.4	4188489.1	10.1	1.83	1.70	1.70	NO
L0004151	0	0.14104E-02	649664.5	4188485.4	10.1	1.83	1.70	1.70	NO
L0004152	0	0.14104E-02	649664.5	4188481.8	10.1	1.83	1.70	1.70	NO
L0004153	0	0.14104E-02	649664.5	4188478.1	10.1	1.83	1.70	1.70	NO
L0004154	0	0.14104E-02	649664.5	4188474.5	10.1	1.83	1.70	1.70	NO
L0004155	0	0.14104E-02	649664.5	4188470.8	10.1	1.83	1.70	1.70	NO
L0004156	0	0.14104E-02	649664.5	4188467.1	10.1	1.83	1.70	1.70	NO
L0004157	0	0.14104E-02	649664.5	4188463.5	10.1	1.83	1.70	1.70	NO
L0004158	0	0.14104E-02	649664.6	4188459.8	10.1	1.83	1.70	1.70	NO
L0004159	0	0.14104E-02	649664.6	4188456.2	10.1	1.83	1.70	1.70	NO
L0004160	0	0.14104E-02	649664.6	4188452.5	10.1	1.83	1.70	1.70	NO
L0004161	0	0.14104E-02	649664.6	4188448.9	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 14

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE RELEASE				INIT.	INIT.	URBAN EMISSION RATE	
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY	
-----									
L0004162	0	0.14104E-02	649664.6	4188445.2	10.1	1.83	1.70	1.70	NO
L0004163	0	0.14104E-02	649664.6	4188441.5	10.1	1.83	1.70	1.70	NO
L0004164	0	0.14104E-02	649664.6	4188437.9	10.1	1.83	1.70	1.70	NO
L0004165	0	0.14104E-02	649664.6	4188434.2	10.1	1.83	1.70	1.70	NO
L0004166	0	0.14104E-02	649664.7	4188430.6	10.1	1.83	1.70	1.70	NO
L0004167	0	0.14104E-02	649664.7	4188426.9	10.1	1.83	1.70	1.70	NO

L0004168	0	0.14104E-02	649664.7	4188423.3	10.1	1.83	1.70	1.70	NO
L0004169	0	0.14104E-02	649664.7	4188419.6	10.1	1.83	1.70	1.70	NO
L0004170	0	0.14104E-02	649664.7	4188415.9	10.1	1.83	1.70	1.70	NO
L0004171	0	0.14104E-02	649664.7	4188412.3	10.1	1.83	1.70	1.70	NO
L0004172	0	0.14104E-02	649664.7	4188408.6	10.1	1.83	1.70	1.70	NO
L0004173	0	0.14104E-02	649664.7	4188405.0	10.1	1.83	1.70	1.70	NO
L0004174	0	0.14104E-02	649664.8	4188401.3	10.1	1.83	1.70	1.70	NO
L0004175	0	0.14104E-02	649664.8	4188397.7	10.1	1.83	1.70	1.70	NO
L0004176	0	0.14104E-02	649664.8	4188394.0	10.1	1.83	1.70	1.70	NO
L0004177	0	0.14104E-02	649664.8	4188390.3	10.1	1.83	1.70	1.70	NO
L0004178	0	0.14104E-02	649664.8	4188386.7	10.1	1.83	1.70	1.70	NO
L0004179	0	0.14104E-02	649664.8	4188383.0	10.1	1.83	1.70	1.70	NO
L0004180	0	0.14104E-02	649664.8	4188379.4	10.1	1.83	1.70	1.70	NO
L0004181	0	0.14104E-02	649664.8	4188375.7	10.1	1.83	1.70	1.70	NO
L0004182	0	0.14104E-02	649664.9	4188372.1	10.1	1.83	1.70	1.70	NO
L0004183	0	0.14104E-02	649664.9	4188368.4	10.1	1.83	1.70	1.70	NO
L0004184	0	0.14104E-02	649664.9	4188364.7	10.1	1.83	1.70	1.70	NO
L0004185	0	0.14104E-02	649664.9	4188361.1	10.1	1.83	1.70	1.70	NO
L0004186	0	0.14104E-02	649664.9	4188357.4	10.1	1.83	1.70	1.70	NO
L0004187	0	0.14104E-02	649665.1	4188353.9	10.1	1.83	1.70	1.70	NO
L0004188	0	0.14104E-02	649668.7	4188353.3	10.1	1.83	1.70	1.70	NO
L0004189	0	0.14104E-02	649671.1	4188354.1	10.1	1.83	1.70	1.70	NO
L0004190	0	0.14104E-02	649671.0	4188357.8	10.1	1.83	1.70	1.70	NO
L0004191	0	0.14104E-02	649670.9	4188361.5	10.1	1.83	1.70	1.70	NO
L0004192	0	0.14104E-02	649670.7	4188365.1	10.1	1.83	1.70	1.70	NO
L0004193	0	0.14104E-02	649670.6	4188368.8	10.1	1.83	1.70	1.70	NO
L0004194	0	0.14104E-02	649670.5	4188372.4	10.1	1.83	1.70	1.70	NO
L0004195	0	0.14104E-02	649670.4	4188376.1	10.1	1.83	1.70	1.70	NO
L0004196	0	0.14104E-02	649670.3	4188379.7	10.1	1.83	1.70	1.70	NO
L0004197	0	0.14104E-02	649670.1	4188383.4	10.1	1.83	1.70	1.70	NO
L0004198	0	0.14104E-02	649670.0	4188387.0	10.1	1.83	1.70	1.70	NO
L0004199	0	0.14104E-02	649669.9	4188390.7	10.1	1.83	1.70	1.70	NO
L0004200	0	0.14104E-02	649669.8	4188394.4	10.1	1.83	1.70	1.70	NO
L0004201	0	0.14104E-02	649669.6	4188398.0	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 15

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE RELEASE			INIT.	INIT.	URBAN EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY
-----									
L0004202	0	0.14104E-02	649669.5	4188401.7	10.1	1.83	1.70	1.70	NO
L0004203	0	0.14104E-02	649669.4	4188405.3	10.1	1.83	1.70	1.70	NO
L0004204	0	0.14104E-02	649669.3	4188409.0	10.1	1.83	1.70	1.70	NO
L0004205	0	0.14104E-02	649669.2	4188412.6	10.1	1.83	1.70	1.70	NO
L0004206	0	0.14104E-02	649670.2	4188415.2	10.1	1.83	1.70	1.70	NO
L0004207	0	0.14104E-02	649673.9	4188415.2	10.1	1.83	1.70	1.70	NO
L0004208	0	0.14104E-02	649677.5	4188415.3	10.1	1.83	1.70	1.70	NO

L0004209	0	0.14104E-02	649681.2	4188415.3	10.1	1.83	1.70	1.70	NO
L0004210	0	0.14104E-02	649684.8	4188415.4	10.1	1.83	1.70	1.70	NO
L0004211	0	0.14104E-02	649688.5	4188415.4	10.1	1.83	1.70	1.70	NO
L0004212	0	0.14104E-02	649692.1	4188415.5	10.1	1.83	1.70	1.70	NO
L0004213	0	0.14104E-02	649695.8	4188415.5	10.1	1.83	1.70	1.70	NO
L0004214	0	0.14104E-02	649699.5	4188415.5	10.1	1.83	1.70	1.70	NO
L0004215	0	0.14104E-02	649703.1	4188415.6	10.1	1.83	1.70	1.70	NO
L0004216	0	0.14104E-02	649706.8	4188415.6	10.1	1.83	1.70	1.70	NO
L0004217	0	0.14104E-02	649710.4	4188415.7	10.1	1.83	1.70	1.70	NO
L0004218	0	0.14104E-02	649714.1	4188415.7	10.1	1.83	1.70	1.70	NO
L0004219	0	0.14104E-02	649717.7	4188415.8	10.1	1.83	1.70	1.70	NO
L0004220	0	0.14104E-02	649721.4	4188415.8	10.1	1.83	1.70	1.70	NO
L0004221	0	0.14104E-02	649725.1	4188415.9	10.1	1.83	1.70	1.70	NO
L0004222	0	0.14104E-02	649728.7	4188415.9	10.1	1.83	1.70	1.70	NO
L0004223	0	0.14104E-02	649732.4	4188415.9	10.1	1.83	1.70	1.70	NO
L0004224	0	0.14104E-02	649736.0	4188416.0	10.1	1.83	1.70	1.70	NO
L0004225	0	0.14104E-02	649739.7	4188416.0	10.1	1.83	1.70	1.70	NO
L0004226	0	0.14104E-02	649743.3	4188416.1	10.1	1.83	1.70	1.70	NO
L0004227	0	0.14104E-02	649747.0	4188416.1	10.1	1.83	1.70	1.70	NO
L0004228	0	0.14104E-02	649750.7	4188416.2	10.1	1.83	1.70	1.70	NO
L0004229	0	0.14104E-02	649754.3	4188416.2	10.1	1.83	1.70	1.70	NO
L0004230	0	0.14104E-02	649758.0	4188416.3	10.1	1.83	1.70	1.70	NO
L0004231	0	0.14104E-02	649761.6	4188416.3	10.1	1.83	1.70	1.70	NO
L0004232	0	0.14104E-02	649765.3	4188416.3	10.1	1.83	1.70	1.70	NO
L0004233	0	0.14104E-02	649768.9	4188416.4	10.1	1.83	1.70	1.70	NO
L0004234	0	0.14104E-02	649772.6	4188416.4	10.1	1.83	1.70	1.70	NO
L0004235	0	0.14104E-02	649776.3	4188416.5	10.1	1.83	1.70	1.70	NO
L0004236	0	0.14104E-02	649779.9	4188416.5	10.1	1.83	1.70	1.70	NO
L0004237	0	0.14104E-02	649783.6	4188416.6	10.1	1.83	1.70	1.70	NO
L0004238	0	0.14104E-02	649787.2	4188416.6	10.1	1.83	1.70	1.70	NO
L0004239	0	0.14104E-02	649790.9	4188416.7	10.1	1.83	1.70	1.70	NO
L0004240	0	0.14104E-02	649794.5	4188416.7	10.1	1.83	1.70	1.70	NO
L0004241	0	0.14104E-02	649798.2	4188416.7	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 16

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN EMISSION RATE SOURCE SCALAR VARY BY
L0004242	0	0.14104E-02	649801.9	4188416.8	10.1	1.83	1.70	1.70	NO
L0004243	0	0.14104E-02	649805.5	4188416.8	10.1	1.83	1.70	1.70	NO
L0004244	0	0.14104E-02	649809.2	4188416.9	10.1	1.83	1.70	1.70	NO
L0004245	0	0.14104E-02	649812.8	4188416.9	10.1	1.83	1.70	1.70	NO
L0004246	0	0.14104E-02	649816.5	4188417.0	10.1	1.83	1.70	1.70	NO
L0004247	0	0.14104E-02	649820.1	4188417.0	10.1	1.83	1.70	1.70	NO
L0004248	0	0.14104E-02	649823.8	4188417.1	10.1	1.83	1.70	1.70	NO
L0004249	0	0.14104E-02	649827.5	4188417.1	10.1	1.83	1.70	1.70	NO

L0004250	0	0.14104E-02	649831.1	4188417.1	10.1	1.83	1.70	1.70	NO
L0004251	0	0.14104E-02	649834.8	4188417.2	10.1	1.83	1.70	1.70	NO
L0004252	0	0.14104E-02	649838.4	4188417.2	10.1	1.83	1.70	1.70	NO
L0004253	0	0.14104E-02	649842.1	4188417.3	10.1	1.83	1.70	1.70	NO
L0004254	0	0.14104E-02	649845.7	4188417.3	10.1	1.83	1.70	1.70	NO
L0004255	0	0.14104E-02	649849.4	4188417.4	10.1	1.83	1.70	1.70	NO
L0004256	0	0.14104E-02	649853.1	4188417.4	10.1	1.83	1.70	1.70	NO
L0004257	0	0.14104E-02	649856.7	4188417.5	10.1	1.83	1.70	1.70	NO
L0004258	0	0.14104E-02	649860.4	4188417.5	10.1	1.83	1.70	1.70	NO
L0004259	0	0.14104E-02	649864.0	4188417.5	10.1	1.83	1.70	1.70	NO
L0004260	0	0.14104E-02	649867.7	4188417.6	10.1	1.83	1.70	1.70	NO
L0004261	0	0.14104E-02	649871.3	4188417.6	10.1	1.83	1.70	1.70	NO
L0004262	0	0.14104E-02	649875.0	4188417.7	10.1	1.83	1.70	1.70	NO
L0004263	0	0.14104E-02	649878.7	4188417.7	10.1	1.83	1.70	1.70	NO
L0004264	0	0.14104E-02	649882.3	4188417.8	10.1	1.83	1.70	1.70	NO
L0004265	0	0.14104E-02	649886.0	4188417.8	10.1	1.83	1.70	1.70	NO
L0004266	0	0.14104E-02	649889.6	4188417.9	10.1	1.83	1.70	1.70	NO
L0004267	0	0.14104E-02	649893.3	4188417.9	10.1	1.83	1.70	1.70	NO
L0004268	0	0.14104E-02	649896.9	4188418.0	10.1	1.83	1.70	1.70	NO
L0004269	0	0.14104E-02	649900.6	4188418.0	10.1	1.83	1.70	1.70	NO
L0004270	0	0.14104E-02	649904.3	4188418.0	10.1	1.83	1.70	1.70	NO
L0004271	0	0.14104E-02	649907.9	4188418.1	10.1	1.83	1.70	1.70	NO
L0004272	0	0.14104E-02	649911.6	4188418.1	10.1	1.83	1.70	1.70	NO
L0004273	0	0.14104E-02	649915.2	4188418.2	10.1	1.83	1.70	1.70	NO
L0004274	0	0.14104E-02	649918.9	4188418.2	10.1	1.83	1.70	1.70	NO
L0004275	0	0.14104E-02	649922.5	4188418.3	10.1	1.83	1.70	1.70	NO
L0004276	0	0.14104E-02	649926.2	4188418.3	10.1	1.83	1.70	1.70	NO
L0004277	0	0.14104E-02	649929.9	4188418.4	10.1	1.83	1.70	1.70	NO
L0004278	0	0.14104E-02	649933.5	4188418.4	10.1	1.83	1.70	1.70	NO
L0004279	0	0.14104E-02	649937.2	4188418.4	10.1	1.83	1.70	1.70	NO
L0004280	0	0.14104E-02	649940.8	4188418.5	10.1	1.83	1.70	1.70	NO
L0004281	0	0.14104E-02	649944.5	4188418.5	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 17

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	URBAN SZ (METERS)	EMISSION RATE SCALAR VARY BY

L0004282	0	0.14104E-02	649948.1	4188418.6	10.1	1.83	1.70	1.70	NO
L0004283	0	0.14104E-02	649951.8	4188418.6	10.1	1.83	1.70	1.70	NO
L0004284	0	0.14104E-02	649955.5	4188418.7	10.1	1.83	1.70	1.70	NO
L0004285	0	0.14104E-02	649959.1	4188418.7	10.1	1.83	1.70	1.70	NO
L0004286	0	0.14104E-02	649962.8	4188418.8	10.1	1.83	1.70	1.70	NO
L0004287	0	0.14104E-02	649966.4	4188418.8	10.1	1.83	1.70	1.70	NO
L0004288	0	0.14104E-02	649970.1	4188418.8	10.1	1.83	1.70	1.70	NO
L0004289	0	0.14104E-02	649973.8	4188418.9	10.1	1.83	1.70	1.70	NO
L0004290	0	0.14104E-02	649977.4	4188418.9	10.1	1.83	1.70	1.70	NO



L0004291	0	0.14104E-02	649981.1	4188419.0	10.1	1.83	1.70	1.70	NO
L0004292	0	0.14104E-02	649984.7	4188419.0	10.1	1.83	1.70	1.70	NO
L0004293	0	0.14104E-02	649988.4	4188419.1	10.1	1.83	1.70	1.70	NO
L0004294	0	0.14104E-02	649992.0	4188419.1	10.1	1.83	1.70	1.70	NO
L0004295	0	0.14104E-02	649995.7	4188419.2	10.1	1.83	1.70	1.70	NO
L0004296	0	0.14104E-02	649999.4	4188419.2	10.1	1.83	1.70	1.70	NO
L0004297	0	0.14104E-02	650003.0	4188419.2	10.1	1.83	1.70	1.70	NO
L0004298	0	0.14104E-02	650006.7	4188419.3	10.1	1.83	1.70	1.70	NO
L0004299	0	0.14104E-02	650010.3	4188419.3	10.1	1.83	1.70	1.70	NO
L0004300	0	0.14104E-02	650014.0	4188419.4	10.1	1.83	1.70	1.70	NO
L0004301	0	0.14104E-02	650017.6	4188419.4	10.1	1.83	1.70	1.70	NO
L0004302	0	0.14104E-02	650021.3	4188419.5	10.1	1.83	1.70	1.70	NO
L0004303	0	0.14104E-02	650025.0	4188419.5	10.1	1.83	1.70	1.70	NO
L0004304	0	0.14104E-02	650028.6	4188419.6	10.1	1.83	1.70	1.70	NO
L0004305	0	0.14104E-02	650032.3	4188419.6	10.1	1.83	1.70	1.70	NO
L0004306	0	0.14104E-02	650035.9	4188419.6	10.1	1.83	1.70	1.70	NO
L0004307	0	0.14104E-02	650039.6	4188419.7	10.1	1.83	1.70	1.70	NO
L0004308	0	0.14104E-02	650043.2	4188419.7	10.1	1.83	1.70	1.70	NO
L0004309	0	0.14104E-02	650046.9	4188419.8	10.1	1.83	1.70	1.70	NO
L0004310	0	0.14104E-02	650050.6	4188419.8	10.1	1.83	1.70	1.70	NO
L0004311	0	0.14104E-02	650054.2	4188419.9	10.1	1.83	1.70	1.70	NO
L0004312	0	0.14104E-02	650057.9	4188419.9	10.1	1.83	1.70	1.70	NO
L0004313	0	0.14104E-02	650061.5	4188420.0	10.1	1.83	1.70	1.70	NO
L0004314	0	0.14104E-02	650065.2	4188420.0	10.1	1.83	1.70	1.70	NO
L0004315	0	0.14104E-02	650068.8	4188420.0	10.1	1.83	1.70	1.70	NO
L0004316	0	0.14104E-02	650072.5	4188420.1	10.1	1.83	1.70	1.70	NO
L0004317	0	0.14104E-02	650076.2	4188420.1	10.1	1.83	1.70	1.70	NO
L0004318	0	0.14104E-02	650079.8	4188420.2	10.1	1.83	1.70	1.70	NO
L0004319	0	0.14104E-02	650083.5	4188420.2	10.1	1.83	1.70	1.70	NO
L0004320	0	0.14104E-02	650087.1	4188420.3	10.1	1.83	1.70	1.70	NO
L0004321	0	0.14104E-02	650090.8	4188420.3	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 18

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE RELEASE			INIT.	INIT.	URBAN EMISSION RATE	
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY

L0004322	0	0.14104E-02	650094.4	4188420.4	10.1	1.83	1.70	1.70	NO
L0004323	0	0.14104E-02	650098.1	4188420.4	10.1	1.83	1.70	1.70	NO
L0004324	0	0.14104E-02	650101.8	4188420.4	10.1	1.83	1.70	1.70	NO
L0004325	0	0.14104E-02	650105.4	4188420.5	10.1	1.83	1.70	1.70	NO
L0004326	0	0.14104E-02	650109.1	4188420.5	10.1	1.83	1.70	1.70	NO
L0004327	0	0.14104E-02	650112.7	4188420.6	10.1	1.83	1.70	1.70	NO
L0004328	0	0.14104E-02	650116.4	4188420.6	10.1	1.83	1.70	1.70	NO
L0004329	0	0.14104E-02	650120.0	4188420.7	10.1	1.83	1.70	1.70	NO
L0004330	0	0.14104E-02	650123.7	4188420.7	10.1	1.83	1.70	1.70	NO
L0004331	0	0.14104E-02	650127.4	4188420.8	10.1	1.83	1.70	1.70	NO

L0004332	0	0.14104E-02	650131.0	4188420.8	10.1	1.83	1.70	1.70	NO
L0004333	0	0.14104E-02	650134.7	4188420.9	10.1	1.83	1.70	1.70	NO
L0004334	0	0.14104E-02	650138.3	4188420.9	10.1	1.83	1.70	1.70	NO
L0004335	0	0.14104E-02	650142.0	4188420.9	10.1	1.83	1.70	1.70	NO
L0004336	0	0.14104E-02	650145.6	4188421.0	10.1	1.83	1.70	1.70	NO
L0004337	0	0.14104E-02	650149.3	4188421.0	10.1	1.83	1.70	1.70	NO
L0004338	0	0.14104E-02	650153.0	4188421.1	10.1	1.83	1.70	1.70	NO
L0004339	0	0.14104E-02	650156.6	4188421.1	10.1	1.83	1.70	1.70	NO
L0004340	0	0.14104E-02	650160.3	4188421.2	10.1	1.83	1.70	1.70	NO
L0004341	0	0.14104E-02	650163.9	4188421.2	10.1	1.83	1.70	1.70	NO
L0004342	0	0.14104E-02	650167.6	4188421.3	10.1	1.83	1.70	1.70	NO
L0004343	0	0.14104E-02	650171.2	4188421.3	10.1	1.83	1.70	1.70	NO
L0004344	0	0.14104E-02	650174.9	4188421.3	10.1	1.83	1.70	1.70	NO
L0004345	0	0.14104E-02	650178.6	4188421.4	10.1	1.83	1.70	1.70	NO
L0004346	0	0.14104E-02	650182.2	4188421.4	10.1	1.83	1.70	1.70	NO
L0004347	0	0.14104E-02	650185.9	4188421.5	10.1	1.83	1.70	1.70	NO
L0004348	0	0.14104E-02	650189.5	4188421.5	10.1	1.83	1.70	1.70	NO
L0004349	0	0.14104E-02	650193.2	4188421.6	10.1	1.83	1.70	1.70	NO
L0004350	0	0.14104E-02	650196.8	4188421.6	10.1	1.83	1.70	1.70	NO
L0004351	0	0.14104E-02	650200.5	4188421.7	10.1	1.83	1.70	1.70	NO
L0004352	0	0.14104E-02	650204.2	4188421.7	10.1	1.83	1.70	1.70	NO
L0004353	0	0.14104E-02	650207.8	4188421.7	10.1	1.83	1.70	1.70	NO
L0004354	0	0.14104E-02	650211.5	4188421.8	10.1	1.83	1.70	1.70	NO
L0004355	0	0.14104E-02	650215.1	4188421.8	10.1	1.83	1.70	1.70	NO
L0004356	0	0.14104E-02	650218.8	4188421.9	10.1	1.83	1.70	1.70	NO
L0004357	0	0.14104E-02	650222.4	4188421.9	10.1	1.83	1.70	1.70	NO
L0004358	0	0.14104E-02	650226.1	4188422.0	10.1	1.83	1.70	1.70	NO
L0004359	0	0.14104E-02	650229.8	4188422.0	10.1	1.83	1.70	1.70	NO
L0004360	0	0.14104E-02	650233.4	4188422.1	10.1	1.83	1.70	1.70	NO
L0004361	0	0.14104E-02	650237.1	4188422.1	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 19

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE	RELEASE	INIT.	INIT.	URBAN	EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY
L0004362	0	0.14104E-02	650240.7	4188422.1	10.1	1.83	1.70	1.70	NO
L0004363	0	0.14104E-02	650244.4	4188422.2	10.1	1.83	1.70	1.70	NO
L0004364	0	0.14104E-02	650248.1	4188422.2	10.1	1.83	1.70	1.70	NO
L0004365	0	0.14104E-02	650251.7	4188422.3	10.1	1.83	1.70	1.70	NO
L0004366	0	0.14104E-02	650255.4	4188422.3	10.1	1.83	1.70	1.70	NO
L0004367	0	0.14104E-02	650259.0	4188422.4	10.1	1.83	1.70	1.70	NO
L0004368	0	0.14104E-02	650262.7	4188422.4	10.1	1.83	1.70	1.70	NO
L0004369	0	0.14104E-02	650266.3	4188422.5	10.1	1.83	1.70	1.70	NO
L0004370	0	0.14104E-02	650270.0	4188422.5	10.1	1.83	1.70	1.70	NO
L0004371	0	0.14104E-02	650273.7	4188422.5	10.1	1.83	1.70	1.70	NO
L0004372	0	0.14104E-02	650277.3	4188422.6	10.1	1.83	1.70	1.70	NO

L0004373	0	0.14104E-02	650281.0	4188422.6	10.1	1.83	1.70	1.70	NO
L0004374	0	0.14104E-02	650284.6	4188422.7	10.1	1.83	1.70	1.70	NO
L0004375	0	0.14104E-02	650288.3	4188422.7	10.1	1.83	1.70	1.70	NO
L0004376	0	0.14104E-02	650291.9	4188422.8	10.1	1.83	1.70	1.70	NO
L0004377	0	0.14104E-02	650295.6	4188422.8	10.1	1.83	1.70	1.70	NO
L0004378	0	0.14104E-02	650299.3	4188422.9	10.1	1.83	1.70	1.70	NO
L0004379	0	0.14104E-02	650302.9	4188422.9	10.1	1.83	1.70	1.70	NO
L0004380	0	0.14104E-02	650306.6	4188422.9	10.1	1.83	1.70	1.70	NO
L0004381	0	0.14104E-02	650310.2	4188423.0	10.1	1.83	1.70	1.70	NO
L0004382	0	0.14104E-02	650313.9	4188423.0	10.1	1.83	1.70	1.70	NO
L0004383	0	0.14104E-02	650317.5	4188423.1	10.1	1.83	1.70	1.70	NO
L0004384	0	0.14104E-02	650321.2	4188423.1	10.1	1.83	1.70	1.70	NO
L0004385	0	0.14104E-02	650324.9	4188423.2	10.1	1.83	1.70	1.70	NO
L0004386	0	0.14104E-02	650328.5	4188423.2	10.1	1.83	1.70	1.70	NO
L0004387	0	0.14104E-02	650332.2	4188423.3	10.1	1.83	1.70	1.70	NO
L0004388	0	0.14104E-02	650335.8	4188423.3	10.1	1.83	1.70	1.70	NO
L0004389	0	0.14104E-02	650339.5	4188423.3	10.1	1.83	1.70	1.70	NO
L0004390	0	0.14104E-02	650343.1	4188423.4	10.1	1.83	1.70	1.70	NO
L0004391	0	0.14104E-02	650346.8	4188423.4	10.1	1.83	1.70	1.70	NO
L0004392	0	0.14104E-02	650350.5	4188423.5	10.1	1.83	1.70	1.70	NO
L0004393	0	0.14104E-02	650354.1	4188423.5	10.1	1.83	1.70	1.70	NO
L0004394	0	0.14104E-02	650357.8	4188423.6	10.1	1.83	1.70	1.70	NO
L0004395	0	0.14104E-02	650361.4	4188423.6	10.1	1.83	1.70	1.70	NO
L0004396	0	0.14104E-02	650365.1	4188423.7	10.1	1.83	1.70	1.70	NO
L0004397	0	0.14104E-02	650368.7	4188423.7	10.1	1.83	1.70	1.70	NO
L0004398	0	0.14104E-02	650372.4	4188423.8	10.1	1.83	1.70	1.70	NO
L0004399	0	0.14104E-02	650376.1	4188423.8	10.1	1.83	1.70	1.70	NO
L0004400	0	0.14104E-02	650379.7	4188423.8	10.1	1.83	1.70	1.70	NO
L0004401	0	0.14104E-02	650383.4	4188423.9	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 20

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER CATS.	EMISSION RATE (GRAMS/SEC)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	URBAN SY (METERS)	EMISSION SZ (METERS)	RATE SCALAR VARY BY
-----------	--------------	---------------------------	-----------------	--------------------	----------------------	-----------------------	-------------------	----------------------	---------------------

L0004402	0	0.14104E-02	650387.0	4188423.9	10.1	1.83	1.70	1.70	NO
L0004403	0	0.14104E-02	650390.7	4188424.0	10.1	1.83	1.70	1.70	NO
L0004404	0	0.14104E-02	650394.3	4188424.0	10.1	1.83	1.70	1.70	NO
L0004405	0	0.14104E-02	650398.0	4188424.1	10.1	1.83	1.70	1.70	NO
L0004406	0	0.14104E-02	650401.7	4188424.1	10.1	1.83	1.70	1.70	NO
L0004407	0	0.14104E-02	650405.3	4188424.2	10.1	1.83	1.70	1.70	NO
L0004408	0	0.14104E-02	650409.0	4188424.2	10.1	1.83	1.70	1.70	NO
L0004409	0	0.14104E-02	650412.6	4188424.2	10.1	1.83	1.70	1.70	NO
L0004410	0	0.14104E-02	650416.3	4188424.3	10.1	1.83	1.70	1.70	NO
L0004411	0	0.14104E-02	650419.9	4188424.3	10.1	1.83	1.70	1.70	NO
L0004412	0	0.14104E-02	650423.6	4188424.4	10.1	1.83	1.70	1.70	NO
L0004413	0	0.14104E-02	650427.3	4188424.4	10.1	1.83	1.70	1.70	NO

L0004414	0	0.14104E-02	650430.9	4188424.5	10.1	1.83	1.70	1.70	NO
L0004415	0	0.14104E-02	650434.6	4188424.5	10.1	1.83	1.70	1.70	NO
L0004416	0	0.14104E-02	650434.7	4188420.9	10.1	1.83	1.70	1.70	NO
L0004417	0	0.14104E-02	650434.9	4188417.2	10.1	1.83	1.70	1.70	NO
L0004418	0	0.14104E-02	650435.0	4188413.6	10.1	1.83	1.70	1.70	NO
L0004419	0	0.14104E-02	650435.1	4188409.9	10.1	1.83	1.70	1.70	NO
L0004420	0	0.14104E-02	650435.3	4188406.3	10.1	1.83	1.70	1.70	NO
L0004421	0	0.14104E-02	650435.4	4188402.6	10.1	1.83	1.70	1.70	NO
L0004422	0	0.14104E-02	650435.5	4188399.0	10.1	1.83	1.70	1.70	NO
L0004423	0	0.14104E-02	650435.7	4188395.3	10.1	1.83	1.70	1.70	NO
L0004424	0	0.14104E-02	650435.8	4188391.6	10.1	1.83	1.70	1.70	NO
L0004425	0	0.14104E-02	650435.9	4188388.0	10.1	1.83	1.70	1.70	NO
L0004426	0	0.14104E-02	650436.1	4188384.3	10.1	1.83	1.70	1.70	NO
L0004427	0	0.14104E-02	650436.2	4188380.7	10.1	1.83	1.70	1.70	NO
L0004428	0	0.14104E-02	650436.3	4188377.0	10.1	1.83	1.70	1.70	NO
L0004429	0	0.14104E-02	650436.5	4188373.4	10.1	1.83	1.70	1.70	NO
L0004430	0	0.14104E-02	650436.6	4188369.7	10.1	1.83	1.70	1.70	NO
L0004431	0	0.35211E-02	650476.6	4188657.2	10.1	1.83	1.70	1.70	NO
L0004432	0	0.35211E-02	650480.3	4188657.3	10.1	1.83	1.70	1.70	NO
L0004433	0	0.35211E-02	650483.9	4188657.4	10.1	1.83	1.70	1.70	NO
L0004434	0	0.35211E-02	650487.6	4188657.4	10.1	1.83	1.70	1.70	NO
L0004435	0	0.35211E-02	650491.2	4188657.5	10.1	1.83	1.70	1.70	NO
L0004436	0	0.35211E-02	650494.9	4188657.6	10.1	1.83	1.70	1.70	NO
L0004437	0	0.35211E-02	650498.6	4188657.7	10.1	1.83	1.70	1.70	NO
L0004438	0	0.35211E-02	650502.2	4188657.8	10.1	1.83	1.70	1.70	NO
L0004439	0	0.35211E-02	650505.9	4188657.8	10.1	1.83	1.70	1.70	NO
L0004440	0	0.35211E-02	650509.5	4188657.9	10.1	1.83	1.70	1.70	NO
L0004441	0	0.35211E-02	650513.2	4188658.0	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 21

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER CATS.	EMISSION RATE (GRAMS/SEC)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	URBAN SY (METERS)	EMISSION SZ (METERS)	RATE VARY BY
L0004442	0	0.35211E-02	650516.8	4188658.1	10.1	1.83	1.70	1.70	NO
L0004443	0	0.35211E-02	650520.5	4188658.1	10.1	1.83	1.70	1.70	NO
L0004444	0	0.35211E-02	650524.2	4188658.2	10.1	1.83	1.70	1.70	NO
L0004445	0	0.35211E-02	650527.8	4188658.3	10.1	1.83	1.70	1.70	NO
L0004446	0	0.35211E-02	650531.5	4188658.4	10.1	1.83	1.70	1.70	NO
L0004447	0	0.35211E-02	650535.1	4188658.4	10.1	1.83	1.70	1.70	NO
L0004448	0	0.35211E-02	650538.8	4188658.5	10.1	1.83	1.70	1.70	NO
L0004449	0	0.35211E-02	650542.4	4188658.6	10.1	1.83	1.70	1.70	NO
L0004450	0	0.35211E-02	650546.1	4188658.7	10.1	1.83	1.70	1.70	NO
L0004451	0	0.35211E-02	650549.8	4188658.7	10.1	1.83	1.70	1.70	NO
L0004452	0	0.35211E-02	650553.4	4188658.8	10.1	1.83	1.70	1.70	NO
L0004453	0	0.35211E-02	650557.1	4188658.9	10.1	1.83	1.70	1.70	NO
L0004454	0	0.35211E-02	650560.7	4188659.0	10.1	1.83	1.70	1.70	NO

L0004455	0	0.35211E-02	650564.4	4188659.0	10.1	1.83	1.70	1.70	NO
L0004456	0	0.35211E-02	650568.0	4188659.1	10.1	1.83	1.70	1.70	NO
L0004457	0	0.35211E-02	650571.7	4188659.2	10.1	1.83	1.70	1.70	NO
L0004458	0	0.35211E-02	650575.3	4188659.3	10.1	1.83	1.70	1.70	NO
L0004459	0	0.35211E-02	650579.0	4188659.4	10.1	1.83	1.70	1.70	NO
L0004460	0	0.35211E-02	650582.7	4188659.4	10.1	1.83	1.70	1.70	NO
L0004461	0	0.35211E-02	650586.3	4188659.5	10.1	1.83	1.70	1.70	NO
L0004462	0	0.35211E-02	650590.0	4188659.6	10.1	1.83	1.70	1.70	NO
L0004463	0	0.35211E-02	650593.6	4188659.7	10.1	1.83	1.70	1.70	NO
L0004464	0	0.35211E-02	650597.3	4188659.7	10.1	1.83	1.70	1.70	NO
L0004465	0	0.35211E-02	650600.9	4188659.8	10.1	1.83	1.70	1.70	NO
L0004466	0	0.35211E-02	650604.6	4188659.9	10.1	1.83	1.70	1.70	NO
L0004467	0	0.35211E-02	650608.3	4188660.0	10.1	1.83	1.70	1.70	NO
L0004468	0	0.35211E-02	650611.9	4188660.0	10.1	1.83	1.70	1.70	NO
L0004469	0	0.35211E-02	650615.6	4188660.1	10.1	1.83	1.70	1.70	NO
L0004470	0	0.35211E-02	650619.2	4188660.2	10.1	1.83	1.70	1.70	NO
L0004471	0	0.35211E-02	650622.9	4188660.3	10.1	1.83	1.70	1.70	NO
L0004472	0	0.35211E-02	650626.5	4188660.3	10.1	1.83	1.70	1.70	NO
L0004473	0	0.35211E-02	650630.2	4188660.4	10.1	1.83	1.70	1.70	NO
L0004474	0	0.35211E-02	650633.9	4188660.5	10.1	1.83	1.70	1.70	NO
L0004475	0	0.35211E-02	650637.5	4188660.6	10.1	1.83	1.70	1.70	NO
L0004476	0	0.35211E-02	650641.2	4188660.6	10.1	1.83	1.70	1.70	NO
L0004477	0	0.35211E-02	650644.8	4188660.7	10.1	1.83	1.70	1.70	NO
L0004478	0	0.35211E-02	650648.5	4188660.8	10.1	1.83	1.70	1.70	NO
L0004479	0	0.35211E-02	650650.7	4188662.7	10.1	1.83	1.70	1.70	NO
L0004480	0	0.35211E-02	650651.6	4188666.2	10.1	1.83	1.70	1.70	NO
L0004481	0	0.35211E-02	650652.5	4188669.8	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 22

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC) (METERS)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	SY (METERS)	SZ (METERS)	URBAN SOURCE SCALAR VARY BY
L0004482	0	0.35211E-02	650653.4	4188673.3	10.1	1.83	1.70	1.70	NO
L0004483	0	0.35211E-02	650654.3	4188676.9	10.1	1.83	1.70	1.70	NO
L0004484	0	0.35211E-02	650655.2	4188680.4	10.1	1.83	1.70	1.70	NO
L0004485	0	0.35211E-02	650656.1	4188684.0	10.1	1.83	1.70	1.70	NO
L0004486	0	0.35211E-02	650657.0	4188687.5	10.1	1.83	1.70	1.70	NO
L0004487	0	0.35211E-02	650657.9	4188691.1	10.1	1.83	1.70	1.70	NO
L0004488	0	0.35211E-02	650658.8	4188694.6	10.1	1.83	1.70	1.70	NO
L0004489	0	0.35211E-02	650659.7	4188698.1	10.1	1.83	1.70	1.70	NO
L0004490	0	0.35211E-02	650660.6	4188701.7	10.1	1.83	1.70	1.70	NO
L0004491	0	0.35211E-02	650661.5	4188705.2	10.1	1.83	1.70	1.70	NO
L0004492	0	0.35211E-02	650662.4	4188708.8	10.1	1.83	1.70	1.70	NO
L0004493	0	0.35211E-02	650663.4	4188712.3	10.1	1.83	1.70	1.70	NO
L0004494	0	0.35211E-02	650664.3	4188715.9	10.1	1.83	1.70	1.70	NO
L0004495	0	0.35211E-02	650665.2	4188719.4	10.1	1.83	1.70	1.70	NO

L0004496	0	0.35211E-02	650666.1	4188723.0	10.1	1.83	1.70	1.70	NO
L0004497	0	0.35211E-02	650667.0	4188726.5	10.1	1.83	1.70	1.70	NO
L0004498	0	0.35211E-02	650667.9	4188730.0	10.1	1.83	1.70	1.70	NO
L0004499	0	0.35211E-02	650668.8	4188733.6	10.1	1.83	1.70	1.70	NO
L0004500	0	0.35211E-02	650669.7	4188737.1	10.1	1.83	1.70	1.70	NO
L0004501	0	0.35211E-02	650670.6	4188740.7	10.1	1.83	1.70	1.70	NO
L0004502	0	0.35211E-02	650671.5	4188744.2	10.1	1.83	1.70	1.70	NO
L0004503	0	0.35211E-02	650672.4	4188747.8	10.1	1.83	1.70	1.70	NO
L0004504	0	0.35211E-02	650673.3	4188751.3	10.1	1.83	1.70	1.70	NO
L0004505	0	0.35211E-02	650674.2	4188754.8	10.1	1.83	1.70	1.70	NO
L0004506	0	0.35211E-02	650675.1	4188758.4	10.1	1.83	1.70	1.70	NO
L0004507	0	0.35211E-02	650676.0	4188761.9	10.1	1.83	1.70	1.70	NO
L0004508	0	0.35211E-02	650676.9	4188765.5	10.1	1.83	1.70	1.70	NO
L0004509	0	0.35211E-02	650677.8	4188769.0	10.1	1.83	1.70	1.70	NO
L0004510	0	0.35211E-02	650678.7	4188772.6	10.1	1.83	1.70	1.70	NO
L0004511	0	0.35211E-02	650679.6	4188776.1	10.1	1.83	1.70	1.70	NO
L0004512	0	0.35211E-02	650680.5	4188779.7	10.1	1.83	1.70	1.70	NO
L0004513	0	0.35211E-02	650681.2	4188783.3	10.1	1.83	1.70	1.70	NO
L0004514	0	0.35211E-02	650681.8	4188786.9	10.1	1.83	1.70	1.70	NO
L0004515	0	0.35211E-02	650682.4	4188790.5	10.1	1.83	1.70	1.70	NO
L0004516	0	0.35211E-02	650683.0	4188794.1	10.1	1.83	1.70	1.70	NO
L0004517	0	0.35211E-02	650683.6	4188797.7	10.1	1.83	1.70	1.70	NO
L0004518	0	0.35211E-02	650684.2	4188801.3	10.1	1.83	1.70	1.70	NO
L0004519	0	0.35211E-02	650684.8	4188804.9	10.1	1.83	1.70	1.70	NO
L0004520	0	0.35211E-02	650685.4	4188808.5	10.1	1.83	1.70	1.70	NO
L0004521	0	0.35211E-02	650685.9	4188812.1	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 23

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	BASE X (METERS)	RELEASE Y (METERS)	INIT. ELEV. (METERS)	INIT. HEIGHT (METERS)	SY (METERS)	SZ (METERS)	URBAN EMISSION RATE SCALAR VARY BY
L0004522	0	0.35211E-02	650686.5	4188815.7	10.1	1.83	1.70	1.70	NO
L0004523	0	0.35211E-02	650687.1	4188819.3	10.1	1.83	1.70	1.70	NO
L0004524	0	0.35211E-02	650687.7	4188823.0	10.1	1.83	1.70	1.70	NO
L0004525	0	0.35211E-02	650688.3	4188826.6	10.1	1.83	1.70	1.70	NO
L0004526	0	0.35211E-02	650688.9	4188830.2	10.1	1.83	1.70	1.70	NO
L0004527	0	0.35211E-02	650689.5	4188833.8	10.1	1.83	1.70	1.70	NO
L0004528	0	0.35211E-02	650690.1	4188837.4	10.1	1.83	1.70	1.70	NO
L0004529	0	0.35211E-02	650690.7	4188841.0	10.1	1.83	1.70	1.70	NO
L0004530	0	0.35211E-02	650691.3	4188844.6	10.1	1.83	1.70	1.70	NO
L0004531	0	0.35211E-02	650691.9	4188848.2	10.1	1.83	1.70	1.70	NO
L0004532	0	0.35211E-02	650692.5	4188851.8	10.1	1.83	1.70	1.70	NO
L0004533	0	0.35211E-02	650693.1	4188855.4	10.1	1.83	1.70	1.70	NO
L0004534	0	0.35211E-02	650693.7	4188859.0	10.1	1.83	1.70	1.70	NO
L0004535	0	0.35211E-02	650694.3	4188862.6	10.1	1.83	1.70	1.70	NO
L0004536	0	0.35211E-02	650694.9	4188866.3	10.1	1.83	1.70	1.70	NO

L0004537	0	0.35211E-02	650695.5	4188869.9	10.1	1.83	1.70	1.70	NO
L0004538	0	0.35211E-02	650696.1	4188873.5	10.1	1.83	1.70	1.70	NO
L0004539	0	0.35211E-02	650696.7	4188877.1	10.1	1.83	1.70	1.70	NO
L0004540	0	0.35211E-02	650697.3	4188880.7	10.1	1.83	1.70	1.70	NO
L0004541	0	0.35211E-02	650697.9	4188884.3	10.1	1.83	1.70	1.70	NO
L0004542	0	0.35211E-02	650698.5	4188887.9	10.1	1.83	1.70	1.70	NO
L0004543	0	0.35211E-02	650699.1	4188891.5	10.1	1.83	1.70	1.70	NO
L0004544	0	0.35211E-02	650699.7	4188895.1	10.1	1.83	1.70	1.70	NO
L0004545	0	0.35211E-02	650700.3	4188898.7	10.1	1.83	1.70	1.70	NO
L0004546	0	0.35211E-02	650700.9	4188902.3	10.1	1.83	1.70	1.70	NO
L0004547	0	0.35211E-02	650701.5	4188906.0	10.1	1.83	1.70	1.70	NO
L0004548	0	0.35211E-02	650702.1	4188909.6	10.1	1.83	1.70	1.70	NO
L0004549	0	0.35211E-02	650702.6	4188913.2	10.1	1.83	1.70	1.70	NO
L0004550	0	0.35211E-02	650703.2	4188916.8	10.1	1.83	1.70	1.70	NO
L0004551	0	0.35211E-02	650703.8	4188920.4	10.1	1.83	1.70	1.70	NO
L0004552	0	0.35211E-02	650704.4	4188924.0	10.1	1.83	1.70	1.70	NO
L0004553	0	0.35211E-02	650705.0	4188927.6	10.1	1.83	1.70	1.70	NO
L0004554	0	0.35211E-02	650705.6	4188931.2	10.1	1.83	1.70	1.70	NO
L0004555	0	0.35211E-02	650706.2	4188934.8	10.1	1.83	1.70	1.70	NO
L0004556	0	0.35211E-02	650706.8	4188938.4	10.1	1.83	1.70	1.70	NO
L0004557	0	0.35211E-02	650707.4	4188942.0	10.1	1.83	1.70	1.70	NO
L0004558	0	0.35211E-02	650708.0	4188945.6	10.1	1.83	1.70	1.70	NO
L0004559	0	0.35211E-02	650708.6	4188949.3	10.1	1.83	1.70	1.70	NO
L0004560	0	0.35211E-02	650709.2	4188952.9	10.1	1.83	1.70	1.70	NO
L0004561	0	0.35211E-02	650709.8	4188956.5	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 24

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE		RELEASE	INIT.	INIT.	URBAN		EMISSION RATE
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY
L0004562	0	0.35211E-02	650710.4	4188960.1	10.1	1.83	1.70	1.70	NO
L0004563	0	0.35211E-02	650711.0	4188963.7	10.1	1.83	1.70	1.70	NO
L0004564	0	0.35211E-02	650711.6	4188967.3	10.1	1.83	1.70	1.70	NO
L0004565	0	0.35211E-02	650712.2	4188970.9	10.1	1.83	1.70	1.70	NO
L0004566	0	0.35211E-02	650712.8	4188974.5	10.1	1.83	1.70	1.70	NO
L0004567	0	0.35211E-02	650713.4	4188978.1	10.1	1.83	1.70	1.70	NO
L0004568	0	0.35211E-02	650714.0	4188981.7	10.1	1.83	1.70	1.70	NO
L0004569	0	0.35211E-02	650714.6	4188985.3	10.1	1.83	1.70	1.70	NO
L0004570	0	0.35211E-02	650715.2	4188988.9	10.1	1.83	1.70	1.70	NO
L0004571	0	0.35211E-02	650715.8	4188992.6	10.1	1.83	1.70	1.70	NO
L0004572	0	0.35211E-02	650716.4	4188996.2	10.1	1.83	1.70	1.70	NO
L0004573	0	0.35211E-02	650717.0	4188999.8	10.1	1.83	1.70	1.70	NO
L0004574	0	0.35211E-02	650717.6	4189003.4	10.1	1.83	1.70	1.70	NO
L0004575	0	0.35211E-02	650718.2	4189007.0	10.1	1.83	1.70	1.70	NO
L0004576	0	0.35211E-02	650718.8	4189010.6	10.1	1.83	1.70	1.70	NO
L0004577	0	0.35211E-02	650719.3	4189014.2	10.1	1.83	1.70	1.70	NO

L0004578	0	0.35211E-02	650719.9	4189017.8	10.1	1.83	1.70	1.70	NO
L0004579	0	0.35211E-02	650720.5	4189021.4	10.1	1.83	1.70	1.70	NO
L0004580	0	0.35211E-02	650721.1	4189025.0	10.1	1.83	1.70	1.70	NO
L0004581	0	0.35211E-02	650721.7	4189028.6	10.1	1.83	1.70	1.70	NO
L0004582	0	0.35211E-02	650722.3	4189032.3	10.1	1.83	1.70	1.70	NO
L0004583	0	0.35211E-02	650722.9	4189035.9	10.1	1.83	1.70	1.70	NO
L0004584	0	0.35211E-02	650723.5	4189039.5	10.1	1.83	1.70	1.70	NO
L0004585	0	0.35211E-02	650724.1	4189043.1	10.1	1.83	1.70	1.70	NO
L0004586	0	0.35211E-02	650724.7	4189046.7	10.1	1.83	1.70	1.70	NO
L0004587	0	0.35211E-02	650725.3	4189050.3	10.1	1.83	1.70	1.70	NO
L0004588	0	0.35211E-02	650725.9	4189053.9	10.1	1.83	1.70	1.70	NO
L0004589	0	0.35211E-02	650726.5	4189057.5	10.1	1.83	1.70	1.70	NO
L0004590	0	0.35211E-02	650727.1	4189061.1	10.1	1.83	1.70	1.70	NO
L0004591	0	0.35211E-02	650727.7	4189064.7	10.1	1.83	1.70	1.70	NO
L0004592	0	0.35211E-02	650728.3	4189068.3	10.1	1.83	1.70	1.70	NO
L0004593	0	0.35211E-02	650728.9	4189071.9	10.1	1.83	1.70	1.70	NO
L0004594	0	0.35211E-02	650729.5	4189075.6	10.1	1.83	1.70	1.70	NO
L0004595	0	0.35211E-02	650730.1	4189079.2	10.1	1.83	1.70	1.70	NO
L0004596	0	0.35211E-02	650730.7	4189082.8	10.1	1.83	1.70	1.70	NO
L0004597	0	0.35211E-02	650731.3	4189086.4	10.1	1.83	1.70	1.70	NO
L0004598	0	0.35211E-02	650731.9	4189090.0	10.1	1.83	1.70	1.70	NO
L0004599	0	0.35211E-02	650732.5	4189093.6	10.1	1.83	1.70	1.70	NO
L0004600	0	0.35211E-02	650733.1	4189097.2	10.1	1.83	1.70	1.70	NO
L0004601	0	0.35211E-02	650733.7	4189100.8	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*

\*\*\* 15:03:05

PAGE 25

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)	URBAN EMISSION RATE SOURCE SCALAR VARY BY
L0004602	0	0.35211E-02	650734.3	4189104.4	10.1	1.83	1.70	1.70	NO
L0004603	0	0.35211E-02	650734.9	4189108.0	10.1	1.83	1.70	1.70	NO
L0004604	0	0.35211E-02	650735.5	4189111.6	10.1	1.83	1.70	1.70	NO
L0004605	0	0.35211E-02	650736.0	4189115.3	10.1	1.83	1.70	1.70	NO
L0004606	0	0.35211E-02	650736.6	4189118.9	10.1	1.83	1.70	1.70	NO
L0004607	0	0.35211E-02	650737.2	4189122.5	10.1	1.83	1.70	1.70	NO
L0004608	0	0.35211E-02	650737.8	4189126.1	10.1	1.83	1.70	1.70	NO
L0004609	0	0.35211E-02	650738.4	4189129.7	10.1	1.83	1.70	1.70	NO
L0004610	0	0.35211E-02	650739.0	4189133.3	10.1	1.83	1.70	1.70	NO
L0004611	0	0.35211E-02	650739.6	4189136.9	10.1	1.83	1.70	1.70	NO
L0004612	0	0.35211E-02	650740.2	4189140.5	10.1	1.83	1.70	1.70	NO
L0004613	0	0.35211E-02	650740.8	4189144.1	10.1	1.83	1.70	1.70	NO
L0004614	0	0.35211E-02	650741.4	4189147.7	10.1	1.83	1.70	1.70	NO
L0004615	0	0.35211E-02	650742.0	4189151.3	10.1	1.83	1.70	1.70	NO
L0004616	0	0.35211E-02	650742.6	4189154.9	10.1	1.83	1.70	1.70	NO
L0004617	0	0.35211E-02	650743.2	4189158.6	10.1	1.83	1.70	1.70	NO
L0004618	0	0.35211E-02	650743.8	4189162.2	10.1	1.83	1.70	1.70	NO



L0004619	0	0.35211E-02	650744.4	4189165.8	10.1	1.83	1.70	1.70	NO
L0004620	0	0.35211E-02	650745.0	4189169.4	10.1	1.83	1.70	1.70	NO
L0004621	0	0.35211E-02	650745.6	4189173.0	10.1	1.83	1.70	1.70	NO
L0004622	0	0.35211E-02	650746.2	4189176.6	10.1	1.83	1.70	1.70	NO
L0004623	0	0.35211E-02	650746.8	4189180.2	10.1	1.83	1.70	1.70	NO
L0004624	0	0.35211E-02	650747.4	4189183.8	10.1	1.83	1.70	1.70	NO
L0004625	0	0.35211E-02	650748.0	4189187.4	10.1	1.83	1.70	1.70	NO
L0004626	0	0.35211E-02	650748.6	4189191.0	10.1	1.83	1.70	1.70	NO
L0004627	0	0.35211E-02	650749.2	4189194.6	10.1	1.83	1.70	1.70	NO
L0004628	0	0.35211E-02	650749.8	4189198.3	10.1	1.83	1.70	1.70	NO
L0004629	0	0.35211E-02	650750.4	4189201.9	10.1	1.83	1.70	1.70	NO
L0004630	0	0.35211E-02	650751.0	4189205.5	10.1	1.83	1.70	1.70	NO
L0004631	0	0.35211E-02	650751.6	4189209.1	10.1	1.83	1.70	1.70	NO
L0004632	0	0.35211E-02	650752.2	4189212.7	10.1	1.83	1.70	1.70	NO
L0004633	0	0.35211E-02	650752.7	4189216.3	10.1	1.83	1.70	1.70	NO
L0004634	0	0.35211E-02	650753.3	4189219.9	10.1	1.83	1.70	1.70	NO
L0004635	0	0.35211E-02	650753.9	4189223.5	10.1	1.83	1.70	1.70	NO
L0004636	0	0.35211E-02	650754.5	4189227.1	10.1	1.83	1.70	1.70	NO
L0004637	0	0.35211E-02	650755.1	4189230.7	10.1	1.83	1.70	1.70	NO
L0004638	0	0.35211E-02	650755.7	4189234.3	10.1	1.83	1.70	1.70	NO
L0004639	0	0.35211E-02	650756.3	4189237.9	10.1	1.83	1.70	1.70	NO
L0004640	0	0.35211E-02	650756.9	4189241.6	10.1	1.83	1.70	1.70	NO
L0004641	0	0.35211E-02	650757.5	4189245.2	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 26

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN EMISSION RATE SOURCE SCALAR VARY BY
-----------	-------------	---	------------	------------	-----------------------------	-----------------------	-------------------	-------------------	---

L0004642	0	0.35211E-02	650758.1	4189248.8	10.1	1.83	1.70	1.70	NO
L0004643	0	0.35211E-02	650758.7	4189252.4	10.1	1.83	1.70	1.70	NO
L0004644	0	0.35211E-02	650759.3	4189256.0	10.1	1.83	1.70	1.70	NO
L0004645	0	0.35211E-02	650759.9	4189259.6	10.1	1.83	1.70	1.70	NO
L0004646	0	0.35211E-02	650760.5	4189263.2	10.1	1.83	1.70	1.70	NO
L0004647	0	0.35211E-02	650761.1	4189266.8	10.1	1.83	1.70	1.70	NO
L0004648	0	0.35211E-02	650761.7	4189270.4	10.1	1.83	1.70	1.70	NO
L0004649	0	0.35211E-02	650762.3	4189274.0	10.1	1.83	1.70	1.70	NO
L0004650	0	0.35211E-02	650762.9	4189277.6	10.1	1.83	1.70	1.70	NO
L0004651	0	0.35211E-02	650763.5	4189281.2	10.1	1.83	1.70	1.70	NO
L0004652	0	0.35211E-02	650764.1	4189284.9	10.1	1.83	1.70	1.70	NO
L0004653	0	0.35211E-02	650764.7	4189288.5	10.1	1.83	1.70	1.70	NO
L0004654	0	0.35211E-02	650765.3	4189292.1	10.1	1.83	1.70	1.70	NO
L0004655	0	0.35211E-02	650765.9	4189295.7	10.1	1.83	1.70	1.70	NO
L0004656	0	0.35211E-02	650766.5	4189299.3	10.1	1.83	1.70	1.70	NO
L0004657	0	0.35211E-02	650767.1	4189302.9	10.1	1.83	1.70	1.70	NO
L0004658	0	0.35211E-02	650767.7	4189306.5	10.1	1.83	1.70	1.70	NO
L0004659	0	0.35211E-02	650768.3	4189310.1	10.1	1.83	1.70	1.70	NO

L0004660	0	0.35211E-02	650768.8	4189313.7	10.1	1.83	1.70	1.70	NO
L0004661	0	0.35211E-02	650769.4	4189317.3	10.1	1.83	1.70	1.70	NO
L0004662	0	0.35211E-02	650770.0	4189320.9	10.1	1.83	1.70	1.70	NO
L0004663	0	0.35211E-02	650770.6	4189324.6	10.1	1.83	1.70	1.70	NO
L0004664	0	0.35211E-02	650771.2	4189328.2	10.1	1.83	1.70	1.70	NO
L0004665	0	0.35211E-02	650771.8	4189331.8	10.1	1.83	1.70	1.70	NO
L0004666	0	0.35211E-02	650772.4	4189335.4	10.1	1.83	1.70	1.70	NO
L0004667	0	0.35211E-02	650773.0	4189339.0	10.1	1.83	1.70	1.70	NO
L0004668	0	0.35211E-02	650773.6	4189342.6	10.1	1.83	1.70	1.70	NO
L0004669	0	0.35211E-02	650774.2	4189346.2	10.1	1.83	1.70	1.70	NO
L0004670	0	0.35211E-02	650774.8	4189349.8	10.1	1.83	1.70	1.70	NO
L0004671	0	0.35211E-02	650775.4	4189353.4	10.1	1.83	1.70	1.70	NO
L0004672	0	0.35211E-02	650776.0	4189357.0	10.1	1.83	1.70	1.70	NO
L0004673	0	0.35211E-02	650776.6	4189360.6	10.1	1.83	1.70	1.70	NO
L0004674	0	0.35211E-02	650777.2	4189364.2	10.1	1.83	1.70	1.70	NO
L0004675	0	0.35211E-02	650777.8	4189367.9	10.1	1.83	1.70	1.70	NO
L0004676	0	0.35211E-02	650778.4	4189371.5	10.1	1.83	1.70	1.70	NO
L0004677	0	0.35211E-02	650779.0	4189375.1	10.1	1.83	1.70	1.70	NO
L0004678	0	0.35211E-02	650779.6	4189378.7	10.1	1.83	1.70	1.70	NO
L0004679	0	0.35211E-02	650780.2	4189382.3	10.1	1.83	1.70	1.70	NO
L0004680	0	0.35211E-02	650780.8	4189385.9	10.1	1.83	1.70	1.70	NO
L0004681	0	0.35211E-02	650781.4	4189389.5	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 27

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE RELEASE			INIT.	INIT.	URBAN EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY

L0004682	0	0.35211E-02	650782.0	4189393.1	10.1	1.83	1.70	1.70	NO
L0004683	0	0.35211E-02	650782.6	4189396.7	10.1	1.83	1.70	1.70	NO
L0004684	0	0.35211E-02	650783.2	4189400.3	10.1	1.83	1.70	1.70	NO
L0004685	0	0.35211E-02	650783.8	4189403.9	10.1	1.83	1.70	1.70	NO
L0004686	0	0.35211E-02	650784.4	4189407.6	10.1	1.83	1.70	1.70	NO
L0004687	0	0.35211E-02	650785.0	4189411.2	10.1	1.83	1.70	1.70	NO
L0004688	0	0.35211E-02	650785.5	4189414.8	10.1	1.83	1.70	1.70	NO
L0004689	0	0.35211E-02	650786.1	4189418.4	10.1	1.83	1.70	1.70	NO
L0004690	0	0.35211E-02	650786.7	4189422.0	10.1	1.83	1.70	1.70	NO
L0004691	0	0.35211E-02	650787.3	4189425.6	10.1	1.83	1.70	1.70	NO
L0004692	0	0.35211E-02	650787.9	4189429.2	10.1	1.83	1.70	1.70	NO
L0004693	0	0.35211E-02	650788.5	4189432.8	10.1	1.83	1.70	1.70	NO
L0004694	0	0.35211E-02	650789.1	4189436.4	10.1	1.83	1.70	1.70	NO
L0004695	0	0.35211E-02	650789.7	4189440.0	10.1	1.83	1.70	1.70	NO
L0004696	0	0.35211E-02	650790.3	4189443.6	10.1	1.83	1.70	1.70	NO
L0004697	0	0.35211E-02	650790.9	4189447.2	10.1	1.83	1.70	1.70	NO
L0004698	0	0.35211E-02	650791.5	4189450.9	10.1	1.83	1.70	1.70	NO
L0004699	0	0.35211E-02	650792.1	4189454.5	10.1	1.83	1.70	1.70	NO
L0004700	0	0.35211E-02	650792.7	4189458.1	10.1	1.83	1.70	1.70	NO

L0004701	0	0.35211E-02	650793.3	4189461.7	10.1	1.83	1.70	1.70	NO
L0004702	0	0.35211E-02	650793.9	4189465.3	10.1	1.83	1.70	1.70	NO
L0004703	0	0.35211E-02	650794.5	4189468.9	10.1	1.83	1.70	1.70	NO
L0004704	0	0.35211E-02	650795.1	4189472.5	10.1	1.83	1.70	1.70	NO
L0004705	0	0.35211E-02	650795.7	4189476.1	10.1	1.83	1.70	1.70	NO
L0004706	0	0.35211E-02	650796.3	4189479.7	10.1	1.83	1.70	1.70	NO
L0004707	0	0.35211E-02	650796.9	4189483.3	10.1	1.83	1.70	1.70	NO
L0004708	0	0.35211E-02	650797.5	4189486.9	10.1	1.83	1.70	1.70	NO
L0004709	0	0.35211E-02	650798.1	4189490.6	10.1	1.83	1.70	1.70	NO
L0004710	0	0.35211E-02	650798.7	4189494.2	10.1	1.83	1.70	1.70	NO
L0004711	0	0.35211E-02	650799.3	4189497.8	10.1	1.83	1.70	1.70	NO
L0004712	0	0.35211E-02	650799.9	4189501.4	10.1	1.83	1.70	1.70	NO
L0004713	0	0.35211E-02	650800.5	4189505.0	10.1	1.83	1.70	1.70	NO
L0004714	0	0.35211E-02	650801.1	4189508.6	10.1	1.83	1.70	1.70	NO
L0005283	0	0.35211E-02	650476.6	4188657.2	10.1	1.83	1.70	1.70	NO
L0005284	0	0.35211E-02	650480.3	4188657.3	10.1	1.83	1.70	1.70	NO
L0005285	0	0.35211E-02	650483.9	4188657.4	10.1	1.83	1.70	1.70	NO
L0005286	0	0.35211E-02	650487.6	4188657.4	10.1	1.83	1.70	1.70	NO
L0005287	0	0.35211E-02	650491.2	4188657.5	10.1	1.83	1.70	1.70	NO
L0005288	0	0.35211E-02	650494.9	4188657.6	10.1	1.83	1.70	1.70	NO
L0005289	0	0.35211E-02	650498.6	4188657.7	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 28

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	NUMBER CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE SCALAR VARY BY

L0005290	0	0.35211E-02	650502.2	4188657.8	10.1	1.83	1.70	1.70	NO
L0005291	0	0.35211E-02	650505.9	4188657.8	10.1	1.83	1.70	1.70	NO
L0005292	0	0.35211E-02	650509.5	4188657.9	10.1	1.83	1.70	1.70	NO
L0005293	0	0.35211E-02	650513.2	4188658.0	10.1	1.83	1.70	1.70	NO
L0005294	0	0.35211E-02	650516.8	4188658.1	10.1	1.83	1.70	1.70	NO
L0005295	0	0.35211E-02	650520.5	4188658.1	10.1	1.83	1.70	1.70	NO
L0005296	0	0.35211E-02	650524.2	4188658.2	10.1	1.83	1.70	1.70	NO
L0005297	0	0.35211E-02	650527.8	4188658.3	10.1	1.83	1.70	1.70	NO
L0005298	0	0.35211E-02	650531.5	4188658.4	10.1	1.83	1.70	1.70	NO
L0005299	0	0.35211E-02	650535.1	4188658.4	10.1	1.83	1.70	1.70	NO
L0005300	0	0.35211E-02	650538.8	4188658.5	10.1	1.83	1.70	1.70	NO
L0005301	0	0.35211E-02	650542.4	4188658.6	10.1	1.83	1.70	1.70	NO
L0005302	0	0.35211E-02	650546.1	4188658.7	10.1	1.83	1.70	1.70	NO
L0005303	0	0.35211E-02	650549.8	4188658.7	10.1	1.83	1.70	1.70	NO
L0005304	0	0.35211E-02	650553.4	4188658.8	10.1	1.83	1.70	1.70	NO
L0005305	0	0.35211E-02	650557.1	4188658.9	10.1	1.83	1.70	1.70	NO
L0005306	0	0.35211E-02	650560.7	4188659.0	10.1	1.83	1.70	1.70	NO
L0005307	0	0.35211E-02	650564.4	4188659.0	10.1	1.83	1.70	1.70	NO
L0005308	0	0.35211E-02	650568.0	4188659.1	10.1	1.83	1.70	1.70	NO
L0005309	0	0.35211E-02	650571.7	4188659.2	10.1	1.83	1.70	1.70	NO

L0005310	0	0.35211E-02	650575.3	4188659.3	10.1	1.83	1.70	1.70	NO
L0005311	0	0.35211E-02	650579.0	4188659.4	10.1	1.83	1.70	1.70	NO
L0005312	0	0.35211E-02	650582.7	4188659.4	10.1	1.83	1.70	1.70	NO
L0005313	0	0.35211E-02	650586.3	4188659.5	10.1	1.83	1.70	1.70	NO
L0005314	0	0.35211E-02	650590.0	4188659.6	10.1	1.83	1.70	1.70	NO
L0005315	0	0.35211E-02	650593.6	4188659.7	10.1	1.83	1.70	1.70	NO
L0005316	0	0.35211E-02	650597.3	4188659.7	10.1	1.83	1.70	1.70	NO
L0005317	0	0.35211E-02	650600.9	4188659.8	10.1	1.83	1.70	1.70	NO
L0005318	0	0.35211E-02	650604.6	4188659.9	10.1	1.83	1.70	1.70	NO
L0005319	0	0.35211E-02	650608.3	4188660.0	10.1	1.83	1.70	1.70	NO
L0005320	0	0.35211E-02	650611.9	4188660.0	10.1	1.83	1.70	1.70	NO
L0005321	0	0.35211E-02	650615.6	4188660.1	10.1	1.83	1.70	1.70	NO
L0005322	0	0.35211E-02	650619.2	4188660.2	10.1	1.83	1.70	1.70	NO
L0005323	0	0.35211E-02	650622.9	4188660.3	10.1	1.83	1.70	1.70	NO
L0005324	0	0.35211E-02	650626.5	4188660.3	10.1	1.83	1.70	1.70	NO
L0005325	0	0.35211E-02	650630.2	4188660.4	10.1	1.83	1.70	1.70	NO
L0005326	0	0.35211E-02	650633.9	4188660.5	10.1	1.83	1.70	1.70	NO
L0005327	0	0.35211E-02	650637.5	4188660.6	10.1	1.83	1.70	1.70	NO
L0005328	0	0.35211E-02	650641.2	4188660.6	10.1	1.83	1.70	1.70	NO
L0005329	0	0.35211E-02	650644.8	4188660.7	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 29

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN EMISSION SOURCE SCALAR VARY BY
L0005330	0	0.35211E-02	650648.5	4188660.8	10.1	1.83	1.70	1.70	NO
L0005331	0	0.35211E-02	650650.7	4188662.7	10.1	1.83	1.70	1.70	NO
L0005332	0	0.35211E-02	650651.6	4188666.2	10.1	1.83	1.70	1.70	NO
L0005333	0	0.35211E-02	650652.5	4188669.8	10.1	1.83	1.70	1.70	NO
L0005334	0	0.35211E-02	650653.4	4188673.3	10.1	1.83	1.70	1.70	NO
L0005335	0	0.35211E-02	650654.3	4188676.9	10.1	1.83	1.70	1.70	NO
L0005336	0	0.35211E-02	650655.2	4188680.4	10.1	1.83	1.70	1.70	NO
L0005337	0	0.35211E-02	650656.1	4188684.0	10.1	1.83	1.70	1.70	NO
L0005338	0	0.35211E-02	650657.0	4188687.5	10.1	1.83	1.70	1.70	NO
L0005339	0	0.35211E-02	650657.9	4188691.1	10.1	1.83	1.70	1.70	NO
L0005340	0	0.35211E-02	650658.8	4188694.6	10.1	1.83	1.70	1.70	NO
L0005341	0	0.35211E-02	650659.7	4188698.1	10.1	1.83	1.70	1.70	NO
L0005342	0	0.35211E-02	650660.6	4188701.7	10.1	1.83	1.70	1.70	NO
L0005343	0	0.35211E-02	650661.5	4188705.2	10.1	1.83	1.70	1.70	NO
L0005344	0	0.35211E-02	650662.4	4188708.8	10.1	1.83	1.70	1.70	NO
L0005345	0	0.35211E-02	650663.4	4188712.3	10.1	1.83	1.70	1.70	NO
L0005346	0	0.35211E-02	650664.3	4188715.9	10.1	1.83	1.70	1.70	NO
L0005347	0	0.35211E-02	650665.2	4188719.4	10.1	1.83	1.70	1.70	NO
L0005348	0	0.35211E-02	650666.1	4188723.0	10.1	1.83	1.70	1.70	NO
L0005349	0	0.35211E-02	650667.0	4188726.5	10.1	1.83	1.70	1.70	NO
L0005350	0	0.35211E-02	650667.9	4188730.0	10.1	1.83	1.70	1.70	NO

L0005351	0	0.35211E-02	650668.8	4188733.6	10.1	1.83	1.70	1.70	NO
L0005352	0	0.35211E-02	650669.7	4188737.1	10.1	1.83	1.70	1.70	NO
L0005353	0	0.35211E-02	650670.6	4188740.7	10.1	1.83	1.70	1.70	NO
L0005354	0	0.35211E-02	650671.5	4188744.2	10.1	1.83	1.70	1.70	NO
L0005355	0	0.35211E-02	650672.4	4188747.8	10.1	1.83	1.70	1.70	NO
L0005356	0	0.35211E-02	650673.3	4188751.3	10.1	1.83	1.70	1.70	NO
L0005357	0	0.35211E-02	650674.2	4188754.8	10.1	1.83	1.70	1.70	NO
L0005358	0	0.35211E-02	650675.1	4188758.4	10.1	1.83	1.70	1.70	NO
L0005359	0	0.35211E-02	650676.0	4188761.9	10.1	1.83	1.70	1.70	NO
L0005360	0	0.35211E-02	650676.9	4188765.5	10.1	1.83	1.70	1.70	NO
L0005361	0	0.35211E-02	650677.8	4188769.0	10.1	1.83	1.70	1.70	NO
L0005362	0	0.35211E-02	650678.7	4188772.6	10.1	1.83	1.70	1.70	NO
L0005363	0	0.35211E-02	650679.6	4188776.1	10.1	1.83	1.70	1.70	NO
L0005364	0	0.35211E-02	650680.5	4188779.7	10.1	1.83	1.70	1.70	NO
L0005365	0	0.35211E-02	650681.2	4188783.3	10.1	1.83	1.70	1.70	NO
L0005366	0	0.35211E-02	650681.8	4188786.9	10.1	1.83	1.70	1.70	NO
L0005367	0	0.35211E-02	650682.4	4188790.5	10.1	1.83	1.70	1.70	NO
L0005368	0	0.35211E-02	650683.0	4188794.1	10.1	1.83	1.70	1.70	NO
L0005369	0	0.35211E-02	650683.6	4188797.7	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 30

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE SCALAR	EMISSION RATE VARY BY
-----------	-------------	---	------------	------------	---------------------	-------------------------	-------------------	-------------------	---------------------	-----------------------

L0005370	0	0.35211E-02	650684.2	4188801.3	10.1	1.83	1.70	1.70	NO
L0005371	0	0.35211E-02	650684.8	4188804.9	10.1	1.83	1.70	1.70	NO
L0005372	0	0.35211E-02	650685.4	4188808.5	10.1	1.83	1.70	1.70	NO
L0005373	0	0.35211E-02	650685.9	4188812.1	10.1	1.83	1.70	1.70	NO
L0005374	0	0.35211E-02	650686.5	4188815.7	10.1	1.83	1.70	1.70	NO
L0005375	0	0.35211E-02	650687.1	4188819.3	10.1	1.83	1.70	1.70	NO
L0005376	0	0.35211E-02	650687.7	4188823.0	10.1	1.83	1.70	1.70	NO
L0005377	0	0.35211E-02	650688.3	4188826.6	10.1	1.83	1.70	1.70	NO
L0005378	0	0.35211E-02	650688.9	4188830.2	10.1	1.83	1.70	1.70	NO
L0005379	0	0.35211E-02	650689.5	4188833.8	10.1	1.83	1.70	1.70	NO
L0005380	0	0.35211E-02	650690.1	4188837.4	10.1	1.83	1.70	1.70	NO
L0005381	0	0.35211E-02	650690.7	4188841.0	10.1	1.83	1.70	1.70	NO
L0005382	0	0.35211E-02	650691.3	4188844.6	10.1	1.83	1.70	1.70	NO
L0005383	0	0.35211E-02	650691.9	4188848.2	10.1	1.83	1.70	1.70	NO
L0005384	0	0.35211E-02	650692.5	4188851.8	10.1	1.83	1.70	1.70	NO
L0005385	0	0.35211E-02	650693.1	4188855.4	10.1	1.83	1.70	1.70	NO
L0005386	0	0.35211E-02	650693.7	4188859.0	10.1	1.83	1.70	1.70	NO
L0005387	0	0.35211E-02	650694.3	4188862.6	10.1	1.83	1.70	1.70	NO
L0005388	0	0.35211E-02	650694.9	4188866.3	10.1	1.83	1.70	1.70	NO
L0005389	0	0.35211E-02	650695.5	4188869.9	10.1	1.83	1.70	1.70	NO
L0005390	0	0.35211E-02	650696.1	4188873.5	10.1	1.83	1.70	1.70	NO
L0005391	0	0.35211E-02	650696.7	4188877.1	10.1	1.83	1.70	1.70	NO

L0005392	0	0.35211E-02	650697.3	4188880.7	10.1	1.83	1.70	1.70	NO
L0005393	0	0.35211E-02	650697.9	4188884.3	10.1	1.83	1.70	1.70	NO
L0005394	0	0.35211E-02	650698.5	4188887.9	10.1	1.83	1.70	1.70	NO
L0005395	0	0.35211E-02	650699.1	4188891.5	10.1	1.83	1.70	1.70	NO
L0005396	0	0.35211E-02	650699.7	4188895.1	10.1	1.83	1.70	1.70	NO
L0005397	0	0.35211E-02	650700.3	4188898.7	10.1	1.83	1.70	1.70	NO
L0005398	0	0.35211E-02	650700.9	4188902.3	10.1	1.83	1.70	1.70	NO
L0005399	0	0.35211E-02	650701.5	4188906.0	10.1	1.83	1.70	1.70	NO
L0005400	0	0.35211E-02	650702.1	4188909.6	10.1	1.83	1.70	1.70	NO
L0005401	0	0.35211E-02	650702.6	4188913.2	10.1	1.83	1.70	1.70	NO
L0005402	0	0.35211E-02	650703.2	4188916.8	10.1	1.83	1.70	1.70	NO
L0005403	0	0.35211E-02	650703.8	4188920.4	10.1	1.83	1.70	1.70	NO
L0005404	0	0.35211E-02	650704.4	4188924.0	10.1	1.83	1.70	1.70	NO
L0005405	0	0.35211E-02	650705.0	4188927.6	10.1	1.83	1.70	1.70	NO
L0005406	0	0.35211E-02	650705.6	4188931.2	10.1	1.83	1.70	1.70	NO
L0005407	0	0.35211E-02	650706.2	4188934.8	10.1	1.83	1.70	1.70	NO
L0005408	0	0.35211E-02	650706.8	4188938.4	10.1	1.83	1.70	1.70	NO
L0005409	0	0.35211E-02	650707.4	4188942.0	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 31

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN EMISSION RATE SOURCE SCALAR VARY BY
-----------	-------------	---	------------	------------	---------------------	-------------------------	-------------------	-------------------	---

L0005410	0	0.35211E-02	650708.0	4188945.6	10.1	1.83	1.70	1.70	NO
L0005411	0	0.35211E-02	650708.6	4188949.3	10.1	1.83	1.70	1.70	NO
L0005412	0	0.35211E-02	650709.2	4188952.9	10.1	1.83	1.70	1.70	NO
L0005413	0	0.35211E-02	650709.8	4188956.5	10.1	1.83	1.70	1.70	NO
L0005414	0	0.35211E-02	650710.4	4188960.1	10.1	1.83	1.70	1.70	NO
L0005415	0	0.35211E-02	650711.0	4188963.7	10.1	1.83	1.70	1.70	NO
L0005416	0	0.35211E-02	650711.6	4188967.3	10.1	1.83	1.70	1.70	NO
L0005417	0	0.35211E-02	650712.2	4188970.9	10.1	1.83	1.70	1.70	NO
L0005418	0	0.35211E-02	650712.8	4188974.5	10.1	1.83	1.70	1.70	NO
L0005419	0	0.35211E-02	650713.4	4188978.1	10.1	1.83	1.70	1.70	NO
L0005420	0	0.35211E-02	650714.0	4188981.7	10.1	1.83	1.70	1.70	NO
L0005421	0	0.35211E-02	650714.6	4188985.3	10.1	1.83	1.70	1.70	NO
L0005422	0	0.35211E-02	650715.2	4188988.9	10.1	1.83	1.70	1.70	NO
L0005423	0	0.35211E-02	650715.8	4188992.6	10.1	1.83	1.70	1.70	NO
L0005424	0	0.35211E-02	650716.4	4188996.2	10.1	1.83	1.70	1.70	NO
L0005425	0	0.35211E-02	650717.0	4188999.8	10.1	1.83	1.70	1.70	NO
L0005426	0	0.35211E-02	650717.6	4189003.4	10.1	1.83	1.70	1.70	NO
L0005427	0	0.35211E-02	650718.2	4189007.0	10.1	1.83	1.70	1.70	NO
L0005428	0	0.35211E-02	650718.8	4189010.6	10.1	1.83	1.70	1.70	NO
L0005429	0	0.35211E-02	650719.3	4189014.2	10.1	1.83	1.70	1.70	NO
L0005430	0	0.35211E-02	650719.9	4189017.8	10.1	1.83	1.70	1.70	NO
L0005431	0	0.35211E-02	650720.5	4189021.4	10.1	1.83	1.70	1.70	NO
L0005432	0	0.35211E-02	650721.1	4189025.0	10.1	1.83	1.70	1.70	NO

L0005433	0	0.35211E-02	650721.7	4189028.6	10.1	1.83	1.70	1.70	NO
L0005434	0	0.35211E-02	650722.3	4189032.3	10.1	1.83	1.70	1.70	NO
L0005435	0	0.35211E-02	650722.9	4189035.9	10.1	1.83	1.70	1.70	NO
L0005436	0	0.35211E-02	650723.5	4189039.5	10.1	1.83	1.70	1.70	NO
L0005437	0	0.35211E-02	650724.1	4189043.1	10.1	1.83	1.70	1.70	NO
L0005438	0	0.35211E-02	650724.7	4189046.7	10.1	1.83	1.70	1.70	NO
L0005439	0	0.35211E-02	650725.3	4189050.3	10.1	1.83	1.70	1.70	NO
L0005440	0	0.35211E-02	650725.9	4189053.9	10.1	1.83	1.70	1.70	NO
L0005441	0	0.35211E-02	650726.5	4189057.5	10.1	1.83	1.70	1.70	NO
L0005442	0	0.35211E-02	650727.1	4189061.1	10.1	1.83	1.70	1.70	NO
L0005443	0	0.35211E-02	650727.7	4189064.7	10.1	1.83	1.70	1.70	NO
L0005444	0	0.35211E-02	650728.3	4189068.3	10.1	1.83	1.70	1.70	NO
L0005445	0	0.35211E-02	650728.9	4189071.9	10.1	1.83	1.70	1.70	NO
L0005446	0	0.35211E-02	650729.5	4189075.6	10.1	1.83	1.70	1.70	NO
L0005447	0	0.35211E-02	650730.1	4189079.2	10.1	1.83	1.70	1.70	NO
L0005448	0	0.35211E-02	650730.7	4189082.8	10.1	1.83	1.70	1.70	NO
L0005449	0	0.35211E-02	650731.3	4189086.4	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 32

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE SCALAR VARY BY
-----------	-------------	---	------------	------------	-----------------------------	-----------------------	-------------------	-------------------	-----------------------------

L0005450	0	0.35211E-02	650731.9	4189090.0	10.1	1.83	1.70	1.70	NO
L0005451	0	0.35211E-02	650732.5	4189093.6	10.1	1.83	1.70	1.70	NO
L0005452	0	0.35211E-02	650733.1	4189097.2	10.1	1.83	1.70	1.70	NO
L0005453	0	0.35211E-02	650733.7	4189100.8	10.1	1.83	1.70	1.70	NO
L0005454	0	0.35211E-02	650734.3	4189104.4	10.1	1.83	1.70	1.70	NO
L0005455	0	0.35211E-02	650734.9	4189108.0	10.1	1.83	1.70	1.70	NO
L0005456	0	0.35211E-02	650735.5	4189111.6	10.1	1.83	1.70	1.70	NO
L0005457	0	0.35211E-02	650736.0	4189115.3	10.1	1.83	1.70	1.70	NO
L0005458	0	0.35211E-02	650736.6	4189118.9	10.1	1.83	1.70	1.70	NO
L0005459	0	0.35211E-02	650737.2	4189122.5	10.1	1.83	1.70	1.70	NO
L0005460	0	0.35211E-02	650737.8	4189126.1	10.1	1.83	1.70	1.70	NO
L0005461	0	0.35211E-02	650738.4	4189129.7	10.1	1.83	1.70	1.70	NO
L0005462	0	0.35211E-02	650739.0	4189133.3	10.1	1.83	1.70	1.70	NO
L0005463	0	0.35211E-02	650739.6	4189136.9	10.1	1.83	1.70	1.70	NO
L0005464	0	0.35211E-02	650740.2	4189140.5	10.1	1.83	1.70	1.70	NO
L0005465	0	0.35211E-02	650740.8	4189144.1	10.1	1.83	1.70	1.70	NO
L0005466	0	0.35211E-02	650741.4	4189147.7	10.1	1.83	1.70	1.70	NO
L0005467	0	0.35211E-02	650742.0	4189151.3	10.1	1.83	1.70	1.70	NO
L0005468	0	0.35211E-02	650742.6	4189154.9	10.1	1.83	1.70	1.70	NO
L0005469	0	0.35211E-02	650743.2	4189158.6	10.1	1.83	1.70	1.70	NO
L0005470	0	0.35211E-02	650743.8	4189162.2	10.1	1.83	1.70	1.70	NO
L0005471	0	0.35211E-02	650744.4	4189165.8	10.1	1.83	1.70	1.70	NO
L0005472	0	0.35211E-02	650745.0	4189169.4	10.1	1.83	1.70	1.70	NO
L0005473	0	0.35211E-02	650745.6	4189173.0	10.1	1.83	1.70	1.70	NO

L0005474	0	0.35211E-02	650746.2	4189176.6	10.1	1.83	1.70	1.70	NO
L0005475	0	0.35211E-02	650746.8	4189180.2	10.1	1.83	1.70	1.70	NO
L0005476	0	0.35211E-02	650747.4	4189183.8	10.1	1.83	1.70	1.70	NO
L0005477	0	0.35211E-02	650748.0	4189187.4	10.1	1.83	1.70	1.70	NO
L0005478	0	0.35211E-02	650748.6	4189191.0	10.1	1.83	1.70	1.70	NO
L0005479	0	0.35211E-02	650749.2	4189194.6	10.1	1.83	1.70	1.70	NO
L0005480	0	0.35211E-02	650749.8	4189198.3	10.1	1.83	1.70	1.70	NO
L0005481	0	0.35211E-02	650750.4	4189201.9	10.1	1.83	1.70	1.70	NO
L0005482	0	0.35211E-02	650751.0	4189205.5	10.1	1.83	1.70	1.70	NO
L0005483	0	0.35211E-02	650751.6	4189209.1	10.1	1.83	1.70	1.70	NO
L0005484	0	0.35211E-02	650752.2	4189212.7	10.1	1.83	1.70	1.70	NO
L0005485	0	0.35211E-02	650752.7	4189216.3	10.1	1.83	1.70	1.70	NO
L0005486	0	0.35211E-02	650753.3	4189219.9	10.1	1.83	1.70	1.70	NO
L0005487	0	0.35211E-02	650753.9	4189223.5	10.1	1.83	1.70	1.70	NO
L0005488	0	0.35211E-02	650754.5	4189227.1	10.1	1.83	1.70	1.70	NO
L0005489	0	0.35211E-02	650755.1	4189230.7	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 33

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

NUMBER	EMISSION RATE	BASE RELEASE		INIT.	INIT.	URBAN EMISSION RATE		
SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE SCALAR VARY
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY

L0005490	0	0.35211E-02	650755.7	4189234.3	10.1	1.83	1.70	1.70	NO
L0005491	0	0.35211E-02	650756.3	4189237.9	10.1	1.83	1.70	1.70	NO
L0005492	0	0.35211E-02	650756.9	4189241.6	10.1	1.83	1.70	1.70	NO
L0005493	0	0.35211E-02	650757.5	4189245.2	10.1	1.83	1.70	1.70	NO
L0005494	0	0.35211E-02	650758.1	4189248.8	10.1	1.83	1.70	1.70	NO
L0005495	0	0.35211E-02	650758.7	4189252.4	10.1	1.83	1.70	1.70	NO
L0005496	0	0.35211E-02	650759.3	4189256.0	10.1	1.83	1.70	1.70	NO
L0005497	0	0.35211E-02	650759.9	4189259.6	10.1	1.83	1.70	1.70	NO
L0005498	0	0.35211E-02	650760.5	4189263.2	10.1	1.83	1.70	1.70	NO
L0005499	0	0.35211E-02	650761.1	4189266.8	10.1	1.83	1.70	1.70	NO
L0005500	0	0.35211E-02	650761.7	4189270.4	10.1	1.83	1.70	1.70	NO
L0005501	0	0.35211E-02	650762.3	4189274.0	10.1	1.83	1.70	1.70	NO
L0005502	0	0.35211E-02	650762.9	4189277.6	10.1	1.83	1.70	1.70	NO
L0005503	0	0.35211E-02	650763.5	4189281.2	10.1	1.83	1.70	1.70	NO
L0005504	0	0.35211E-02	650764.1	4189284.9	10.1	1.83	1.70	1.70	NO
L0005505	0	0.35211E-02	650764.7	4189288.5	10.1	1.83	1.70	1.70	NO
L0005506	0	0.35211E-02	650765.3	4189292.1	10.1	1.83	1.70	1.70	NO
L0005507	0	0.35211E-02	650765.9	4189295.7	10.1	1.83	1.70	1.70	NO
L0005508	0	0.35211E-02	650766.5	4189299.3	10.1	1.83	1.70	1.70	NO
L0005509	0	0.35211E-02	650767.1	4189302.9	10.1	1.83	1.70	1.70	NO
L0005510	0	0.35211E-02	650767.7	4189306.5	10.1	1.83	1.70	1.70	NO
L0005511	0	0.35211E-02	650768.3	4189310.1	10.1	1.83	1.70	1.70	NO
L0005512	0	0.35211E-02	650768.8	4189313.7	10.1	1.83	1.70	1.70	NO
L0005513	0	0.35211E-02	650769.4	4189317.3	10.1	1.83	1.70	1.70	NO
L0005514	0	0.35211E-02	650770.0	4189320.9	10.1	1.83	1.70	1.70	NO



L0005515	0	0.35211E-02	650770.6	4189324.6	10.1	1.83	1.70	1.70	NO
L0005516	0	0.35211E-02	650771.2	4189328.2	10.1	1.83	1.70	1.70	NO
L0005517	0	0.35211E-02	650771.8	4189331.8	10.1	1.83	1.70	1.70	NO
L0005518	0	0.35211E-02	650772.4	4189335.4	10.1	1.83	1.70	1.70	NO
L0005519	0	0.35211E-02	650773.0	4189339.0	10.1	1.83	1.70	1.70	NO
L0005520	0	0.35211E-02	650773.6	4189342.6	10.1	1.83	1.70	1.70	NO
L0005521	0	0.35211E-02	650774.2	4189346.2	10.1	1.83	1.70	1.70	NO
L0005522	0	0.35211E-02	650774.8	4189349.8	10.1	1.83	1.70	1.70	NO
L0005523	0	0.35211E-02	650775.4	4189353.4	10.1	1.83	1.70	1.70	NO
L0005524	0	0.35211E-02	650776.0	4189357.0	10.1	1.83	1.70	1.70	NO
L0005525	0	0.35211E-02	650776.6	4189360.6	10.1	1.83	1.70	1.70	NO
L0005526	0	0.35211E-02	650777.2	4189364.2	10.1	1.83	1.70	1.70	NO
L0005527	0	0.35211E-02	650777.8	4189367.9	10.1	1.83	1.70	1.70	NO
L0005528	0	0.35211E-02	650778.4	4189371.5	10.1	1.83	1.70	1.70	NO
L0005529	0	0.35211E-02	650779.0	4189375.1	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 34

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* VOLUME SOURCE DATA \*\*\*

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC) (METERS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE SCALAR VARY BY
L0005530	0	0.35211E-02	650779.6	4189378.7	10.1	1.83	1.70	1.70	NO
L0005531	0	0.35211E-02	650780.2	4189382.3	10.1	1.83	1.70	1.70	NO
L0005532	0	0.35211E-02	650780.8	4189385.9	10.1	1.83	1.70	1.70	NO
L0005533	0	0.35211E-02	650781.4	4189389.5	10.1	1.83	1.70	1.70	NO
L0005534	0	0.35211E-02	650782.0	4189393.1	10.1	1.83	1.70	1.70	NO
L0005535	0	0.35211E-02	650782.6	4189396.7	10.1	1.83	1.70	1.70	NO
L0005536	0	0.35211E-02	650783.2	4189400.3	10.1	1.83	1.70	1.70	NO
L0005537	0	0.35211E-02	650783.8	4189403.9	10.1	1.83	1.70	1.70	NO
L0005538	0	0.35211E-02	650784.4	4189407.6	10.1	1.83	1.70	1.70	NO
L0005539	0	0.35211E-02	650785.0	4189411.2	10.1	1.83	1.70	1.70	NO
L0005540	0	0.35211E-02	650785.5	4189414.8	10.1	1.83	1.70	1.70	NO
L0005541	0	0.35211E-02	650786.1	4189418.4	10.1	1.83	1.70	1.70	NO
L0005542	0	0.35211E-02	650786.7	4189422.0	10.1	1.83	1.70	1.70	NO
L0005543	0	0.35211E-02	650787.3	4189425.6	10.1	1.83	1.70	1.70	NO
L0005544	0	0.35211E-02	650787.9	4189429.2	10.1	1.83	1.70	1.70	NO
L0005545	0	0.35211E-02	650788.5	4189432.8	10.1	1.83	1.70	1.70	NO
L0005546	0	0.35211E-02	650789.1	4189436.4	10.1	1.83	1.70	1.70	NO
L0005547	0	0.35211E-02	650789.7	4189440.0	10.1	1.83	1.70	1.70	NO
L0005548	0	0.35211E-02	650790.3	4189443.6	10.1	1.83	1.70	1.70	NO
L0005549	0	0.35211E-02	650790.9	4189447.2	10.1	1.83	1.70	1.70	NO
L0005550	0	0.35211E-02	650791.5	4189450.9	10.1	1.83	1.70	1.70	NO
L0005551	0	0.35211E-02	650792.1	4189454.5	10.1	1.83	1.70	1.70	NO
L0005552	0	0.35211E-02	650792.7	4189458.1	10.1	1.83	1.70	1.70	NO
L0005553	0	0.35211E-02	650793.3	4189461.7	10.1	1.83	1.70	1.70	NO
L0005554	0	0.35211E-02	650793.9	4189465.3	10.1	1.83	1.70	1.70	NO
L0005555	0	0.35211E-02	650794.5	4189468.9	10.1	1.83	1.70	1.70	NO

L0005556	0	0.35211E-02	650795.1	4189472.5	10.1	1.83	1.70	1.70	NO
L0005557	0	0.35211E-02	650795.7	4189476.1	10.1	1.83	1.70	1.70	NO
L0005558	0	0.35211E-02	650796.3	4189479.7	10.1	1.83	1.70	1.70	NO
L0005559	0	0.35211E-02	650796.9	4189483.3	10.1	1.83	1.70	1.70	NO
L0005560	0	0.35211E-02	650797.5	4189486.9	10.1	1.83	1.70	1.70	NO
L0005561	0	0.35211E-02	650798.1	4189490.6	10.1	1.83	1.70	1.70	NO
L0005562	0	0.35211E-02	650798.7	4189494.2	10.1	1.83	1.70	1.70	NO
L0005563	0	0.35211E-02	650799.3	4189497.8	10.1	1.83	1.70	1.70	NO
L0005564	0	0.35211E-02	650799.9	4189501.4	10.1	1.83	1.70	1.70	NO
L0005565	0	0.35211E-02	650800.5	4189505.0	10.1	1.83	1.70	1.70	NO
L0005566	0	0.35211E-02	650801.1	4189508.6	10.1	1.83	1.70	1.70	NO

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

SLINE7 L0003722 ,L0003723 ,L0003724 ,L0003725 ,L0003726 ,L0003727 ,L0003728 ,L0003729 ,  
L0003730 ,L0003731 ,L0003732 ,L0003733 ,L0003734 ,L0003735 ,L0003736 ,L0003737 ,  
L0003738 ,L0003739 ,L0003740 ,L0003741 ,L0003742 ,L0003743 ,L0003744 ,L0003745 ,  
L0003746 ,L0003747 ,L0003748 ,L0003749 ,L0003750 ,L0003751 ,L0003752 ,L0003753 ,  
L0003754 ,L0003755 ,L0003756 ,L0003757 ,L0003758 ,L0003759 ,L0003760 ,L0003761 ,  
L0003762 ,L0003763 ,L0003764 ,L0003765 ,L0003766 ,L0003767 ,L0003768 ,L0003769 ,  
L0003770 ,L0003771 ,L0003772 ,L0003773 ,L0003774 ,L0003775 ,L0003776 ,L0003777 ,  
L0003778 ,L0003779 ,L0003780 ,L0003781 ,L0003782 ,L0003783 ,L0003784 ,L0003785 ,  
L0003786 ,L0003787 ,L0003788 ,L0003789 ,L0003790 ,L0003791 ,L0003792 ,L0003793 ,  
L0003794 ,L0003795 ,L0003796 ,L0003797 ,L0003798 ,L0003799 ,L0003800 ,L0003801 ,  
L0003802 ,L0003803 ,L0003804 ,L0003805 ,L0003806 ,L0003807 ,L0003808 ,L0003809 ,  
L0003810 ,L0003811 ,L0003812 ,L0003813 ,L0003814 ,L0003815 ,L0003816 ,L0003817 ,  
L0003818 ,L0003819 ,L0003820 ,L0003821 ,L0003822 ,L0003823 ,L0003824 ,L0003825 ,  
L0003826 ,L0003827 ,L0003828 ,L0003829 ,L0003830 ,L0003831 ,L0003832 ,L0003833 ,  
L0003834 ,L0003835 ,L0003836 ,L0003837 ,L0003838 ,L0003839 ,L0003840 ,L0003841 ,  
L0003842 ,L0003843 ,L0003844 ,L0003845 ,L0003846 ,L0003847 ,L0003848 ,L0003849 ,

L0003850 , L0003851 , L0003852 , L0003853 , L0003854 , L0003855 , L0003856 , L0003857 ,  
 L0003858 , L0003859 , L0003860 , L0003861 , L0003862 , L0003863 , L0003864 , L0003865 ,  
 L0003866 , L0003867 , L0003868 , L0003869 , L0003870 , L0003871 , L0003872 , L0003873 ,  
 L0003874 , L0003875 , L0003876 , L0003877 , L0003878 , L0003879 , L0003880 , L0003881 ,  
 \*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-  
 977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\*\* 15:03:05

PAGE 36

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

L0003882 , L0003883 , L0003884 , L0003885 , L0003886 , L0003887 , L0003888 , L0003889 ,  
 L0003890 , L0003891 , L0003892 , L0003893 , L0003894 , L0003895 , L0003896 , L0003897 ,  
 L0003898 , L0003899 , L0003900 , L0003901 , L0003902 , L0003903 , L0003904 , L0003905 ,  
 L0003906 , L0003907 , L0003908 , L0003909 , L0003910 , L0003911 , L0003912 , L0003913 ,  
 L0003914 , L0003915 , L0003916 , L0003917 , L0003918 , L0003919 , L0003920 , L0003921 ,  
 L0003922 , L0003923 , L0003924 , L0003925 , L0003926 , L0003927 , L0003928 , L0003929 ,  
 L0003930 , L0003931 , L0003932 , L0003933 , L0003934 , L0003935 , L0003936 , L0003937 ,  
 L0003938 , L0003939 , L0003940 , L0003941 , L0003942 , L0003943 , L0003944 , L0003945 ,  
 L0003946 , L0003947 , L0003948 , L0003949 , L0003950 , L0003951 , L0003952 , L0003953 ,  
 L0003954 , L0003955 , L0003956 , L0003957 , L0003958 , L0003959 , L0003960 , L0003961 ,  
 L0003962 , L0003963 , L0003964 , L0003965 , L0003966 , L0003967 , L0003968 , L0003969 ,  
 L0003970 , L0003971 , L0003972 , L0003973 , L0003974 , L0003975 , L0003976 , L0003977 ,  
 L0003978 , L0003979 , L0003980 , L0003981 , L0003982 , L0003983 , L0003984 , L0003985 ,  
 L0003986 , L0003987 , L0003988 , L0003989 , L0003990 , L0003991 , L0003992 , L0003993 ,  
 L0003994 , L0003995 , L0003996 , L0003997 , L0003998 , L0003999 , L0004000 , L0004001 ,  
 L0004002 , L0004003 , L0004004 , L0004005 , L0004006 , L0004007 , L0004008 , L0004009 ,  
 L0004010 , L0004011 , L0004012 , L0004013 , L0004014 , L0004015 , L0004016 , L0004017 ,  
 L0004018 , L0004019 , L0004020 , L0004021 , L0004022 , L0004023 , L0004024 , L0004025 ,

L0004026 , L0004027 , L0004028 , L0004029 , L0004030 , L0004031 , L0004032 , L0004033 ,  
L0004034 , L0004035 , L0004036 , L0004037 , L0004038 , L0004039 , L0004040 , L0004041 ,  
\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-  
977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 37

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

L0004042 , L0004043 , L0004044 , L0004045 , L0004046 , L0004047 , L0004048 , L0004049 ,  
L0004050 , L0004051 , L0004052 , L0004053 , L0004054 , L0004055 , L0004056 , L0004057 ,  
L0004058 , L0004059 , L0004060 , L0004061 , L0004062 , L0004063 , L0004064 , L0004065 ,  
L0004066 , L0004067 , L0004068 , L0004069 , L0004070 , L0004071 , L0004072 , L0004073 ,  
L0004074 , L0004075 , L0004076 , L0004077 , L0004078 , L0004079 , L0004080 , L0004081 ,  
L0004082 , L0004083 , L0004084 , L0004085 , L0004086 , L0004087 , L0004088 , L0004089 ,  
L0004090 , L0004091 , L0004092 , L0004093 , L0004094 , L0004095 , L0004096 , L0004097 ,  
L0004098 , L0004099 , L0004100 , L0004101 , L0004102 , L0004103 , L0004104 , L0004105 ,  
L0004106 , L0004107 , L0004108 , L0004109 , L0004110 , L0004111 , L0004112 , L0004113 ,  
L0004114 , L0004115 , L0004116 , L0004117 , L0004118 , L0004119 , L0004120 , L0004121 ,  
L0004122 , L0004123 , L0004124 , L0004125 , L0004126 , L0004127 , L0004128 , L0004129 ,  
L0004130 , L0004131 , L0004132 , L0004133 , L0004134 , L0004135 , L0004136 , L0004137 ,  
L0004138 , L0004139 , L0004140 , L0004141 , L0004142 , L0004143 , L0004144 , L0004145 ,  
L0004146 , L0004147 , L0004148 , L0004149 , L0004150 , L0004151 , L0004152 , L0004153 ,  
L0004154 , L0004155 , L0004156 , L0004157 , L0004158 , L0004159 , L0004160 , L0004161 ,  
L0004162 , L0004163 , L0004164 , L0004165 , L0004166 , L0004167 , L0004168 , L0004169 ,  
L0004170 , L0004171 , L0004172 , L0004173 , L0004174 , L0004175 , L0004176 , L0004177 ,  
L0004178 , L0004179 , L0004180 , L0004181 , L0004182 , L0004183 , L0004184 , L0004185 ,  
L0004186 , L0004187 , L0004188 , L0004189 , L0004190 , L0004191 , L0004192 , L0004193 ,  
L0004194 , L0004195 , L0004196 , L0004197 , L0004198 , L0004199 , L0004200 , L0004201 ,

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID  
-----

SOURCE IDs  
-----

L0004202	,	L0004203	,	L0004204	,	L0004205	,	L0004206	,	L0004207	,	L0004208	,	L0004209	,
L0004210	,	L0004211	,	L0004212	,	L0004213	,	L0004214	,	L0004215	,	L0004216	,	L0004217	,
L0004218	,	L0004219	,	L0004220	,	L0004221	,	L0004222	,	L0004223	,	L0004224	,	L0004225	,
L0004226	,	L0004227	,	L0004228	,	L0004229	,	L0004230	,	L0004231	,	L0004232	,	L0004233	,
L0004234	,	L0004235	,	L0004236	,	L0004237	,	L0004238	,	L0004239	,	L0004240	,	L0004241	,
L0004242	,	L0004243	,	L0004244	,	L0004245	,	L0004246	,	L0004247	,	L0004248	,	L0004249	,
L0004250	,	L0004251	,	L0004252	,	L0004253	,	L0004254	,	L0004255	,	L0004256	,	L0004257	,
L0004258	,	L0004259	,	L0004260	,	L0004261	,	L0004262	,	L0004263	,	L0004264	,	L0004265	,
L0004266	,	L0004267	,	L0004268	,	L0004269	,	L0004270	,	L0004271	,	L0004272	,	L0004273	,
L0004274	,	L0004275	,	L0004276	,	L0004277	,	L0004278	,	L0004279	,	L0004280	,	L0004281	,
L0004282	,	L0004283	,	L0004284	,	L0004285	,	L0004286	,	L0004287	,	L0004288	,	L0004289	,
L0004290	,	L0004291	,	L0004292	,	L0004293	,	L0004294	,	L0004295	,	L0004296	,	L0004297	,
L0004298	,	L0004299	,	L0004300	,	L0004301	,	L0004302	,	L0004303	,	L0004304	,	L0004305	,
L0004306	,	L0004307	,	L0004308	,	L0004309	,	L0004310	,	L0004311	,	L0004312	,	L0004313	,
L0004314	,	L0004315	,	L0004316	,	L0004317	,	L0004318	,	L0004319	,	L0004320	,	L0004321	,
L0004322	,	L0004323	,	L0004324	,	L0004325	,	L0004326	,	L0004327	,	L0004328	,	L0004329	,
L0004330	,	L0004331	,	L0004332	,	L0004333	,	L0004334	,	L0004335	,	L0004336	,	L0004337	,
L0004338	,	L0004339	,	L0004340	,	L0004341	,	L0004342	,	L0004343	,	L0004344	,	L0004345	,
L0004346	,	L0004347	,	L0004348	,	L0004349	,	L0004350	,	L0004351	,	L0004352	,	L0004353	,
L0004354	,	L0004355	,	L0004356	,	L0004357	,	L0004358	,	L0004359	,	L0004360	,	L0004361	,

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

L0004362 , L0004363 , L0004364 , L0004365 , L0004366 , L0004367 , L0004368 , L0004369 ,  
 L0004370 , L0004371 , L0004372 , L0004373 , L0004374 , L0004375 , L0004376 , L0004377 ,  
 L0004378 , L0004379 , L0004380 , L0004381 , L0004382 , L0004383 , L0004384 , L0004385 ,  
 L0004386 , L0004387 , L0004388 , L0004389 , L0004390 , L0004391 , L0004392 , L0004393 ,  
 L0004394 , L0004395 , L0004396 , L0004397 , L0004398 , L0004399 , L0004400 , L0004401 ,  
 L0004402 , L0004403 , L0004404 , L0004405 , L0004406 , L0004407 , L0004408 , L0004409 ,  
 L0004410 , L0004411 , L0004412 , L0004413 , L0004414 , L0004415 , L0004416 , L0004417 ,  
 L0004418 , L0004419 , L0004420 , L0004421 , L0004422 , L0004423 , L0004424 , L0004425 ,  
 L0004426 , L0004427 , L0004428 , L0004429 , L0004430 ,

SLINE8 L0004431 , L0004432 , L0004433 , L0004434 , L0004435 , L0004436 , L0004437 , L0004438 ,  
 L0004439 , L0004440 , L0004441 , L0004442 , L0004443 , L0004444 , L0004445 , L0004446 ,  
 L0004447 , L0004448 , L0004449 , L0004450 , L0004451 , L0004452 , L0004453 , L0004454 ,  
 L0004455 , L0004456 , L0004457 , L0004458 , L0004459 , L0004460 , L0004461 , L0004462 ,  
 L0004463 , L0004464 , L0004465 , L0004466 , L0004467 , L0004468 , L0004469 , L0004470 ,  
 L0004471 , L0004472 , L0004473 , L0004474 , L0004475 , L0004476 , L0004477 , L0004478 ,  
 L0004479 , L0004480 , L0004481 , L0004482 , L0004483 , L0004484 , L0004485 , L0004486 ,  
 L0004487 , L0004488 , L0004489 , L0004490 , L0004491 , L0004492 , L0004493 , L0004494 ,  
 L0004495 , L0004496 , L0004497 , L0004498 , L0004499 , L0004500 , L0004501 , L0004502 ,  
 L0004503 , L0004504 , L0004505 , L0004506 , L0004507 , L0004508 , L0004509 , L0004510 ,  
 L0004511 , L0004512 , L0004513 , L0004514 , L0004515 , L0004516 , L0004517 , L0004518 ,

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

L0004519 , L0004520 , L0004521 , L0004522 , L0004523 , L0004524 , L0004525 , L0004526 ,  
L0004527 , L0004528 , L0004529 , L0004530 , L0004531 , L0004532 , L0004533 , L0004534 ,  
L0004535 , L0004536 , L0004537 , L0004538 , L0004539 , L0004540 , L0004541 , L0004542 ,  
L0004543 , L0004544 , L0004545 , L0004546 , L0004547 , L0004548 , L0004549 , L0004550 ,  
L0004551 , L0004552 , L0004553 , L0004554 , L0004555 , L0004556 , L0004557 , L0004558 ,  
L0004559 , L0004560 , L0004561 , L0004562 , L0004563 , L0004564 , L0004565 , L0004566 ,  
L0004567 , L0004568 , L0004569 , L0004570 , L0004571 , L0004572 , L0004573 , L0004574 ,  
L0004575 , L0004576 , L0004577 , L0004578 , L0004579 , L0004580 , L0004581 , L0004582 ,  
L0004583 , L0004584 , L0004585 , L0004586 , L0004587 , L0004588 , L0004589 , L0004590 ,  
L0004591 , L0004592 , L0004593 , L0004594 , L0004595 , L0004596 , L0004597 , L0004598 ,  
L0004599 , L0004600 , L0004601 , L0004602 , L0004603 , L0004604 , L0004605 , L0004606 ,  
L0004607 , L0004608 , L0004609 , L0004610 , L0004611 , L0004612 , L0004613 , L0004614 ,  
L0004615 , L0004616 , L0004617 , L0004618 , L0004619 , L0004620 , L0004621 , L0004622 ,  
L0004623 , L0004624 , L0004625 , L0004626 , L0004627 , L0004628 , L0004629 , L0004630 ,  
L0004631 , L0004632 , L0004633 , L0004634 , L0004635 , L0004636 , L0004637 , L0004638 ,  
L0004639 , L0004640 , L0004641 , L0004642 , L0004643 , L0004644 , L0004645 , L0004646 ,  
L0004647 , L0004648 , L0004649 , L0004650 , L0004651 , L0004652 , L0004653 , L0004654 ,  
L0004655 , L0004656 , L0004657 , L0004658 , L0004659 , L0004660 , L0004661 , L0004662 ,  
L0004663 , L0004664 , L0004665 , L0004666 , L0004667 , L0004668 , L0004669 , L0004670 ,  
L0004671 , L0004672 , L0004673 , L0004674 , L0004675 , L0004676 , L0004677 , L0004678 ,

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*

\*\*\* 15:03:05

PAGE 41

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

-----  
L0004679 , L0004680 , L0004681 , L0004682 , L0004683 , L0004684 , L0004685 , L0004686 ,  
L0004687 , L0004688 , L0004689 , L0004690 , L0004691 , L0004692 , L0004693 , L0004694 ,  
L0004695 , L0004696 , L0004697 , L0004698 , L0004699 , L0004700 , L0004701 , L0004702 ,  
L0004703 , L0004704 , L0004705 , L0004706 , L0004707 , L0004708 , L0004709 , L0004710 ,  
L0004711 , L0004712 , L0004713 , L0004714 ,

SLINE9 L0005283 , L0005284 , L0005285 , L0005286 , L0005287 , L0005288 , L0005289 , L0005290 ,  
L0005291 , L0005292 , L0005293 , L0005294 , L0005295 , L0005296 , L0005297 , L0005298 ,  
L0005299 , L0005300 , L0005301 , L0005302 , L0005303 , L0005304 , L0005305 , L0005306 ,  
L0005307 , L0005308 , L0005309 , L0005310 , L0005311 , L0005312 , L0005313 , L0005314 ,  
L0005315 , L0005316 , L0005317 , L0005318 , L0005319 , L0005320 , L0005321 , L0005322 ,  
L0005323 , L0005324 , L0005325 , L0005326 , L0005327 , L0005328 , L0005329 , L0005330 ,  
L0005331 , L0005332 , L0005333 , L0005334 , L0005335 , L0005336 , L0005337 , L0005338 ,  
L0005339 , L0005340 , L0005341 , L0005342 , L0005343 , L0005344 , L0005345 , L0005346 ,  
L0005347 , L0005348 , L0005349 , L0005350 , L0005351 , L0005352 , L0005353 , L0005354 ,  
L0005355 , L0005356 , L0005357 , L0005358 , L0005359 , L0005360 , L0005361 , L0005362 ,  
L0005363 , L0005364 , L0005365 , L0005366 , L0005367 , L0005368 , L0005369 , L0005370 ,  
L0005371 , L0005372 , L0005373 , L0005374 , L0005375 , L0005376 , L0005377 , L0005378 ,  
L0005379 , L0005380 , L0005381 , L0005382 , L0005383 , L0005384 , L0005385 , L0005386 ,  
L0005387 , L0005388 , L0005389 , L0005390 , L0005391 , L0005392 , L0005393 , L0005394 ,  
L0005395 , L0005396 , L0005397 , L0005398 , L0005399 , L0005400 , L0005401 , L0005402 ,

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-  
977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID SOURCE IDs  
-----



L0005403 , L0005404 , L0005405 , L0005406 , L0005407 , L0005408 , L0005409 , L0005410 ,  
 L0005411 , L0005412 , L0005413 , L0005414 , L0005415 , L0005416 , L0005417 , L0005418 ,  
 L0005419 , L0005420 , L0005421 , L0005422 , L0005423 , L0005424 , L0005425 , L0005426 ,  
 L0005427 , L0005428 , L0005429 , L0005430 , L0005431 , L0005432 , L0005433 , L0005434 ,  
 L0005435 , L0005436 , L0005437 , L0005438 , L0005439 , L0005440 , L0005441 , L0005442 ,  
 L0005443 , L0005444 , L0005445 , L0005446 , L0005447 , L0005448 , L0005449 , L0005450 ,  
 L0005451 , L0005452 , L0005453 , L0005454 , L0005455 , L0005456 , L0005457 , L0005458 ,  
 L0005459 , L0005460 , L0005461 , L0005462 , L0005463 , L0005464 , L0005465 , L0005466 ,  
 L0005467 , L0005468 , L0005469 , L0005470 , L0005471 , L0005472 , L0005473 , L0005474 ,  
 L0005475 , L0005476 , L0005477 , L0005478 , L0005479 , L0005480 , L0005481 , L0005482 ,  
 L0005483 , L0005484 , L0005485 , L0005486 , L0005487 , L0005488 , L0005489 , L0005490 ,  
 L0005491 , L0005492 , L0005493 , L0005494 , L0005495 , L0005496 , L0005497 , L0005498 ,  
 L0005499 , L0005500 , L0005501 , L0005502 , L0005503 , L0005504 , L0005505 , L0005506 ,  
 L0005507 , L0005508 , L0005509 , L0005510 , L0005511 , L0005512 , L0005513 , L0005514 ,  
 L0005515 , L0005516 , L0005517 , L0005518 , L0005519 , L0005520 , L0005521 , L0005522 ,  
 L0005523 , L0005524 , L0005525 , L0005526 , L0005527 , L0005528 , L0005529 , L0005530 ,  
 L0005531 , L0005532 , L0005533 , L0005534 , L0005535 , L0005536 , L0005537 , L0005538 ,  
 L0005539 , L0005540 , L0005541 , L0005542 , L0005543 , L0005544 , L0005545 , L0005546 ,  
 L0005547 , L0005548 , L0005549 , L0005550 , L0005551 , L0005552 , L0005553 , L0005554 ,  
 L0005555 , L0005556 , L0005557 , L0005558 , L0005559 , L0005560 , L0005561 , L0005562 ,

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 43

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID

SOURCE IDs

-----

-----

L0005563 , L0005564 , L0005565 , L0005566 ,

STCK1 STCK1 ,

STCK10 STCK10 ,  
STCK11 STCK11 ,  
STCK12 STCK12 ,  
STCK13 STCK13 ,  
STCK14 STCK14 ,  
STCK2 STCK2 ,  
STCK3 STCK3 ,  
STCK4 STCK4 ,  
STCK5 STCK5 ,  
STCK6 STCK6 ,  
STCK7 STCK7 ,  
STCK8 STCK8 ,  
STCK9 STCK9 ,

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 44

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

( 649676.3, 4188314.5,	10.1,	10.1,	0.0);	( 649629.7, 4188294.8,	10.1,	10.1,	0.0);
( 649810.2, 4188312.5,	10.1,	10.1,	0.0);	( 649364.1, 4188360.2,	10.1,	10.1,	0.0);
( 649327.8, 4188355.0,	10.1,	10.1,	0.0);	( 649380.7, 4188758.5,	10.1,	10.1,	0.0);
( 650495.8, 4188841.5,	10.1,	10.1,	0.0);	( 650597.5, 4188832.2,	10.1,	10.1,	0.0);
( 650536.3, 4188878.8,	10.1,	10.1,	0.0);	( 650577.8, 4188877.8,	10.1,	10.1,	0.0);
( 650602.7, 4188860.2,	10.1,	10.1,	0.0);	( 650611.0, 4188880.9,	10.1,	10.1,	0.0);
( 650638.1, 4188858.5,	10.1,	10.1,	0.0);	( 650664.1, 4188331.0,	10.1,	10.1,	0.0);
( 650668.7, 4188350.8,	10.1,	10.1,	0.0);	( 650678.0, 4188379.9,	10.1,	10.1,	0.0);
( 650699.7, 4188414.8,	10.1,	10.1,	0.0);	( 650758.5, 4188658.4,	10.1,	10.1,	0.0);
( 650765.7, 4188678.8,	10.1,	10.1,	0.0);	( 650773.7, 4188706.5,	10.1,	10.1,	0.0);
( 650778.3, 4188726.3,	10.1,	10.1,	0.0);	( 650805.3, 4188805.5,	10.1,	10.1,	0.0);
( 650806.7, 4188824.0,	10.1,	10.1,	0.0);	( 650811.3, 4188843.8,	10.1,	10.1,	0.0);
( 650814.6, 4188862.3,	10.1,	10.1,	0.0);	( 650846.2, 4188925.0,	10.1,	10.1,	0.0);
( 650850.9, 4188951.4,	10.1,	10.1,	0.0);	( 650854.8, 4188976.5,	10.1,	10.1,	0.0);
( 650698.0, 4188307.3,	10.1,	10.1,	0.0);	( 650692.6, 4188291.8,	10.1,	10.1,	0.0);
( 650724.8, 4189245.8,	10.1,	10.1,	0.0);	( 650726.1, 4189273.4,	10.1,	10.1,	0.0);
( 650856.3, 4189006.3,	10.1,	10.1,	0.0);	( 650857.2, 4189022.6,	10.1,	10.1,	0.0);
( 650859.2, 4189041.3,	10.1,	10.1,	0.0);	( 650859.2, 4189058.5,	10.1,	10.1,	0.0);
( 650860.6, 4189076.3,	10.1,	10.1,	0.0);	( 650861.5, 4189094.5,	10.1,	10.1,	0.0);
( 650857.7, 4189113.2,	10.1,	10.1,	0.0);	( 650847.2, 4189118.9,	10.1,	10.1,	0.0);

( 650848.1, 4189134.8, 10.1, 10.1, 0.0); ( 650850.0, 4189155.4, 10.1, 10.1, 0.0);  
( 650851.5, 4189171.7, 10.1, 10.1, 0.0); ( 650853.9, 4189184.1, 10.1, 10.1, 0.0);  
( 650856.8, 4189199.5, 10.1, 10.1, 0.0); ( 650857.7, 4189213.4, 10.1, 10.1, 0.0);  
( 650860.6, 4189226.3, 10.1, 10.1, 0.0); ( 650862.5, 4189242.6, 10.1, 10.1, 0.0);  
( 650865.4, 4189258.4, 10.1, 10.1, 0.0); ( 650867.8, 4189275.2, 10.1, 10.1, 0.0);  
( 650868.7, 4189291.5, 10.1, 10.1, 0.0); ( 650872.1, 4189309.2, 10.1, 10.1, 0.0);  
( 650874.0, 4189325.0, 10.1, 10.1, 0.0); ( 650875.9, 4189340.4, 10.1, 10.1, 0.0);  
( 650878.8, 4189355.2, 10.1, 10.1, 0.0); ( 650881.2, 4189373.4, 10.1, 10.1, 0.0);  
( 650884.6, 4189390.7, 10.1, 10.1, 0.0); ( 650888.9, 4189407.0, 10.1, 10.1, 0.0);  
( 650889.8, 4189427.1, 10.1, 10.1, 0.0); ( 650891.7, 4189443.4, 10.1, 10.1, 0.0);  
( 650895.1, 4189461.2, 10.1, 10.1, 0.0); ( 650898.5, 4189475.5, 10.1, 10.1, 0.0);  
( 650898.5, 4189489.9, 10.1, 10.1, 0.0); ( 650902.3, 4189504.3, 10.1, 10.1, 0.0);  
( 650709.4, 4188344.6, 10.1, 10.1, 0.0); ( 650722.5, 4188284.0, 10.1, 10.1, 0.0);  
( 650745.7, 4188280.3, 10.1, 10.1, 0.0); ( 650735.5, 4188223.5, 10.1, 10.1, 0.0);  
( 650721.5, 4188167.6, 10.1, 10.1, 0.0); ( 650525.8, 4188133.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188133.3, 10.1, 10.1, 0.0); ( 649125.8, 4188183.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188183.3, 10.1, 10.1, 0.0); ( 649325.8, 4188183.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188183.3, 10.1, 10.1, 0.0); ( 649525.8, 4188183.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188183.3, 10.1, 10.1, 0.0); ( 649725.8, 4188183.3, 10.1, 10.1, 0.0);  
( 649825.8, 4188183.3, 10.1, 10.1, 0.0); ( 649925.8, 4188183.3, 10.1, 10.1, 0.0);  
( 650025.8, 4188183.3, 10.1, 10.1, 0.0); ( 650125.8, 4188183.3, 10.1, 10.1, 0.0);  
( 650225.8, 4188183.3, 10.1, 10.1, 0.0); ( 650325.8, 4188183.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188183.3, 10.1, 10.1, 0.0); ( 650525.8, 4188183.3, 10.1, 10.1, 0.0);  
( 650625.8, 4188183.3, 10.1, 10.1, 0.0); ( 650725.8, 4188183.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188183.3, 10.1, 10.1, 0.0); ( 651125.8, 4188183.3, 10.1, 10.1, 0.0);

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 45

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

( 649125.8, 4188233.3, 10.1, 10.1, 0.0); ( 649225.8, 4188233.3, 10.1, 10.1, 0.0);  
( 649325.8, 4188233.3, 10.1, 10.1, 0.0); ( 649425.8, 4188233.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188233.3, 10.1, 10.1, 0.0); ( 649625.8, 4188233.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188233.3, 10.1, 10.1, 0.0); ( 649825.8, 4188233.3, 10.1, 10.1, 0.0);  
( 649925.8, 4188233.3, 10.1, 10.1, 0.0); ( 650025.8, 4188233.3, 10.1, 10.1, 0.0);  
( 650125.8, 4188233.3, 10.1, 10.1, 0.0); ( 650225.8, 4188233.3, 10.1, 10.1, 0.0);  
( 650325.8, 4188233.3, 10.1, 10.1, 0.0); ( 650425.8, 4188233.3, 10.1, 10.1, 0.0);  
( 650525.8, 4188233.3, 10.1, 10.1, 0.0); ( 650625.8, 4188233.3, 10.1, 10.1, 0.0);  
( 650725.8, 4188233.3, 10.1, 10.1, 0.0); ( 650825.8, 4188233.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188233.3, 10.1, 10.1, 0.0); ( 649125.8, 4188283.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188283.3, 10.1, 10.1, 0.0); ( 649325.8, 4188283.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188283.3, 10.1, 10.1, 0.0); ( 649525.8, 4188283.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188283.3, 10.1, 10.1, 0.0); ( 649725.8, 4188283.3, 10.1, 10.1, 0.0);  
( 649825.8, 4188283.3, 10.1, 10.1, 0.0); ( 649925.8, 4188283.3, 10.1, 10.1, 0.0);  
( 650025.8, 4188283.3, 10.1, 10.1, 0.0); ( 650125.8, 4188283.3, 10.1, 10.1, 0.0);  
( 650225.8, 4188283.3, 10.1, 10.1, 0.0); ( 650325.8, 4188283.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188283.3, 10.1, 10.1, 0.0); ( 650525.8, 4188283.3, 10.1, 10.1, 0.0);  
( 650625.8, 4188283.3, 10.1, 10.1, 0.0); ( 650725.8, 4188283.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188283.3, 10.1, 10.1, 0.0); ( 651125.8, 4188283.3, 10.1, 10.1, 0.0);  
( 649125.8, 4188333.3, 10.1, 10.1, 0.0); ( 649225.8, 4188333.3, 10.1, 10.1, 0.0);

( 649325.8, 4188333.3, 10.1, 10.1, 0.0); ( 649425.8, 4188333.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188333.3, 10.1, 10.1, 0.0); ( 649625.8, 4188333.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188333.3, 10.1, 10.1, 0.0); ( 649825.8, 4188333.3, 10.1, 10.1, 0.0);  
( 649925.8, 4188333.3, 10.1, 10.1, 0.0); ( 650025.8, 4188333.3, 10.1, 10.1, 0.0);  
( 650125.8, 4188333.3, 10.1, 10.1, 0.0); ( 650225.8, 4188333.3, 10.1, 10.1, 0.0);  
( 650325.8, 4188333.3, 10.1, 10.1, 0.0); ( 650425.8, 4188333.3, 10.1, 10.1, 0.0);  
( 650525.8, 4188333.3, 10.1, 10.1, 0.0); ( 650625.8, 4188333.3, 10.1, 10.1, 0.0);  
( 650725.8, 4188333.3, 10.1, 10.1, 0.0); ( 650825.8, 4188333.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188333.3, 10.1, 10.1, 0.0); ( 649125.8, 4188383.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188383.3, 10.1, 10.1, 0.0); ( 649325.8, 4188383.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188383.3, 10.1, 10.1, 0.0); ( 649525.8, 4188383.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188383.3, 10.1, 10.1, 0.0); ( 649725.8, 4188383.3, 10.1, 10.1, 0.0);  
( 649825.8, 4188383.3, 10.1, 10.1, 0.0); ( 649925.8, 4188383.3, 10.1, 10.1, 0.0);  
( 650025.8, 4188383.3, 10.1, 10.1, 0.0); ( 650125.8, 4188383.3, 10.1, 10.1, 0.0);  
( 650225.8, 4188383.3, 10.1, 10.1, 0.0); ( 650325.8, 4188383.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188383.3, 10.1, 10.1, 0.0); ( 650525.8, 4188383.3, 10.1, 10.1, 0.0);  
( 650625.8, 4188383.3, 10.1, 10.1, 0.0); ( 650725.8, 4188383.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188383.3, 10.1, 10.1, 0.0); ( 651125.8, 4188383.3, 10.1, 10.1, 0.0);  
( 649125.8, 4188433.3, 10.1, 10.1, 0.0); ( 649225.8, 4188433.3, 10.1, 10.1, 0.0);  
( 649325.8, 4188433.3, 10.1, 10.1, 0.0); ( 649425.8, 4188433.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188433.3, 10.1, 10.1, 0.0); ( 649625.8, 4188433.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188433.3, 10.1, 10.1, 0.0); ( 649825.8, 4188433.3, 10.1, 10.1, 0.0);  
( 649925.8, 4188433.3, 10.1, 10.1, 0.0); ( 650025.8, 4188433.3, 10.1, 10.1, 0.0);  
( 650125.8, 4188433.3, 10.1, 10.1, 0.0); ( 650225.8, 4188433.3, 10.1, 10.1, 0.0);  
( 650325.8, 4188433.3, 10.1, 10.1, 0.0); ( 650425.8, 4188433.3, 10.1, 10.1, 0.0);

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 46

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

( 650525.8, 4188433.3, 10.1, 10.1, 0.0); ( 650625.8, 4188433.3, 10.1, 10.1, 0.0);  
( 650725.8, 4188433.3, 10.1, 10.1, 0.0); ( 650825.8, 4188433.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188433.3, 10.1, 10.1, 0.0); ( 649125.8, 4188483.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188483.3, 10.1, 10.1, 0.0); ( 649325.8, 4188483.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188483.3, 10.1, 10.1, 0.0); ( 649525.8, 4188483.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188483.3, 10.1, 10.1, 0.0); ( 649725.8, 4188483.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188483.3, 10.1, 10.1, 0.0); ( 650525.8, 4188483.3, 10.1, 10.1, 0.0);  
( 650625.8, 4188483.3, 10.1, 10.1, 0.0); ( 650725.8, 4188483.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188483.3, 10.1, 10.1, 0.0); ( 651125.8, 4188483.3, 10.1, 10.1, 0.0);  
( 649125.8, 4188533.3, 10.1, 10.1, 0.0); ( 649225.8, 4188533.3, 10.1, 10.1, 0.0);  
( 649325.8, 4188533.3, 10.1, 10.1, 0.0); ( 649425.8, 4188533.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188533.3, 10.1, 10.1, 0.0); ( 649625.8, 4188533.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188533.3, 10.1, 10.1, 0.0); ( 650425.8, 4188533.3, 10.1, 10.1, 0.0);  
( 650525.8, 4188533.3, 10.1, 10.1, 0.0); ( 650625.8, 4188533.3, 10.1, 10.1, 0.0);  
( 650725.8, 4188533.3, 10.1, 10.1, 0.0); ( 650825.8, 4188533.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188533.3, 10.1, 10.1, 0.0); ( 649125.8, 4188583.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188583.3, 10.1, 10.1, 0.0); ( 649325.8, 4188583.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188583.3, 10.1, 10.1, 0.0); ( 649525.8, 4188583.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188583.3, 10.1, 10.1, 0.0); ( 649725.8, 4188583.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188583.3, 10.1, 10.1, 0.0); ( 650525.8, 4188583.3, 10.1, 10.1, 0.0);

( 650625.8, 4188583.3, 10.1, 10.1, 0.0); ( 650725.8, 4188583.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188583.3, 10.1, 10.1, 0.0); ( 651125.8, 4188583.3, 10.1, 10.1, 0.0);  
( 649125.8, 4188633.3, 10.1, 10.1, 0.0); ( 649225.8, 4188633.3, 10.1, 10.1, 0.0);  
( 649325.8, 4188633.3, 10.1, 10.1, 0.0); ( 649425.8, 4188633.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188633.3, 10.1, 10.1, 0.0); ( 649625.8, 4188633.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188633.3, 10.1, 10.1, 0.0); ( 649825.8, 4188633.3, 10.1, 10.1, 0.0);  
( 649925.8, 4188633.3, 10.1, 10.1, 0.0); ( 650025.8, 4188633.3, 10.1, 10.1, 0.0);  
( 650125.8, 4188633.3, 10.1, 10.1, 0.0); ( 650225.8, 4188633.3, 10.1, 10.1, 0.0);  
( 650325.8, 4188633.3, 10.1, 10.1, 0.0); ( 650425.8, 4188633.3, 10.1, 10.1, 0.0);  
( 650525.8, 4188633.3, 10.1, 10.1, 0.0); ( 650625.8, 4188633.3, 10.1, 10.1, 0.0);  
( 650725.8, 4188633.3, 10.1, 10.1, 0.0); ( 650825.8, 4188633.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188633.3, 10.1, 10.1, 0.0); ( 649125.8, 4188683.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188683.3, 10.1, 10.1, 0.0); ( 649325.8, 4188683.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188683.3, 10.1, 10.1, 0.0); ( 649525.8, 4188683.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188683.3, 10.1, 10.1, 0.0); ( 649725.8, 4188683.3, 10.1, 10.1, 0.0);  
( 649825.8, 4188683.3, 10.1, 10.1, 0.0); ( 649925.8, 4188683.3, 10.1, 10.1, 0.0);  
( 650025.8, 4188683.3, 10.1, 10.1, 0.0); ( 650125.8, 4188683.3, 10.1, 10.1, 0.0);  
( 650225.8, 4188683.3, 10.1, 10.1, 0.0); ( 650325.8, 4188683.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188683.3, 10.1, 10.1, 0.0); ( 650525.8, 4188683.3, 10.1, 10.1, 0.0);  
( 650625.8, 4188683.3, 10.1, 10.1, 0.0); ( 650725.8, 4188683.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188683.3, 10.1, 10.1, 0.0); ( 651125.8, 4188683.3, 10.1, 10.1, 0.0);  
( 649125.8, 4188733.3, 10.1, 10.1, 0.0); ( 649225.8, 4188733.3, 10.1, 10.1, 0.0);  
( 649325.8, 4188733.3, 10.1, 10.1, 0.0); ( 649425.8, 4188733.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188733.3, 10.1, 10.1, 0.0); ( 649625.8, 4188733.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188733.3, 10.1, 10.1, 0.0); ( 649825.8, 4188733.3, 10.1, 10.1, 0.0);

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 47

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* DISCRETE CARTESIAN RECEPTORS \*\*\*  
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)  
(METERS)

( 649925.8, 4188733.3, 10.1, 10.1, 0.0); ( 650025.8, 4188733.3, 10.1, 10.1, 0.0);  
( 650125.8, 4188733.3, 10.1, 10.1, 0.0); ( 650225.8, 4188733.3, 10.1, 10.1, 0.0);  
( 650325.8, 4188733.3, 10.1, 10.1, 0.0); ( 650425.8, 4188733.3, 10.1, 10.1, 0.0);  
( 650525.8, 4188733.3, 10.1, 10.1, 0.0); ( 650625.8, 4188733.3, 10.1, 10.1, 0.0);  
( 650725.8, 4188733.3, 10.1, 10.1, 0.0); ( 650825.8, 4188733.3, 10.1, 10.1, 0.0);  
( 651125.8, 4188733.3, 10.1, 10.1, 0.0); ( 649125.8, 4188783.3, 10.1, 10.1, 0.0);  
( 649225.8, 4188783.3, 10.1, 10.1, 0.0); ( 649325.8, 4188783.3, 10.1, 10.1, 0.0);  
( 649425.8, 4188783.3, 10.1, 10.1, 0.0); ( 649525.8, 4188783.3, 10.1, 10.1, 0.0);  
( 649625.8, 4188783.3, 10.1, 10.1, 0.0); ( 649725.8, 4188783.3, 10.1, 10.1, 0.0);  
( 649825.8, 4188783.3, 10.1, 10.1, 0.0); ( 649925.8, 4188783.3, 10.1, 10.1, 0.0);  
( 650025.8, 4188783.3, 10.1, 10.1, 0.0); ( 650125.8, 4188783.3, 10.1, 10.1, 0.0);  
( 650225.8, 4188783.3, 10.1, 10.1, 0.0); ( 650325.8, 4188783.3, 10.1, 10.1, 0.0);  
( 650425.8, 4188783.3, 10.1, 10.1, 0.0); ( 650525.8, 4188783.3, 10.1, 10.1, 0.0);  
( 650625.8, 4188783.3, 10.1, 10.1, 0.0); ( 650725.8, 4188783.3, 10.1, 10.1, 0.0);  
( 650825.8, 4188783.3, 10.1, 10.1, 0.0); ( 651125.8, 4188783.3, 10.1, 10.1, 0.0);  
( 649125.8, 4188833.3, 10.1, 10.1, 0.0); ( 649225.8, 4188833.3, 10.1, 10.1, 0.0);  
( 649325.8, 4188833.3, 10.1, 10.1, 0.0); ( 649425.8, 4188833.3, 10.1, 10.1, 0.0);  
( 649525.8, 4188833.3, 10.1, 10.1, 0.0); ( 649625.8, 4188833.3, 10.1, 10.1, 0.0);  
( 649725.8, 4188833.3, 10.1, 10.1, 0.0); ( 649825.8, 4188833.3, 10.1, 10.1, 0.0);  
( 649925.8, 4188833.3, 10.1, 10.1, 0.0); ( 650025.8, 4188833.3, 10.1, 10.1, 0.0);

```

( 650125.8,4188833.3, 10.1, 10.1, 0.0); ( 650225.8,4188833.3, 10.1, 10.1, 0.0);
( 650325.8,4188833.3, 10.1, 10.1, 0.0); ( 650425.8,4188833.3, 10.1, 10.1, 0.0);
( 650525.8,4188833.3, 10.1, 10.1, 0.0); ( 650625.8,4188833.3, 10.1, 10.1, 0.0);
( 650725.8,4188833.3, 10.1, 10.1, 0.0); ( 650825.8,4188833.3, 10.1, 10.1, 0.0);
( 651125.8,4188833.3, 10.1, 10.1, 0.0); ( 649125.8,4188833.3, 10.1, 10.1, 0.0);
( 649225.8,4188833.3, 10.1, 10.1, 0.0); ( 649325.8,4188833.3, 10.1, 10.1, 0.0);
( 649425.8,4188833.3, 10.1, 10.1, 0.0); ( 649525.8,4188833.3, 10.1, 10.1, 0.0);
( 649625.8,4188833.3, 10.1, 10.1, 0.0); ( 649725.8,4188833.3, 10.1, 10.1, 0.0);
( 649825.8,4188833.3, 10.1, 10.1, 0.0); ( 649925.8,4188833.3, 10.1, 10.1, 0.0);
( 650025.8,4188833.3, 10.1, 10.1, 0.0); ( 650125.8,4188833.3, 10.1, 10.1, 0.0);
( 650225.8,4188833.3, 10.1, 10.1, 0.0); ( 650325.8,4188833.3, 10.1, 10.1, 0.0);
( 650425.8,4188833.3, 10.1, 10.1, 0.0); ( 650525.8,4188833.3, 10.1, 10.1, 0.0);
( 650625.8,4188833.3, 10.1, 10.1, 0.0); ( 650725.8,4188833.3, 10.1, 10.1, 0.0);
( 650825.8,4188833.3, 10.1, 10.1, 0.0); ( 651125.8,4188833.3, 10.1, 10.1, 0.0);
( 650125.8,4188933.3, 10.1, 10.1, 0.0); ( 650225.8,4188933.3, 10.1, 10.1, 0.0);
( 650325.8,4188933.3, 10.1, 10.1, 0.0); ( 650425.8,4188933.3, 10.1, 10.1, 0.0);
( 650525.8,4188933.3, 10.1, 10.1, 0.0); ( 650625.8,4188933.3, 10.1, 10.1, 0.0);
( 650725.8,4188933.3, 10.1, 10.1, 0.0); ( 650825.8,4188933.3, 10.1, 10.1, 0.0);
( 651125.8,4188933.3, 10.1, 10.1, 0.0); ( 650425.8,4188983.3, 10.1, 10.1, 0.0);
( 650525.8,4188983.3, 10.1, 10.1, 0.0); ( 650625.8,4188983.3, 10.1, 10.1, 0.0);
( 650725.8,4188983.3, 10.1, 10.1, 0.0); ( 650825.8,4188983.3, 10.1, 10.1, 0.0);
( 651125.8,4188983.3, 10.1, 10.1, 0.0); ( 650525.8,4189033.3, 10.1, 10.1, 0.0);
( 650625.8,4189033.3, 10.1, 10.1, 0.0); ( 650725.8,4189033.3, 10.1, 10.1, 0.0);
( 650825.8,4189033.3, 10.1, 10.1, 0.0); ( 651125.8,4189033.3, 10.1, 10.1, 0.0);
( 650525.8,4189083.3, 10.1, 10.1, 0.0); ( 650625.8,4189083.3, 10.1, 10.1, 0.0);

```

```

*** AERMOD - VERSION 19191 *** *** C:\Users\Smith\Dropbox\My PC (DESKTOP-
977GSBU)\Documents\HRA\Ashley *** 07/19/23

```

```

*** AERMET - VERSION 18081 *** ***

```

```

*** 15:03:05

```

PAGE 48

```

*** MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ_U*

```

```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```

```

( 650725.8,4189083.3, 10.1, 10.1, 0.0); ( 650825.8,4189083.3, 10.1, 10.1, 0.0);
( 651125.8,4189083.3, 10.1, 10.1, 0.0); ( 650525.8,4189133.3, 10.1, 10.1, 0.0);
( 650625.8,4189133.3, 10.1, 10.1, 0.0); ( 650725.8,4189133.3, 10.1, 10.1, 0.0);
( 650825.8,4189133.3, 10.1, 10.1, 0.0); ( 651125.8,4189133.3, 10.1, 10.1, 0.0);
( 650782.0,4189510.6, 10.1, 10.1, 0.0); ( 650760.3,4189397.5, 10.1, 10.1, 0.0);

```

```

*** AERMOD - VERSION 19191 *** *** C:\Users\Smith\Dropbox\My PC (DESKTOP-
977GSBU)\Documents\HRA\Ashley *** 07/19/23

```

```

*** AERMET - VERSION 18081 *** ***

```

```

*** 15:03:05

```

PAGE 49

```

*** MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ_U*

```

```

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE
PERFORMED *

```

LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

```

SOURCE      -- RECEPTOR LOCATION --    DISTANCE
ID          XR (METERS)  YR (METERS)  (METERS)
-----

```



13 01 01	1 04	-6.7	0.105	-9.000	-9.000	-999.	84.	16.0	0.04	2.20	1.00	1.63	349.	10.0	272.5	2.0
13 01 01	1 05	-20.1	0.193	-9.000	-9.000	-999.	203.	40.9	0.04	2.20	1.00	2.86	356.	10.0	274.2	2.0
13 01 01	1 06	-3.9	0.081	-9.000	-9.000	-999.	64.	12.6	0.04	2.20	1.00	1.23	77.	10.0	273.8	2.0
13 01 01	1 07	-18.3	0.180	-9.000	-9.000	-999.	184.	35.8	0.06	2.20	1.00	2.52	255.	10.0	273.1	2.0
13 01 01	1 08	-26.9	0.259	-9.000	-9.000	-999.	316.	73.8	0.08	2.20	0.73	3.29	287.	10.0	274.2	2.0
13 01 01	1 09	-1.9	0.212	-9.000	-9.000	-999.	236.	461.6	0.05	2.20	0.39	2.81	315.	10.0	275.9	2.0
13 01 01	1 10	61.1	0.155	0.630	0.005	150.	147.	-5.5	0.04	2.20	0.27	1.60	336.	10.0	277.5	2.0
13 01 01	1 11	110.2	0.238	1.137	0.005	488.	279.	-11.2	0.06	2.20	0.23	2.45	228.	10.0	279.9	2.0
13 01 01	1 12	137.1	0.276	1.492	0.008	886.	347.	-14.0	0.08	2.20	0.22	2.69	286.	10.0	280.4	2.0
13 01 01	1 13	141.1	0.271	1.531	0.007	929.	339.	-12.9	0.05	2.20	0.21	2.88	325.	10.0	282.5	2.0
13 01 01	1 14	121.3	0.232	1.475	0.006	965.	269.	-9.4	0.04	2.20	0.22	2.57	356.	10.0	283.8	2.0
13 01 01	1 15	78.7	0.218	1.287	0.005	988.	244.	-12.0	0.04	2.20	0.26	2.47	357.	10.0	284.2	2.0
13 01 01	1 16	17.6	0.265	0.783	0.005	993.	327.	-96.0	0.03	2.20	0.35	3.59	2.	10.0	284.2	2.0
13 01 01	1 17	-11.2	0.143	-9.000	-9.000	-999.	139.	24.1	0.04	2.20	0.60	2.16	346.	10.0	282.5	2.0
13 01 01	1 18	-8.7	0.125	-9.000	-9.000	-999.	107.	20.6	0.08	2.20	1.00	1.67	273.	10.0	279.2	2.0
13 01 01	1 19	-13.3	0.154	-9.000	-9.000	-999.	145.	26.0	0.06	2.20	1.00	2.15	238.	10.0	278.1	2.0
13 01 01	1 20	-10.2	0.134	-9.000	-9.000	-999.	117.	21.4	0.06	2.20	1.00	1.89	230.	10.0	275.9	2.0
13 01 01	1 21	-12.5	0.148	-9.000	-9.000	-999.	137.	24.2	0.05	2.20	1.00	2.11	300.	10.0	276.4	2.0
13 01 01	1 22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.05	2.20	1.00	0.00	0.	10.0	275.9	2.0
13 01 01	1 23	-24.0	0.230	-9.000	-9.000	-999.	264.	57.9	0.04	2.20	1.00	3.36	80.	10.0	274.2	2.0
13 01 01	1 24	-16.1	0.169	-9.000	-9.000	-999.	167.	31.3	0.06	2.20	1.00	2.36	100.	10.0	274.2	2.0

First hour of profile data

YR MO DY HR HEIGHT F WDIR WSPD AMB\_TMP sigmaA sigmaW sigmaV

13 01 01 01 10.0 1 149. 2.78 273.8 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 52

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	20.13692	649629.66	4188294.84	11.51824
649810.15	4188312.48	17.40247	649364.10	4188360.20	4.15681
649327.80	4188355.01	3.67786	649380.70	4188758.52	4.21347
650495.81	4188841.51	5.17191	650597.47	4188832.17	4.53875
650536.27	4188878.85	4.06292	650577.76	4188877.81	3.84133
650602.66	4188860.18	3.97914	650610.95	4188880.93	3.61292
650638.10	4188858.53	3.78294	650664.10	4188331.03	11.09513
650668.72	4188350.83	11.62804	650677.96	4188379.86	12.27381



650699.74	4188414.84	12.43299	650758.47	4188658.36	6.80585
650765.73	4188678.82	6.06019	650773.65	4188706.54	5.26625
650778.27	4188726.34	4.80392	650805.33	4188805.53	3.39978
650806.65	4188824.01	3.19310	650811.27	4188843.81	2.97589
650814.57	4188862.29	2.79785	650846.24	4188924.98	2.24299
650850.86	4188951.38	2.08414	650854.82	4188976.46	1.95056
650698.00	4188307.32	9.18217	650692.60	4188291.80	8.91220
650724.82	4189245.80	1.23135	650726.07	4189273.37	1.16888
650856.27	4189006.30	1.81555	650857.23	4189022.60	1.74769
650859.15	4189041.29	1.67330	650859.15	4189058.54	1.61186
650860.58	4189076.28	1.55011	650861.54	4189094.49	1.49119
650857.71	4189113.19	1.44046	650847.16	4189118.94	1.43725
650848.12	4189134.76	1.39118	650850.04	4189155.37	1.33383
650851.48	4189171.66	1.29120	650853.87	4189184.12	1.25875
650856.75	4189199.46	1.22065	650857.71	4189213.36	1.18921
650860.58	4189226.30	1.15940	650862.50	4189242.60	1.12496
650865.38	4189258.42	1.09232	650867.77	4189275.19	1.05990
650868.73	4189291.49	1.03086	650872.09	4189309.23	0.99919
650874.00	4189325.04	0.97302	650875.92	4189340.38	0.94868
650878.80	4189355.24	0.92546	650881.19	4189373.45	0.89894
650884.55	4189390.71	0.87438	650888.86	4189407.01	0.85163
650889.82	4189427.14	0.82699	650891.74	4189443.43	0.80737
650895.09	4189461.17	0.78633	650898.45	4189475.55	0.76966
650898.45	4189489.93	0.75492	650902.28	4189504.31	0.73915
650709.41	4188344.56	9.83166	650722.45	4188284.03	7.98290
650745.73	4188280.30	7.40433	650735.49	4188223.50	6.54973
650721.52	4188167.62	5.77284	650525.76	4188133.34	6.52242
651125.76	4188133.34	2.68991	649125.76	4188183.34	1.79878
649225.76	4188183.34	2.12953	649325.76	4188183.34	2.57795
649425.76	4188183.34	3.20954	649525.76	4188183.34	4.19510
649625.76	4188183.34	5.55330	649725.76	4188183.34	6.70326
649825.76	4188183.34	7.51555	649925.76	4188183.34	7.89041

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 53

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	8.09091	650125.76	4188183.34	8.21635
650225.76	4188183.34	8.32412	650325.76	4188183.34	8.54660
650425.76	4188183.34	8.49502	650525.76	4188183.34	8.00518
650625.76	4188183.34	7.09608	650725.76	4188183.34	5.98587

650825.76	4188183.34	4.92410	651125.76	4188183.34	2.80973
649125.76	4188233.34	1.92638	649225.76	4188233.34	2.31214
649325.76	4188233.34	2.84838	649425.76	4188233.34	3.65232
649525.76	4188233.34	4.95506	649625.76	4188233.34	7.20879
649725.76	4188233.34	9.16267	649825.76	4188233.34	9.91892
649925.76	4188233.34	10.07767	650025.76	4188233.34	10.18082
650125.76	4188233.34	10.28151	650225.76	4188233.34	10.39831
650325.76	4188233.34	10.68337	650425.76	4188233.34	10.94944
650525.76	4188233.34	10.24065	650625.76	4188233.34	8.62605
650725.76	4188233.34	6.88148	650825.76	4188233.34	5.45799
651125.76	4188233.34	2.91546	649125.76	4188283.34	2.05886
649225.76	4188283.34	2.50999	649325.76	4188283.34	3.15811
649425.76	4188283.34	4.18118	649525.76	4188283.34	6.04433
649625.76	4188283.34	10.17868	649725.76	4188283.34	14.25495
649825.76	4188283.34	13.77077	649925.76	4188283.34	13.43280
650025.76	4188283.34	13.39627	650125.76	4188283.34	13.46418
650225.76	4188283.34	13.62101	650325.76	4188283.34	14.06063
650425.76	4188283.34	15.31987	650525.76	4188283.34	14.04018
650625.76	4188283.34	10.59827	650725.76	4188283.34	7.89309
650825.76	4188283.34	6.02625	651125.76	4188283.34	2.99837
649125.76	4188333.34	2.19773	649225.76	4188333.34	2.71939
649325.76	4188333.34	3.50062	649425.76	4188333.34	4.81140
649525.76	4188333.34	7.55461	649625.76	4188333.34	16.85489
649725.76	4188333.34	27.09266	649825.76	4188333.34	20.51983
649925.76	4188333.34	19.52745	650025.76	4188333.34	19.28906
650125.76	4188333.34	19.27696	650225.76	4188333.34	19.46463
650325.76	4188333.34	20.34829	650425.76	4188333.34	26.27164
650525.76	4188333.34	20.94245	650625.76	4188333.34	12.95604
650725.76	4188333.34	9.02066	650825.76	4188333.34	6.60275
651125.76	4188333.34	3.05176	649125.76	4188383.34	2.33510
649225.76	4188383.34	2.92850	649325.76	4188383.34	3.85384
649425.76	4188383.34	5.49030	649525.76	4188383.34	9.33219
649625.76	4188383.34	30.16040	649725.76	4188383.34	49.29068
649825.76	4188383.34	38.61852	649925.76	4188383.34	36.68677
650025.76	4188383.34	35.80408	650125.76	4188383.34	35.25961
650225.76	4188383.34	35.08507	650325.76	4188383.34	36.37310

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 54

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	-------------	-------------	------

-----

650425.76	4188383.34	79.76445	650525.76	4188383.34	30.81161
650625.76	4188383.34	15.58203	650725.76	4188383.34	10.26304
650825.76	4188383.34	7.12476	651125.76	4188383.34	3.07799
649125.76	4188433.34	2.45327	649225.76	4188433.34	3.10040
649325.76	4188433.34	4.13116	649425.76	4188433.34	6.00565
649525.76	4188433.34	10.47164	649625.76	4188433.34	32.62095
649725.76	4188433.34	52.39743	649825.76	4188433.34	47.20024
649925.76	4188433.34	47.98459	650025.76	4188433.34	49.91260
650125.76	4188433.34	52.34976	650225.76	4188433.34	55.41647
650325.76	4188433.34	60.40938	650425.76	4188433.34	81.57230
650525.76	4188433.34	39.42868	650625.76	4188433.34	18.63487
650725.76	4188433.34	11.62808	650825.76	4188433.34	7.50028
651125.76	4188433.34	3.08261	649125.76	4188483.34	2.52935
649225.76	4188483.34	3.20395	649325.76	4188483.34	4.27670
649425.76	4188483.34	6.22293	649525.76	4188483.34	10.66525
649625.76	4188483.34	28.33774	649725.76	4188483.34	30.93479
650425.76	4188483.34	34.70096	650525.76	4188483.34	41.12687
650625.76	4188483.34	24.01474	650725.76	4188483.34	12.83977
650825.76	4188483.34	7.61133	651125.76	4188483.34	3.05419
649125.76	4188533.34	2.56138	649225.76	4188533.34	3.24320
649325.76	4188533.34	4.32360	649425.76	4188533.34	6.25091
649525.76	4188533.34	10.51394	649625.76	4188533.34	26.27362
649725.76	4188533.34	27.80582	650425.76	4188533.34	34.49666
650525.76	4188533.34	67.04790	650625.76	4188533.34	42.03909
650725.76	4188533.34	13.09441	650825.76	4188533.34	7.37615
651125.76	4188533.34	2.97562	649125.76	4188583.34	2.56792
649225.76	4188583.34	3.24528	649325.76	4188583.34	4.30389
649425.76	4188583.34	6.17178	649525.76	4188583.34	10.14655
649625.76	4188583.34	25.17893	649725.76	4188583.34	29.65903
650425.76	4188583.34	39.91585	650525.76	4188583.34	75.96965
650625.76	4188583.34	33.57403	650725.76	4188583.34	11.56444
650825.76	4188583.34	6.79303	651125.76	4188583.34	2.85289
649125.76	4188633.34	2.55121	649225.76	4188633.34	3.20886
649325.76	4188633.34	4.22431	649425.76	4188633.34	5.98468
649525.76	4188633.34	9.54260	649625.76	4188633.34	23.75373
649725.76	4188633.34	59.27276	649825.76	4188633.34	57.91571
649925.76	4188633.34	56.53131	650025.76	4188633.34	55.14158
650125.76	4188633.34	53.86823	650225.76	4188633.34	52.89741
650325.76	4188633.34	52.75430	650425.76	4188633.34	58.15951
650525.76	4188633.34	33.65838	650625.76	4188633.34	15.17221

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 55

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	8.82907	650825.76	4188633.34	5.89686
651125.76	4188633.34	2.69568	649125.76	4188683.34	2.50392
649225.76	4188683.34	3.12179	649325.76	4188683.34	4.05963
649425.76	4188683.34	5.59466	649525.76	4188683.34	8.38047
649625.76	4188683.34	15.63110	649725.76	4188683.34	23.39022
649825.76	4188683.34	25.85796	649925.76	4188683.34	27.13382
650025.76	4188683.34	28.11587	650125.76	4188683.34	29.04005
650225.76	4188683.34	30.00831	650325.76	4188683.34	31.16261
650425.76	4188683.34	31.71880	650525.76	4188683.34	17.18918
650625.76	4188683.34	10.08028	650725.76	4188683.34	6.77744
650825.76	4188683.34	4.97190	651125.76	4188683.34	2.51137
649125.76	4188733.34	2.41901	649225.76	4188733.34	2.97987
649325.76	4188733.34	3.80382	649425.76	4188733.34	5.04095
649525.76	4188733.34	6.97458	649625.76	4188733.34	9.77938
649725.76	4188733.34	11.89010	649825.76	4188733.34	13.02130
649925.76	4188733.34	13.73948	650025.76	4188733.34	14.24007
650125.76	4188733.34	14.63146	650225.76	4188733.34	14.93445
650325.76	4188733.34	15.13428	650425.76	4188733.34	13.72820
650525.76	4188733.34	9.95680	650625.76	4188733.34	7.21197
650725.76	4188733.34	5.36619	650825.76	4188733.34	4.16897
651125.76	4188733.34	2.31403	649125.76	4188783.34	2.30740
649225.76	4188783.34	2.81136	649325.76	4188783.34	3.51697
649425.76	4188783.34	4.48233	649525.76	4188783.34	5.77463
649625.76	4188783.34	7.08687	649725.76	4188783.34	8.13487
649825.76	4188783.34	8.81447	649925.76	4188783.34	9.27204
650025.76	4188783.34	9.60990	650125.76	4188783.34	9.83302
650225.76	4188783.34	9.93891	650325.76	4188783.34	9.81386
650425.76	4188783.34	8.53763	650525.76	4188783.34	6.84006
650625.76	4188783.34	5.43751	650725.76	4188783.34	4.33797
650825.76	4188783.34	3.51680	651125.76	4188783.34	2.11484
649125.76	4188833.34	2.19272	649225.76	4188833.34	2.64240
649325.76	4188833.34	3.23206	649425.76	4188833.34	3.97460
649525.76	4188833.34	4.83180	649625.76	4188833.34	5.56687
649725.76	4188833.34	6.20421	649825.76	4188833.34	6.66007
649925.76	4188833.34	6.96872	650025.76	4188833.34	7.18340
650125.76	4188833.34	7.30546	650225.76	4188833.34	7.32636
650325.76	4188833.34	7.00851	650425.76	4188833.34	6.08101
650525.76	4188833.34	5.12467	650625.76	4188833.34	4.29157
650725.76	4188833.34	3.57770	650825.76	4188833.34	2.99986
651125.76	4188833.34	1.91943	649125.76	4188883.34	2.08289

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,

L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	2.47788	649325.76	4188883.34	2.96365
649425.76	4188883.34	3.53266	649525.76	4188883.34	4.10703
649625.76	4188883.34	4.57379	649725.76	4188883.34	4.99722
649825.76	4188883.34	5.31669	649925.76	4188883.34	5.53521
650025.76	4188883.34	5.66751	650125.76	4188883.34	5.72714
650225.76	4188883.34	5.67704	650325.76	4188883.34	5.30034
650425.76	4188883.34	4.65075	650525.76	4188883.34	4.04537
650625.76	4188883.34	3.50192	650725.76	4188883.34	3.00867
650825.76	4188883.34	2.58619	651125.76	4188883.34	1.73535
650125.76	4188933.34	4.64717	650225.76	4188933.34	4.52668
650325.76	4188933.34	4.18005	650425.76	4188933.34	3.71925
650525.76	4188933.34	3.30758	650625.76	4188933.34	2.92879
650725.76	4188933.34	2.57281	650825.76	4188933.34	2.25405
651125.76	4188933.34	1.57160	650425.76	4188983.34	3.06701
650525.76	4188983.34	2.77332	650625.76	4188983.34	2.49647
650725.76	4188983.34	2.23092	650825.76	4188983.34	1.98511
651125.76	4188983.34	1.43043	650525.76	4189033.34	2.36987
650625.76	4189033.34	2.16023	650725.76	4189033.34	1.95698
650825.76	4189033.34	1.76372	651125.76	4189033.34	1.30831
650525.76	4189083.34	2.05598	650625.76	4189083.34	1.89236
650725.76	4189083.34	1.73318	650825.76	4189083.34	1.57867
651125.76	4189083.34	1.20076	650525.76	4189133.34	1.80640
650625.76	4189133.34	1.67521	650725.76	4189133.34	1.54749
650825.76	4189133.34	1.42229	651125.76	4189133.34	1.10456
650781.98	4189510.65	0.77732	650760.33	4189397.50	0.92902

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	1.09263	649629.66	4188294.84	1.01940
649810.15	4188312.48	1.26984	649364.10	4188360.20	0.83428
649327.80	4188355.01	0.80346	649380.70	4188758.52	1.11592

650495.81	4188841.51	14.41221	650597.47	4188832.17	27.08044
650536.27	4188878.85	16.55569	650577.76	4188877.81	21.44500
650602.66	4188860.18	26.87888	650610.95	4188880.93	27.95155
650638.10	4188858.53	39.63081	650664.10	4188331.03	4.65392
650668.72	4188350.83	5.06011	650677.96	4188379.86	5.77600
650699.74	4188414.84	6.90231	650758.47	4188658.36	29.77228
650765.73	4188678.82	30.13169	650773.65	4188706.54	30.14610
650778.27	4188726.34	30.07687	650805.33	4188805.53	27.14511
650806.65	4188824.01	27.48404	650811.27	4188843.81	27.18872
650814.57	4188862.29	27.12197	650846.24	4188924.98	23.32122
650850.86	4188951.38	23.23907	650854.82	4188976.46	23.21509
650698.00	4188307.32	4.25510	650692.60	4188291.80	4.01158
650724.82	4189245.80	55.36062	650726.07	4189273.37	51.42713
650856.27	4189006.30	23.67808	650857.23	4189022.60	23.90595
650859.15	4189041.29	24.03138	650859.15	4189058.54	24.44221
650860.58	4189076.28	24.62295	650861.54	4189094.49	24.89525
650857.71	4189113.19	26.09854	650847.16	4189118.94	28.55162
650848.12	4189134.76	28.84601	650850.04	4189155.37	29.06223
650851.48	4189171.66	29.24402	650853.87	4189184.12	29.04859
650856.75	4189199.46	28.80984	650857.71	4189213.36	28.99692
650860.58	4189226.30	28.65271	650862.50	4189242.60	28.62944
650865.38	4189258.42	28.31680	650867.77	4189275.19	28.11884
650868.73	4189291.49	28.24302	650872.09	4189309.23	27.70601
650874.00	4189325.04	27.45126	650875.92	4189340.38	27.11523
650878.80	4189355.24	26.43033	650881.19	4189373.45	25.76095
650884.55	4189390.71	24.65192	650888.86	4189407.01	23.10455
650889.82	4189427.14	21.93369	650891.74	4189443.43	20.30642
650895.09	4189461.17	17.86991	650898.45	4189475.55	15.63153
650898.45	4189489.93	13.89472	650902.28	4189504.31	11.67951
650709.41	4188344.56	4.94969	650722.45	4188284.03	3.92594
650745.73	4188280.30	3.89607	650735.49	4188223.50	3.22256
650721.52	4188167.62	2.72124	650525.76	4188133.34	2.43029
651125.76	4188133.34	2.37778	649125.76	4188183.34	0.60234
649225.76	4188183.34	0.64914	649325.76	4188183.34	0.70189
649425.76	4188183.34	0.76227	649525.76	4188183.34	0.83210
649625.76	4188183.34	0.91293	649725.76	4188183.34	1.00553
649825.76	4188183.34	1.11095	649925.76	4188183.34	1.23180

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 58

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	-------------	-------------	------

650025.76	4188183.34	1.37528	650125.76	4188183.34	1.56163
650225.76	4188183.34	1.82082	650325.76	4188183.34	2.17575
650425.76	4188183.34	2.55369	650525.76	4188183.34	2.76196
650625.76	4188183.34	2.80763	650725.76	4188183.34	2.84937
650825.76	4188183.34	2.92733	651125.76	4188183.34	2.63055
649125.76	4188233.34	0.62325	649225.76	4188233.34	0.67377
649325.76	4188233.34	0.73037	649425.76	4188233.34	0.79469
649525.76	4188233.34	0.86915	649625.76	4188233.34	0.95661
649725.76	4188233.34	1.05964	649825.76	4188233.34	1.17999
649925.76	4188233.34	1.31962	650025.76	4188233.34	1.48270
650125.76	4188233.34	1.68708	650225.76	4188233.34	1.97237
650325.76	4188233.34	2.38204	650425.76	4188233.34	2.86342
650525.76	4188233.34	3.17637	650625.76	4188233.34	3.26342
650725.76	4188233.34	3.31384	650825.76	4188233.34	3.38180
651125.76	4188233.34	2.91848	649125.76	4188283.34	0.64370
649225.76	4188283.34	0.69843	649325.76	4188283.34	0.76005
649425.76	4188283.34	0.82980	649525.76	4188283.34	0.90988
649625.76	4188283.34	1.00377	649725.76	4188283.34	1.11599
649825.76	4188283.34	1.25119	649925.76	4188283.34	1.41312
650025.76	4188283.34	1.60470	650125.76	4188283.34	1.83692
650225.76	4188283.34	2.15288	650325.76	4188283.34	2.62476
650425.76	4188283.34	3.23814	650525.76	4188283.34	3.70529
650625.76	4188283.34	3.86401	650725.76	4188283.34	3.91945
650825.76	4188283.34	3.96568	651125.76	4188283.34	3.24297
649125.76	4188333.34	0.66390	649225.76	4188333.34	0.72253
649325.76	4188333.34	0.78939	649425.76	4188333.34	0.86580
649525.76	4188333.34	0.95363	649625.76	4188333.34	1.05592
649725.76	4188333.34	1.17764	649825.76	4188333.34	1.32614
649925.76	4188333.34	1.51043	650025.76	4188333.34	1.73782
650125.76	4188333.34	2.01430	650225.76	4188333.34	2.37422
650325.76	4188333.34	2.91825	650425.76	4188333.34	3.70240
650525.76	4188333.34	4.39900	650625.76	4188333.34	4.68500
650725.76	4188333.34	4.73879	650825.76	4188333.34	4.72935
651125.76	4188333.34	3.60214	649125.76	4188383.34	0.68480
649225.76	4188383.34	0.74693	649325.76	4188383.34	0.81847
649425.76	4188383.34	0.90131	649525.76	4188383.34	0.99780
649625.76	4188383.34	1.11112	649725.76	4188383.34	1.24585
649825.76	4188383.34	1.40932	649925.76	4188383.34	1.61418
650025.76	4188383.34	1.87824	650125.76	4188383.34	2.21637
650225.76	4188383.34	2.64973	650325.76	4188383.34	3.28568

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 59

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	4.29626	650525.76	4188383.34	5.34411
650625.76	4188383.34	5.86095	650725.76	4188383.34	5.89914
650825.76	4188383.34	5.74429	651125.76	4188383.34	3.99105
649125.76	4188433.34	0.70681	649225.76	4188433.34	0.77262
649325.76	4188433.34	0.84869	649425.76	4188433.34	0.93743
649525.76	4188433.34	1.04192	649625.76	4188433.34	1.16641
649725.76	4188433.34	1.31675	649825.76	4188433.34	1.50086
649925.76	4188433.34	1.73097	650025.76	4188433.34	2.03023
650125.76	4188433.34	2.43547	650225.76	4188433.34	2.98443
650325.76	4188433.34	3.76660	650425.76	4188433.34	5.09224
650525.76	4188433.34	6.70808	650625.76	4188433.34	7.65777
650725.76	4188433.34	7.62531	650825.76	4188433.34	7.11094
651125.76	4188433.34	4.40396	649125.76	4188483.34	0.72931
649225.76	4188483.34	0.79928	649325.76	4188483.34	0.88046
649425.76	4188483.34	0.97554	649525.76	4188483.34	1.08812
649625.76	4188483.34	1.22322	649725.76	4188483.34	1.38835
650425.76	4188483.34	6.23119	650525.76	4188483.34	8.86631
650625.76	4188483.34	10.68429	650725.76	4188483.34	10.32987
650825.76	4188483.34	8.94405	651125.76	4188483.34	4.83631
649125.76	4188533.34	0.75164	649225.76	4188533.34	0.82595
649325.76	4188533.34	0.91266	649425.76	4188533.34	1.01479
649525.76	4188533.34	1.13650	649625.76	4188533.34	1.28349
649725.76	4188533.34	1.46420	650425.76	4188533.34	7.98723
650525.76	4188533.34	12.88225	650625.76	4188533.34	16.55249
650725.76	4188533.34	14.79479	650825.76	4188533.34	11.31622
651125.76	4188533.34	5.28240	649125.76	4188583.34	0.77383
649225.76	4188583.34	0.85234	649325.76	4188583.34	0.94455
649425.76	4188583.34	1.05387	649525.76	4188583.34	1.18512
649625.76	4188583.34	1.34504	649725.76	4188583.34	1.54344
650425.76	4188583.34	10.89537	650525.76	4188583.34	23.07205
650625.76	4188583.34	30.50296	650725.76	4188583.34	22.51690
650825.76	4188583.34	14.16460	651125.76	4188583.34	5.72402
649125.76	4188633.34	0.79620	649225.76	4188633.34	0.87872
649325.76	4188633.34	0.97620	649425.76	4188633.34	1.09250
649525.76	4188633.34	1.23304	649625.76	4188633.34	1.40565
649725.76	4188633.34	1.62185	649825.76	4188633.34	1.89973
649925.76	4188633.34	2.26997	650025.76	4188633.34	2.78782
650125.76	4188633.34	3.56371	650225.76	4188633.34	4.86030
650325.76	4188633.34	7.49903	650425.76	4188633.34	16.27634
650525.76	4188633.34	74.06851	650625.76	4188633.34	83.06367

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,



\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	34.87867	650825.76	4188633.34	17.19444
651125.76	4188633.34	6.14067	649125.76	4188683.34	0.81841
649225.76	4188683.34	0.90472	649325.76	4188683.34	1.00707
649425.76	4188683.34	1.12983	649525.76	4188683.34	1.27896
649625.76	4188683.34	1.46312	649725.76	4188683.34	1.69528
649825.76	4188683.34	1.99570	649925.76	4188683.34	2.39863
650025.76	4188683.34	2.96696	650125.76	4188683.34	3.82785
650225.76	4188683.34	5.28778	650325.76	4188683.34	8.33433
650425.76	4188683.34	19.20567	650525.76	4188683.34	58.45561
650625.76	4188683.34	85.67949	650725.76	4188683.34	46.32733
650825.76	4188683.34	19.88069	651125.76	4188683.34	6.52841
649125.76	4188733.34	0.83928	649225.76	4188733.34	0.92886
649325.76	4188733.34	1.03528	649425.76	4188733.34	1.16322
649525.76	4188733.34	1.31911	649625.76	4188733.34	1.51199
649725.76	4188733.34	1.75538	649825.76	4188733.34	2.07022
649925.76	4188733.34	2.49092	650025.76	4188733.34	3.07969
650125.76	4188733.34	3.96034	650225.76	4188733.34	5.41884
650325.76	4188733.34	8.25992	650425.76	4188733.34	15.29960
650525.76	4188733.34	25.69709	650625.76	4188733.34	51.77343
650725.76	4188733.34	53.23589	650825.76	4188733.34	21.69003
651125.76	4188733.34	6.85905	649125.76	4188783.34	0.85732
649225.76	4188783.34	0.94924	649325.76	4188783.34	1.05833
649425.76	4188783.34	1.18937	649525.76	4188783.34	1.34891
649625.76	4188783.34	1.54612	649725.76	4188783.34	1.79451
649825.76	4188783.34	2.11526	649925.76	4188783.34	2.54346
650025.76	4188783.34	3.14181	650125.76	4188783.34	4.02962
650225.76	4188783.34	5.44729	650325.76	4188783.34	7.95605
650425.76	4188783.34	12.59512	650525.76	4188783.34	19.29753
650625.76	4188783.34	41.35061	650725.76	4188783.34	62.12835
650825.76	4188783.34	23.00489	651125.76	4188783.34	7.10635
649125.76	4188833.34	0.87114	649225.76	4188833.34	0.96425
649325.76	4188833.34	1.07451	649425.76	4188833.34	1.20674
649525.76	4188833.34	1.36773	649625.76	4188833.34	1.56725
649725.76	4188833.34	1.81984	649825.76	4188833.34	2.14789
649925.76	4188833.34	2.58671	650025.76	4188833.34	3.19311
650125.76	4188833.34	4.06739	650225.76	4188833.34	5.40415
650325.76	4188833.34	7.64093	650425.76	4188833.34	11.12034
650525.76	4188833.34	16.87291	650625.76	4188833.34	35.94297
650725.76	4188833.34	72.12944	650825.76	4188833.34	24.25443
651125.76	4188833.34	7.28970	649125.76	4188883.34	0.88023

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	0.97393	649325.76	4188883.34	1.08495
649425.76	4188883.34	1.21845	649525.76	4188883.34	1.38174
649625.76	4188883.34	1.58526	649725.76	4188883.34	1.84374
649825.76	4188883.34	2.17800	649925.76	4188883.34	2.61915
650025.76	4188883.34	3.21875	650125.76	4188883.34	4.06598
650225.76	4188883.34	5.33935	650325.76	4188883.34	7.33047
650425.76	4188883.34	10.25034	650525.76	4188883.34	15.56307
650625.76	4188883.34	32.33588	650725.76	4188883.34	85.68703
650825.76	4188883.34	25.62584	651125.76	4188883.34	7.42983
650125.76	4188933.34	4.04427	650225.76	4188933.34	5.26471
650325.76	4188933.34	7.04213	650425.76	4188933.34	9.67255
650525.76	4188933.34	14.65002	650625.76	4188933.34	29.45754
650725.76	4188933.34	104.84825	650825.76	4188933.34	27.15576
651125.76	4188933.34	7.52404	650425.76	4188983.34	9.23603
650525.76	4188983.34	13.90286	650625.76	4188983.34	27.03376
650725.76	4188983.34	132.89053	650825.76	4188983.34	28.85515
651125.76	4188983.34	7.57435	650525.76	4189033.34	13.23120
650625.76	4189033.34	24.93173	650725.76	4189033.34	113.00527
650825.76	4189033.34	30.75576	651125.76	4189033.34	7.58956
650525.76	4189083.34	12.59673	650625.76	4189083.34	23.06636
650725.76	4189083.34	132.10456	650825.76	4189083.34	32.90528
651125.76	4189083.34	7.56717	650525.76	4189133.34	11.98003
650625.76	4189133.34	21.37689	650725.76	4189133.34	93.10955
650825.76	4189133.34	35.36232	651125.76	4189133.34	7.49170
650781.98	4189510.65	42.33150	650760.33	4189397.50	66.45984

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	-------------	-------------	------

649676.34	4188314.55	1.09263	649629.66	4188294.84	1.01940
649810.15	4188312.48	1.26984	649364.10	4188360.20	0.83428
649327.80	4188355.01	0.80346	649380.70	4188758.52	1.11592
650495.81	4188841.51	14.41221	650597.47	4188832.17	27.08044
650536.27	4188878.85	16.55569	650577.76	4188877.81	21.44500
650602.66	4188860.18	26.87888	650610.95	4188880.93	27.95155
650638.10	4188858.53	39.63081	650664.10	4188331.03	4.65392
650668.72	4188350.83	5.06011	650677.96	4188379.86	5.77600
650699.74	4188414.84	6.90231	650758.47	4188658.36	29.77228
650765.73	4188678.82	30.13169	650773.65	4188706.54	30.14610
650778.27	4188726.34	30.07687	650805.33	4188805.53	27.14511
650806.65	4188824.01	27.48404	650811.27	4188843.81	27.18872
650814.57	4188862.29	27.12197	650846.24	4188924.98	23.32122
650850.86	4188951.38	23.23907	650854.82	4188976.46	23.21509
650698.00	4188307.32	4.25510	650692.60	4188291.80	4.01158
650724.82	4189245.80	55.36062	650726.07	4189273.37	51.42713
650856.27	4189006.30	23.67808	650857.23	4189022.60	23.90595
650859.15	4189041.29	24.03138	650859.15	4189058.54	24.44221
650860.58	4189076.28	24.62295	650861.54	4189094.49	24.89525
650857.71	4189113.19	26.09854	650847.16	4189118.94	28.55162
650848.12	4189134.76	28.84601	650850.04	4189155.37	29.06223
650851.48	4189171.66	29.24402	650853.87	4189184.12	29.04859
650856.75	4189199.46	28.80984	650857.71	4189213.36	28.99692
650860.58	4189226.30	28.65271	650862.50	4189242.60	28.62944
650865.38	4189258.42	28.31680	650867.77	4189275.19	28.11884
650868.73	4189291.49	28.24302	650872.09	4189309.23	27.70601
650874.00	4189325.04	27.45126	650875.92	4189340.38	27.11523
650878.80	4189355.24	26.43033	650881.19	4189373.45	25.76095
650884.55	4189390.71	24.65192	650888.86	4189407.01	23.10455
650889.82	4189427.14	21.93369	650891.74	4189443.43	20.30642
650895.09	4189461.17	17.86991	650898.45	4189475.55	15.63153
650898.45	4189489.93	13.89472	650902.28	4189504.31	11.67951
650709.41	4188344.56	4.94969	650722.45	4188284.03	3.92594
650745.73	4188280.30	3.89607	650735.49	4188223.50	3.22256
650721.52	4188167.62	2.72124	650525.76	4188133.34	2.43029
651125.76	4188133.34	2.37778	649125.76	4188183.34	0.60234
649225.76	4188183.34	0.64914	649325.76	4188183.34	0.70189
649425.76	4188183.34	0.76227	649525.76	4188183.34	0.83210
649625.76	4188183.34	0.91293	649725.76	4188183.34	1.00553
649825.76	4188183.34	1.11095	649925.76	4188183.34	1.23180

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 63

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	1.37528	650125.76	4188183.34	1.56163
650225.76	4188183.34	1.82082	650325.76	4188183.34	2.17575
650425.76	4188183.34	2.55369	650525.76	4188183.34	2.76196
650625.76	4188183.34	2.80763	650725.76	4188183.34	2.84937
650825.76	4188183.34	2.92733	651125.76	4188183.34	2.63055
649125.76	4188233.34	0.62325	649225.76	4188233.34	0.67377
649325.76	4188233.34	0.73037	649425.76	4188233.34	0.79469
649525.76	4188233.34	0.86915	649625.76	4188233.34	0.95661
649725.76	4188233.34	1.05964	649825.76	4188233.34	1.17999
649925.76	4188233.34	1.31962	650025.76	4188233.34	1.48270
650125.76	4188233.34	1.68708	650225.76	4188233.34	1.97237
650325.76	4188233.34	2.38204	650425.76	4188233.34	2.86342
650525.76	4188233.34	3.17637	650625.76	4188233.34	3.26342
650725.76	4188233.34	3.31384	650825.76	4188233.34	3.38180
651125.76	4188233.34	2.91848	649125.76	4188283.34	0.64370
649225.76	4188283.34	0.69843	649325.76	4188283.34	0.76005
649425.76	4188283.34	0.82980	649525.76	4188283.34	0.90988
649625.76	4188283.34	1.00377	649725.76	4188283.34	1.11599
649825.76	4188283.34	1.25119	649925.76	4188283.34	1.41312
650025.76	4188283.34	1.60470	650125.76	4188283.34	1.83692
650225.76	4188283.34	2.15288	650325.76	4188283.34	2.62476
650425.76	4188283.34	3.23814	650525.76	4188283.34	3.70529
650625.76	4188283.34	3.86401	650725.76	4188283.34	3.91945
650825.76	4188283.34	3.96568	651125.76	4188283.34	3.24297
649125.76	4188333.34	0.66390	649225.76	4188333.34	0.72253
649325.76	4188333.34	0.78939	649425.76	4188333.34	0.86580
649525.76	4188333.34	0.95363	649625.76	4188333.34	1.05592
649725.76	4188333.34	1.17764	649825.76	4188333.34	1.32614
649925.76	4188333.34	1.51043	650025.76	4188333.34	1.73782
650125.76	4188333.34	2.01430	650225.76	4188333.34	2.37422
650325.76	4188333.34	2.91825	650425.76	4188333.34	3.70240
650525.76	4188333.34	4.39900	650625.76	4188333.34	4.68500
650725.76	4188333.34	4.73879	650825.76	4188333.34	4.72935
651125.76	4188333.34	3.60214	649125.76	4188383.34	0.68480
649225.76	4188383.34	0.74693	649325.76	4188383.34	0.81847
649425.76	4188383.34	0.90131	649525.76	4188383.34	0.99780
649625.76	4188383.34	1.11112	649725.76	4188383.34	1.24585
649825.76	4188383.34	1.40932	649925.76	4188383.34	1.61418
650025.76	4188383.34	1.87824	650125.76	4188383.34	2.21637
650225.76	4188383.34	2.64973	650325.76	4188383.34	3.28568

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	4.29626	650525.76	4188383.34	5.34411
650625.76	4188383.34	5.86095	650725.76	4188383.34	5.89914
650825.76	4188383.34	5.74429	651125.76	4188383.34	3.99105
649125.76	4188433.34	0.70681	649225.76	4188433.34	0.77262
649325.76	4188433.34	0.84869	649425.76	4188433.34	0.93743
649525.76	4188433.34	1.04192	649625.76	4188433.34	1.16641
649725.76	4188433.34	1.31675	649825.76	4188433.34	1.50086
649925.76	4188433.34	1.73097	650025.76	4188433.34	2.03023
650125.76	4188433.34	2.43547	650225.76	4188433.34	2.98443
650325.76	4188433.34	3.76660	650425.76	4188433.34	5.09224
650525.76	4188433.34	6.70808	650625.76	4188433.34	7.65777
650725.76	4188433.34	7.62531	650825.76	4188433.34	7.11094
651125.76	4188433.34	4.40396	649125.76	4188483.34	0.72931
649225.76	4188483.34	0.79928	649325.76	4188483.34	0.88046
649425.76	4188483.34	0.97554	649525.76	4188483.34	1.08812
649625.76	4188483.34	1.22322	649725.76	4188483.34	1.38835
650425.76	4188483.34	6.23119	650525.76	4188483.34	8.86631
650625.76	4188483.34	10.68429	650725.76	4188483.34	10.32987
650825.76	4188483.34	8.94405	651125.76	4188483.34	4.83631
649125.76	4188533.34	0.75164	649225.76	4188533.34	0.82595
649325.76	4188533.34	0.91266	649425.76	4188533.34	1.01479
649525.76	4188533.34	1.13650	649625.76	4188533.34	1.28349
649725.76	4188533.34	1.46420	650425.76	4188533.34	7.98723
650525.76	4188533.34	12.88225	650625.76	4188533.34	16.55249
650725.76	4188533.34	14.79479	650825.76	4188533.34	11.31622
651125.76	4188533.34	5.28240	649125.76	4188583.34	0.77383
649225.76	4188583.34	0.85234	649325.76	4188583.34	0.94455
649425.76	4188583.34	1.05387	649525.76	4188583.34	1.18512
649625.76	4188583.34	1.34504	649725.76	4188583.34	1.54344
650425.76	4188583.34	10.89537	650525.76	4188583.34	23.07205
650625.76	4188583.34	30.50296	650725.76	4188583.34	22.51690
650825.76	4188583.34	14.16460	651125.76	4188583.34	5.72402
649125.76	4188633.34	0.79620	649225.76	4188633.34	0.87872
649325.76	4188633.34	0.97620	649425.76	4188633.34	1.09250
649525.76	4188633.34	1.23304	649625.76	4188633.34	1.40565
649725.76	4188633.34	1.62185	649825.76	4188633.34	1.89973
649925.76	4188633.34	2.26997	650025.76	4188633.34	2.78782
650125.76	4188633.34	3.56371	650225.76	4188633.34	4.86030
650325.76	4188633.34	7.49903	650425.76	4188633.34	16.27634
650525.76	4188633.34	74.06851	650625.76	4188633.34	83.06367

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	34.87867	650825.76	4188633.34	17.19444
651125.76	4188633.34	6.14067	649125.76	4188683.34	0.81841
649225.76	4188683.34	0.90472	649325.76	4188683.34	1.00707
649425.76	4188683.34	1.12983	649525.76	4188683.34	1.27896
649625.76	4188683.34	1.46312	649725.76	4188683.34	1.69528
649825.76	4188683.34	1.99570	649925.76	4188683.34	2.39863
650025.76	4188683.34	2.96696	650125.76	4188683.34	3.82785
650225.76	4188683.34	5.28778	650325.76	4188683.34	8.33433
650425.76	4188683.34	19.20567	650525.76	4188683.34	58.45561
650625.76	4188683.34	85.67949	650725.76	4188683.34	46.32733
650825.76	4188683.34	19.88069	651125.76	4188683.34	6.52841
649125.76	4188733.34	0.83928	649225.76	4188733.34	0.92886
649325.76	4188733.34	1.03528	649425.76	4188733.34	1.16322
649525.76	4188733.34	1.31911	649625.76	4188733.34	1.51199
649725.76	4188733.34	1.75538	649825.76	4188733.34	2.07022
649925.76	4188733.34	2.49092	650025.76	4188733.34	3.07969
650125.76	4188733.34	3.96034	650225.76	4188733.34	5.41884
650325.76	4188733.34	8.25992	650425.76	4188733.34	15.29960
650525.76	4188733.34	25.69709	650625.76	4188733.34	51.77343
650725.76	4188733.34	53.23589	650825.76	4188733.34	21.69003
651125.76	4188733.34	6.85905	649125.76	4188783.34	0.85732
649225.76	4188783.34	0.94924	649325.76	4188783.34	1.05833
649425.76	4188783.34	1.18937	649525.76	4188783.34	1.34891
649625.76	4188783.34	1.54612	649725.76	4188783.34	1.79451
649825.76	4188783.34	2.11526	649925.76	4188783.34	2.54346
650025.76	4188783.34	3.14181	650125.76	4188783.34	4.02962
650225.76	4188783.34	5.44729	650325.76	4188783.34	7.95605
650425.76	4188783.34	12.59512	650525.76	4188783.34	19.29753
650625.76	4188783.34	41.35061	650725.76	4188783.34	62.12835
650825.76	4188783.34	23.00489	651125.76	4188783.34	7.10635
649125.76	4188833.34	0.87114	649225.76	4188833.34	0.96425
649325.76	4188833.34	1.07451	649425.76	4188833.34	1.20674
649525.76	4188833.34	1.36773	649625.76	4188833.34	1.56725
649725.76	4188833.34	1.81984	649825.76	4188833.34	2.14789
649925.76	4188833.34	2.58671	650025.76	4188833.34	3.19311
650125.76	4188833.34	4.06739	650225.76	4188833.34	5.40415
650325.76	4188833.34	7.64093	650425.76	4188833.34	11.12034
650525.76	4188833.34	16.87291	650625.76	4188833.34	35.94297
650725.76	4188833.34	72.12944	650825.76	4188833.34	24.25443
651125.76	4188833.34	7.28970	649125.76	4188883.34	0.88023

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 , L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 , L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 , L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	0.97393	649325.76	4188883.34	1.08495
649425.76	4188883.34	1.21845	649525.76	4188883.34	1.38174
649625.76	4188883.34	1.58526	649725.76	4188883.34	1.84374
649825.76	4188883.34	2.17800	649925.76	4188883.34	2.61915
650025.76	4188883.34	3.21875	650125.76	4188883.34	4.06598
650225.76	4188883.34	5.33935	650325.76	4188883.34	7.33047
650425.76	4188883.34	10.25034	650525.76	4188883.34	15.56307
650625.76	4188883.34	32.33588	650725.76	4188883.34	85.68703
650825.76	4188883.34	25.62584	651125.76	4188883.34	7.42983
650125.76	4188933.34	4.04427	650225.76	4188933.34	5.26471
650325.76	4188933.34	7.04213	650425.76	4188933.34	9.67255
650525.76	4188933.34	14.65002	650625.76	4188933.34	29.45754
650725.76	4188933.34	104.84825	650825.76	4188933.34	27.15576
651125.76	4188933.34	7.52404	650425.76	4188983.34	9.23603
650525.76	4188983.34	13.90286	650625.76	4188983.34	27.03376
650725.76	4188983.34	132.89053	650825.76	4188983.34	28.85515
651125.76	4188983.34	7.57435	650525.76	4189033.34	13.23120
650625.76	4189033.34	24.93173	650725.76	4189033.34	113.00527
650825.76	4189033.34	30.75576	651125.76	4189033.34	7.58956
650525.76	4189083.34	12.59673	650625.76	4189083.34	23.06636
650725.76	4189083.34	132.10456	650825.76	4189083.34	32.90528
651125.76	4189083.34	7.56717	650525.76	4189133.34	11.98003
650625.76	4189133.34	21.37689	650725.76	4189133.34	93.10955
650825.76	4189133.34	35.36232	651125.76	4189133.34	7.49170
650781.98	4189510.65	42.33150	650760.33	4189397.50	66.45984

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	3.40637	649629.66	4188294.84	3.10444
649810.15	4188312.48	7.40409	649364.10	4188360.20	2.66313
649327.80	4188355.01	2.52421	649380.70	4188758.52	2.93298
650495.81	4188841.51	1.50436	650597.47	4188832.17	1.48381
650536.27	4188878.85	1.35657	650577.76	4188877.81	1.34125
650602.66	4188860.18	1.38498	650610.95	4188880.93	1.31617
650638.10	4188858.53	1.37035	650664.10	4188331.03	3.15801
650668.72	4188350.83	3.10949	650677.96	4188379.86	3.01545
650699.74	4188414.84	2.83736	650758.47	4188658.36	1.89245
650765.73	4188678.82	1.80661	650773.65	4188706.54	1.70065
650778.27	4188726.34	1.63125	650805.33	4188805.53	1.37880
650806.65	4188824.01	1.33251	650811.27	4188843.81	1.28178
650814.57	4188862.29	1.23718	650846.24	4188924.98	1.08629
650850.86	4188951.38	1.03431	650854.82	4188976.46	0.98777
650698.00	4188307.32	2.97778	650692.60	4188291.80	3.01395
650724.82	4189245.80	0.69043	650726.07	4189273.37	0.66642
650856.27	4189006.30	0.93703	650857.23	4189022.60	0.91079
650859.15	4189041.29	0.88185	650859.15	4189058.54	0.85703
650860.58	4189076.28	0.83240	650861.54	4189094.49	0.80865
650857.71	4189113.19	0.78698	650847.16	4189118.94	0.78316
650848.12	4189134.76	0.76502	650850.04	4189155.37	0.74255
650851.48	4189171.66	0.72579	650853.87	4189184.12	0.71318
650856.75	4189199.46	0.69827	650857.71	4189213.36	0.68573
650860.58	4189226.30	0.67397	650862.50	4189242.60	0.66012
650865.38	4189258.42	0.64696	650867.77	4189275.19	0.63370
650868.73	4189291.49	0.62158	650872.09	4189309.23	0.60833
650874.00	4189325.04	0.59715	650875.92	4189340.38	0.58659
650878.80	4189355.24	0.57644	650881.19	4189373.45	0.56456
650884.55	4189390.71	0.55344	650888.86	4189407.01	0.54303
650889.82	4189427.14	0.53124	650891.74	4189443.43	0.52178
650895.09	4189461.17	0.51155	650898.45	4189475.55	0.50339
650898.45	4189489.93	0.49583	650902.28	4189504.31	0.48797
650709.41	4188344.56	2.88776	650722.45	4188284.03	2.85608
650745.73	4188280.30	2.74152	650735.49	4188223.50	2.78400
650721.52	4188167.62	2.81526	650525.76	4188133.34	3.97182
651125.76	4188133.34	1.56795	649125.76	4188183.34	1.60171
649225.76	4188183.34	1.77403	649325.76	4188183.34	1.96891
649425.76	4188183.34	2.17798	649525.76	4188183.34	2.38406
649625.76	4188183.34	2.73262	649725.76	4188183.34	3.98740
649825.76	4188183.34	5.52897	649925.76	4188183.34	7.87699

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\*\* 15:03:05

PAGE 68

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*



X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	10.55386	650125.76	4188183.34	10.10536
650225.76	4188183.34	8.33866	650325.76	4188183.34	6.53779
650425.76	4188183.34	5.13134	650525.76	4188183.34	4.10852
650625.76	4188183.34	3.36300	650725.76	4188183.34	2.80759
650825.76	4188183.34	2.38369	651125.76	4188183.34	1.57575
649125.76	4188233.34	1.69518	649225.76	4188233.34	1.88858
649325.76	4188233.34	2.10676	649425.76	4188233.34	2.33698
649525.76	4188233.34	2.56311	649625.76	4188233.34	2.83594
649725.76	4188233.34	3.94815	649825.76	4188233.34	6.61820
649925.76	4188233.34	11.07729	650025.76	4188233.34	14.72800
650125.76	4188233.34	12.58437	650225.76	4188233.34	9.38981
650325.76	4188233.34	6.96300	650425.76	4188233.34	5.32047
650525.76	4188233.34	4.20233	650625.76	4188233.34	3.41307
650725.76	4188233.34	2.83536	650825.76	4188233.34	2.39909
651125.76	4188233.34	1.57611	649125.76	4188283.34	1.79394
649225.76	4188283.34	2.00947	649325.76	4188283.34	2.25617
649425.76	4188283.34	2.51455	649525.76	4188283.34	2.76534
649625.76	4188283.34	3.03369	649725.76	4188283.34	3.79946
649825.76	4188283.34	7.94226	649925.76	4188283.34	17.67391
650025.76	4188283.34	21.37997	650125.76	4188283.34	15.06447
650225.76	4188283.34	10.14650	650325.76	4188283.34	7.22751
650425.76	4188283.34	5.42646	650525.76	4188283.34	4.24671
650625.76	4188283.34	3.43020	650725.76	4188283.34	2.83935
650825.76	4188283.34	2.39642	651125.76	4188283.34	1.56764
649125.76	4188333.34	1.90892	649225.76	4188333.34	2.15022
649325.76	4188333.34	2.42692	649425.76	4188333.34	2.71538
649525.76	4188333.34	2.99206	649625.76	4188333.34	3.30297
649725.76	4188333.34	3.89315	649825.76	4188333.34	8.82207
649925.76	4188333.34	34.25296	650025.76	4188333.34	29.96043
650125.76	4188333.34	16.70070	650225.76	4188333.34	10.48683
650325.76	4188333.34	7.30240	650425.76	4188333.34	5.42822
650525.76	4188333.34	4.22655	650625.76	4188333.34	3.40436
650725.76	4188333.34	2.81345	650825.76	4188333.34	2.37238
651125.76	4188333.34	1.55075	649125.76	4188383.34	2.04059
649225.76	4188383.34	2.32357	649325.76	4188383.34	2.65466
649425.76	4188383.34	3.00709	649525.76	4188383.34	3.33565
649625.76	4188383.34	3.66837	649725.76	4188383.34	4.35447
649825.76	4188383.34	7.92504	649925.76	4188383.34	81.96510
650025.76	4188383.34	35.03218	650125.76	4188383.34	16.85192
650225.76	4188383.34	10.29834	650325.76	4188383.34	7.13253

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 69

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	5.29987	650525.76	4188383.34	4.13056
650625.76	4188383.34	3.33167	650725.76	4188383.34	2.75739
650825.76	4188383.34	2.32835	651125.76	4188383.34	1.52730
649125.76	4188433.34	2.16226	649225.76	4188433.34	2.49381
649325.76	4188433.34	2.90116	649425.76	4188433.34	3.37935
649525.76	4188433.34	3.91303	649625.76	4188433.34	4.58873
649725.76	4188433.34	5.79977	649825.76	4188433.34	9.12618
649925.76	4188433.34	97.44906	650025.76	4188433.34	30.42169
650125.76	4188433.34	15.06778	650225.76	4188433.34	9.47345
650325.76	4188433.34	6.69116	650425.76	4188433.34	5.03742
650525.76	4188433.34	3.96159	650625.76	4188433.34	3.21648
650725.76	4188433.34	2.67532	650825.76	4188433.34	2.26776
651125.76	4188433.34	1.49890	649125.76	4188483.34	2.23572
649225.76	4188483.34	2.59490	649325.76	4188483.34	3.04708
649425.76	4188483.34	3.60780	649525.76	4188483.34	4.30081
649625.76	4188483.34	5.34846	649725.76	4188483.34	7.96111
650425.76	4188483.34	4.64140	650525.76	4188483.34	3.71994
650625.76	4188483.34	3.05881	650725.76	4188483.34	2.56707
650825.76	4188483.34	2.19036	651125.76	4188483.34	1.46523
649125.76	4188533.34	2.24236	649225.76	4188533.34	2.59953
649325.76	4188533.34	3.05076	649425.76	4188533.34	3.62463
649525.76	4188533.34	4.38359	649625.76	4188533.34	5.73922
649725.76	4188533.34	9.58152	650425.76	4188533.34	4.11552
650525.76	4188533.34	3.40009	650625.76	4188533.34	2.85208
650725.76	4188533.34	2.42687	650825.76	4188533.34	2.09151
651125.76	4188533.34	1.42404	649125.76	4188583.34	2.20127
649225.76	4188583.34	2.54682	649325.76	4188583.34	2.98925
649425.76	4188583.34	3.57617	649525.76	4188583.34	4.41306
649625.76	4188583.34	5.94813	649725.76	4188583.34	8.93923
650425.76	4188583.34	3.52531	650525.76	4188583.34	3.02351
650625.76	4188583.34	2.60167	650725.76	4188583.34	2.25427
650825.76	4188583.34	1.96880	651125.76	4188583.34	1.37296
649125.76	4188633.34	2.14690	649225.76	4188633.34	2.48364
649325.76	4188633.34	2.91920	649425.76	4188633.34	3.50989
649525.76	4188633.34	4.36302	649625.76	4188633.34	5.77454
649725.76	4188633.34	6.97609	649825.76	4188633.34	4.42655
649925.76	4188633.34	2.88823	650025.76	4188633.34	2.83567
650125.76	4188633.34	3.16751	650225.76	4188633.34	3.35958
650325.76	4188633.34	3.25684	650425.76	4188633.34	2.96968
650525.76	4188633.34	2.64188	650625.76	4188633.34	2.33357

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 70

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	2.06183	650825.76	4188633.34	1.82790
651125.76	4188633.34	1.31158	649125.76	4188683.34	2.09251
649225.76	4188683.34	2.41697	649325.76	4188683.34	2.83565
649425.76	4188683.34	3.40207	649525.76	4188683.34	4.21407
649625.76	4188683.34	5.24007	649725.76	4188683.34	5.21141
649825.76	4188683.34	3.20979	649925.76	4188683.34	2.42708
650025.76	4188683.34	2.33923	650125.76	4188683.34	2.48673
650225.76	4188683.34	2.62369	650325.76	4188683.34	2.62640
650425.76	4188683.34	2.49699	650525.76	4188683.34	2.29619
650625.76	4188683.34	2.07750	650725.76	4188683.34	1.86912
650825.76	4188683.34	1.68100	651125.76	4188683.34	1.24227
649125.76	4188733.34	2.03331	649225.76	4188733.34	2.33969
649325.76	4188733.34	2.73184	649425.76	4188733.34	3.26068
649525.76	4188733.34	3.97649	649625.76	4188733.34	4.51440
649725.76	4188733.34	3.97356	649825.76	4188733.34	2.57078
649925.76	4188733.34	2.12682	650025.76	4188733.34	2.04031
650125.76	4188733.34	2.09241	650225.76	4188733.34	2.15974
650325.76	4188733.34	2.16585	650425.76	4188733.34	2.10914
650525.76	4188733.34	1.99588	650625.76	4188733.34	1.84763
650725.76	4188733.34	1.69045	650825.76	4188733.34	1.53996
651125.76	4188733.34	1.16927	649125.76	4188783.34	1.96657
649225.76	4188783.34	2.25169	649325.76	4188783.34	2.61528
649425.76	4188783.34	3.10082	649525.76	4188783.34	3.64568
649625.76	4188783.34	3.79764	649725.76	4188783.34	3.14666
649825.76	4188783.34	2.18598	649925.76	4188783.34	1.90852
650025.76	4188783.34	1.83193	650125.76	4188783.34	1.83368
650225.76	4188783.34	1.84727	650325.76	4188783.34	1.83897
650425.76	4188783.34	1.80191	650525.76	4188783.34	1.73751
650625.76	4188783.34	1.64300	650725.76	4188783.34	1.52923
650825.76	4188783.34	1.41070	651125.76	4188783.34	1.09710
649125.76	4188833.34	1.89395	649225.76	4188833.34	2.15780
649325.76	4188833.34	2.49627	649425.76	4188833.34	2.91765
649525.76	4188833.34	3.25627	649625.76	4188833.34	3.18304
649725.76	4188833.34	2.58445	649825.76	4188833.34	1.92283
649925.76	4188833.34	1.73751	650025.76	4188833.34	1.66771
650125.76	4188833.34	1.64124	650225.76	4188833.34	1.62083
650325.76	4188833.34	1.60193	650425.76	4188833.34	1.56721
650525.76	4188833.34	1.52127	650625.76	4188833.34	1.46062
650725.76	4188833.34	1.38240	650825.76	4188833.34	1.29273
651125.76	4188833.34	1.02898	649125.76	4188883.34	1.81833

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 71

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	2.06447	649325.76	4188883.34	2.37560
649425.76	4188883.34	2.70471	649525.76	4188883.34	2.86332
649625.76	4188883.34	2.68274	649725.76	4188883.34	2.18173
649825.76	4188883.34	1.72054	649925.76	4188883.34	1.58944
650025.76	4188883.34	1.52451	650125.76	4188883.34	1.48536
650225.76	4188883.34	1.44938	650325.76	4188883.34	1.42118
650425.76	4188883.34	1.38835	650525.76	4188883.34	1.34710
650625.76	4188883.34	1.30191	650725.76	4188883.34	1.24801
650825.76	4188883.34	1.18316	651125.76	4188883.34	0.96609
650125.76	4188933.34	1.35425	650225.76	4188933.34	1.31443
650325.76	4188933.34	1.27814	650425.76	4188933.34	1.24743
650525.76	4188933.34	1.20914	650625.76	4188933.34	1.16894
650725.76	4188933.34	1.12766	650825.76	4188933.34	1.08081
651125.76	4188933.34	0.90774	650425.76	4188983.34	1.13192
650525.76	4188983.34	1.09809	650625.76	4188983.34	1.06022
650725.76	4188983.34	1.02372	650825.76	4188983.34	0.98713
651125.76	4188983.34	0.85240	650525.76	4189033.34	1.00559
650625.76	4189033.34	0.97112	650725.76	4189033.34	0.93646
650825.76	4189033.34	0.90427	651125.76	4189033.34	0.79882
650525.76	4189083.34	0.92615	650625.76	4189083.34	0.89631
650725.76	4189083.34	0.86370	650825.76	4189083.34	0.83311
651125.76	4189083.34	0.74681	650525.76	4189133.34	0.85702
650625.76	4189133.34	0.83151	650725.76	4189133.34	0.80222
650825.76	4189133.34	0.77281	651125.76	4189133.34	0.69720
650781.98	4189510.65	0.49979	650760.33	4189397.50	0.56844

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 72

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	2.16298	649629.66	4188294.84	2.00962
649810.15	4188312.48	2.83778	649364.10	4188360.20	1.68990
649327.80	4188355.01	1.61924	649380.70	4188758.52	2.53480
650495.81	4188841.51	3.06137	650597.47	4188832.17	2.90606
650536.27	4188878.85	2.57365	650577.76	4188877.81	2.52180
650602.66	4188860.18	2.62901	650610.95	4188880.93	2.43702
650638.10	4188858.53	2.55804	650664.10	4188331.03	4.19140
650668.72	4188350.83	4.21914	650677.96	4188379.86	4.21847
650699.74	4188414.84	4.09353	650758.47	4188658.36	3.32307
650765.73	4188678.82	3.19842	650773.65	4188706.54	3.03464
650778.27	4188726.34	2.91824	650805.33	4188805.53	2.40521

650806.65	4188824.01	2.30695	650811.27	4188843.81	2.19552
650814.57	4188862.29	2.09862	650846.24	4188924.98	1.77135
650850.86	4188951.38	1.66769	650854.82	4188976.46	1.57639
650698.00	4188307.32	3.84311	650692.60	4188291.80	3.82705
650724.82	4189245.80	0.96546	650726.07	4189273.37	0.92309
650856.27	4189006.30	1.47812	650857.23	4189022.60	1.42680
650859.15	4189041.29	1.36951	650859.15	4189058.54	1.32001
650860.58	4189076.28	1.27030	650861.54	4189094.49	1.22196
650857.71	4189113.19	1.17710	650847.16	4189118.94	1.16782
650848.12	4189134.76	1.13034	650850.04	4189155.37	1.08437
650851.48	4189171.66	1.05048	650853.87	4189184.12	1.02548
650856.75	4189199.46	0.99629	650857.71	4189213.36	0.97183
650860.58	4189226.30	0.94950	650862.50	4189242.60	0.92338
650865.38	4189258.42	0.89911	650867.77	4189275.19	0.87499
650868.73	4189291.49	0.85323	650872.09	4189309.23	0.83005
650874.00	4189325.04	0.81073	650875.92	4189340.38	0.79277
650878.80	4189355.24	0.77577	650881.19	4189373.45	0.75612
650884.55	4189390.71	0.73798	650888.86	4189407.01	0.72123
650889.82	4189427.14	0.70239	650891.74	4189443.43	0.68744
650895.09	4189461.17	0.67144	650898.45	4189475.55	0.65875
650898.45	4189489.93	0.64707	650902.28	4189504.31	0.63499
650709.41	4188344.56	3.86728	650722.45	4188284.03	3.59977
650745.73	4188280.30	3.44355	650735.49	4188223.50	3.31364
650721.52	4188167.62	3.15139	650525.76	4188133.34	3.65480
651125.76	4188133.34	1.81155	649125.76	4188183.34	1.12787
649225.76	4188183.34	1.22999	649325.76	4188183.34	1.33942
649425.76	4188183.34	1.45159	649525.76	4188183.34	1.57550
649625.76	4188183.34	1.76292	649725.76	4188183.34	2.11351
649825.76	4188183.34	2.70805	649925.76	4188183.34	3.15507

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 73

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	3.25703	650125.76	4188183.34	3.88578
650225.76	4188183.34	4.53385	650325.76	4188183.34	4.62403
650425.76	4188183.34	4.45117	650525.76	4188183.34	4.10862
650625.76	4188183.34	3.65883	650725.76	4188183.34	3.20070
650825.76	4188183.34	2.78065	651125.76	4188183.34	1.85271
649125.76	4188233.34	1.17984	649225.76	4188233.34	1.29022
649325.76	4188233.34	1.41360	649425.76	4188233.34	1.54509
649525.76	4188233.34	1.68127	649625.76	4188233.34	1.85634
649725.76	4188233.34	2.18541	649825.76	4188233.34	2.85190
649925.76	4188233.34	3.51775	650025.76	4188233.34	3.70110

650125.76	4188233.34	4.60197	650225.76	4188233.34	5.42088
650325.76	4188233.34	5.46436	650425.76	4188233.34	5.15679
650525.76	4188233.34	4.60278	650625.76	4188233.34	3.98119
650725.76	4188233.34	3.40187	650825.76	4188233.34	2.90479
651125.76	4188233.34	1.88708	649125.76	4188283.34	1.23824
649225.76	4188283.34	1.35615	649325.76	4188283.34	1.49071
649425.76	4188283.34	1.64094	649525.76	4188283.34	1.79987
649625.76	4188283.34	1.97180	649725.76	4188283.34	2.26065
649825.76	4188283.34	2.95632	649925.76	4188283.34	3.92508
650025.76	4188283.34	4.25974	650125.76	4188283.34	5.60581
650225.76	4188283.34	6.63296	650325.76	4188283.34	6.57279
650425.76	4188283.34	5.97206	650525.76	4188283.34	5.11662
650625.76	4188283.34	4.28397	650725.76	4188283.34	3.57642
650825.76	4188283.34	3.00816	651125.76	4188283.34	1.91536
649125.76	4188333.34	1.30219	649225.76	4188333.34	1.43026
649325.76	4188333.34	1.57577	649425.76	4188333.34	1.74146
649525.76	4188333.34	1.92505	649625.76	4188333.34	2.11188
649725.76	4188333.34	2.35375	649825.76	4188333.34	3.00758
649925.76	4188333.34	4.35624	650025.76	4188333.34	4.99407
650125.76	4188333.34	7.10952	650225.76	4188333.34	8.36955
650325.76	4188333.34	7.99894	650425.76	4188333.34	6.86342
650525.76	4188333.34	5.60774	650625.76	4188333.34	4.54302
650725.76	4188333.34	3.71764	650825.76	4188333.34	3.09012
651125.76	4188333.34	1.93773	649125.76	4188383.34	1.36831
649225.76	4188383.34	1.51017	649325.76	4188383.34	1.67101
649425.76	4188383.34	1.85315	649525.76	4188383.34	2.05756
649625.76	4188383.34	2.26769	649725.76	4188383.34	2.48549
649825.76	4188383.34	3.01806	649925.76	4188383.34	4.74980
650025.76	4188383.34	6.01491	650125.76	4188383.34	9.55312
650225.76	4188383.34	10.96215	650325.76	4188383.34	9.72468

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 74

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	7.74616	650525.76	4188383.34	6.02193
650625.76	4188383.34	4.74411	650725.76	4188383.34	3.82415
650825.76	4188383.34	3.15105	651125.76	4188383.34	1.95285
649125.76	4188433.34	1.43598	649225.76	4188433.34	1.59236
649325.76	4188433.34	1.77202	649425.76	4188433.34	1.97688
649525.76	4188433.34	2.20514	649625.76	4188433.34	2.43732
649725.76	4188433.34	2.66472	649825.76	4188433.34	3.04573
649925.76	4188433.34	4.94415	650025.76	4188433.34	7.50126
650125.76	4188433.34	13.91209	650225.76	4188433.34	14.80119

650325.76	4188433.34	11.58119	650425.76	4188433.34	8.48204
650525.76	4188433.34	6.32336	650625.76	4188433.34	4.88320
650725.76	4188433.34	3.89473	650825.76	4188433.34	3.18891
651125.76	4188433.34	1.95776	649125.76	4188483.34	1.50965
649225.76	4188483.34	1.68078	649325.76	4188483.34	1.87910
649425.76	4188483.34	2.10828	649525.76	4188483.34	2.36634
649625.76	4188483.34	2.62658	649725.76	4188483.34	2.87840
650425.76	4188483.34	8.96164	650525.76	4188483.34	6.49811
650625.76	4188483.34	4.95305	650725.76	4188483.34	3.92188
650825.76	4188483.34	3.19678	651125.76	4188483.34	1.94948
649125.76	4188533.34	1.59228	649225.76	4188533.34	1.78300
649325.76	4188533.34	2.00530	649425.76	4188533.34	2.26307
649525.76	4188533.34	2.55276	649625.76	4188533.34	2.84132
649725.76	4188533.34	3.11956	650425.76	4188533.34	9.12735
650525.76	4188533.34	6.51863	650625.76	4188533.34	4.93364
650725.76	4188533.34	3.89231	650825.76	4188533.34	3.16644
651125.76	4188533.34	1.92742	649125.76	4188583.34	1.67749
649225.76	4188583.34	1.89391	649325.76	4188583.34	2.15157
649425.76	4188583.34	2.45772	649525.76	4188583.34	2.81069
649625.76	4188583.34	3.17108	649725.76	4188583.34	3.50304
650425.76	4188583.34	8.89091	650525.76	4188583.34	6.34328
650625.76	4188583.34	4.80689	650725.76	4188583.34	3.79921
650825.76	4188583.34	3.09651	651125.76	4188583.34	1.89379
649125.76	4188633.34	1.75018	649225.76	4188633.34	1.99087
649325.76	4188633.34	2.28473	649425.76	4188633.34	2.64687
649525.76	4188633.34	3.09064	649625.76	4188633.34	3.60407
649725.76	4188633.34	4.20025	649825.76	4188633.34	5.05334
649925.76	4188633.34	7.08271	650025.76	4188633.34	0.38430
650125.76	4188633.34	57.71726	650225.76	4188633.34	22.06068
650325.76	4188633.34	12.31240	650425.76	4188633.34	8.19275
650525.76	4188633.34	5.95994	650625.76	4188633.34	4.57383

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 75

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	3.64691	650825.76	4188633.34	2.99150
651125.76	4188633.34	1.85093	649125.76	4188683.34	1.79344
649225.76	4188683.34	2.04676	649325.76	4188683.34	2.35918
649425.76	4188683.34	2.75004	649525.76	4188683.34	3.24261
649625.76	4188683.34	3.84796	649725.76	4188683.34	4.63480
649825.76	4188683.34	6.02076	649925.76	4188683.34	10.94503
650025.76	4188683.34	15.87151	650125.76	4188683.34	14.00699
650225.76	4188683.34	13.57327	650325.76	4188683.34	9.62064

650425.76	4188683.34	7.03812	650525.76	4188683.34	5.36921
650625.76	4188683.34	4.23372	650725.76	4188683.34	3.43440
650825.76	4188683.34	2.85043	651125.76	4188683.34	1.79814
649125.76	4188733.34	1.79793	649225.76	4188733.34	2.04909
649325.76	4188733.34	2.35814	649425.76	4188733.34	2.74464
649525.76	4188733.34	3.23616	649625.76	4188733.34	3.86371
649725.76	4188733.34	4.76750	649825.76	4188733.34	6.67911
649925.76	4188733.34	12.30345	650025.76	4188733.34	7.82918
650125.76	4188733.34	5.18943	650225.76	4188733.34	6.74854
650325.76	4188733.34	6.59411	650425.76	4188733.34	5.59760
650525.76	4188733.34	4.60290	650625.76	4188733.34	3.78760
650725.76	4188733.34	3.15604	650825.76	4188733.34	2.66702
651125.76	4188733.34	1.73192	649125.76	4188783.34	1.77022
649225.76	4188783.34	2.01211	649325.76	4188783.34	2.31019
649425.76	4188783.34	2.68554	649525.76	4188783.34	3.17302
649625.76	4188783.34	3.83109	649725.76	4188783.34	4.84085
649825.76	4188783.34	6.84639	649925.76	4188783.34	9.24576
650025.76	4188783.34	4.69502	650125.76	4188783.34	3.46637
650225.76	4188783.34	3.95728	650325.76	4188783.34	4.41364
650425.76	4188783.34	4.26828	650525.76	4188783.34	3.80080
650625.76	4188783.34	3.28567	650725.76	4188783.34	2.82883
650825.76	4188783.34	2.44557	651125.76	4188783.34	1.64978
649125.76	4188833.34	1.72897	649225.76	4188833.34	1.96303
649325.76	4188833.34	2.25258	649425.76	4188833.34	2.61920
649525.76	4188833.34	3.10071	649625.76	4188833.34	3.76584
649725.76	4188833.34	4.77086	649825.76	4188833.34	6.31416
649925.76	4188833.34	6.31893	650025.76	4188833.34	3.35818
650125.76	4188833.34	2.72403	650225.76	4188833.34	2.86835
650325.76	4188833.34	3.17332	650425.76	4188833.34	3.26859
650525.76	4188833.34	3.10117	650625.76	4188833.34	2.80628
650725.76	4188833.34	2.49468	650825.76	4188833.34	2.20762
651125.76	4188833.34	1.55362	649125.76	4188883.34	1.68796

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 76

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.91469	649325.76	4188883.34	2.19387
649425.76	4188883.34	2.54592	649525.76	4188883.34	3.00670
649625.76	4188883.34	3.64332	649725.76	4188883.34	4.55383
649825.76	4188883.34	5.35858	649925.76	4188883.34	4.47721
650025.76	4188883.34	2.67282	650125.76	4188883.34	2.31743
650225.76	4188883.34	2.33863	650325.76	4188883.34	2.49378
650425.76	4188883.34	2.58418	650525.76	4188883.34	2.54175



650625.76	4188883.34	2.39084	650725.76	4188883.34	2.18850
650825.76	4188883.34	1.97850	651125.76	4188883.34	1.44984
650125.76	4188933.34	2.04984	650225.76	4188933.34	2.02601
650325.76	4188933.34	2.08647	650425.76	4188933.34	2.13171
650525.76	4188933.34	2.11459	650625.76	4188933.34	2.04175
650725.76	4188933.34	1.91953	650825.76	4188933.34	1.77127
651125.76	4188933.34	1.34626	650425.76	4188983.34	1.82147
650525.76	4188983.34	1.80086	650625.76	4188983.34	1.75622
650725.76	4188983.34	1.68436	650825.76	4188983.34	1.58564
651125.76	4188983.34	1.24870	650525.76	4189033.34	1.57065
650625.76	4189033.34	1.53170	650725.76	4189033.34	1.48266
650825.76	4189033.34	1.41825	651125.76	4189033.34	1.15915
650525.76	4189083.34	1.39487	650625.76	4189083.34	1.35833
650725.76	4189083.34	1.31617	650825.76	4189083.34	1.26970
651125.76	4189083.34	1.07638	650525.76	4189133.34	1.25471
650625.76	4189133.34	1.22184	650725.76	4189133.34	1.18239
650825.76	4189133.34	1.14258	651125.76	4189133.34	0.99817
650781.98	4189510.65	0.65191	650760.33	4189397.50	0.75998

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 77

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	1.98399	649629.66	4188294.84	1.85054
649810.15	4188312.48	2.29232	649364.10	4188360.20	1.54415
649327.80	4188355.01	1.48153	649380.70	4188758.52	2.22814
650495.81	4188841.51	3.15675	650597.47	4188832.17	3.17493
650536.27	4188878.85	2.65042	650577.76	4188877.81	2.64502
650602.66	4188860.18	2.81602	650610.95	4188880.93	2.58162
650638.10	4188858.53	2.77178	650664.10	4188331.03	5.02612
650668.72	4188350.83	5.09906	650677.96	4188379.86	5.14204
650699.74	4188414.84	5.00944	650758.47	4188658.36	4.00403
650765.73	4188678.82	3.82606	650773.65	4188706.54	3.59140
650778.27	4188726.34	3.42486	650805.33	4188805.53	2.72088
650806.65	4188824.01	2.58926	650811.27	4188843.81	2.44446
650814.57	4188862.29	2.32007	650846.24	4188924.98	1.91901
650850.86	4188951.38	1.79156	650854.82	4188976.46	1.68018
650698.00	4188307.32	4.55204	650692.60	4188291.80	4.50394
650724.82	4189245.80	0.99397	650726.07	4189273.37	0.94947
650856.27	4189006.30	1.56087	650857.23	4189022.60	1.49973
650859.15	4189041.29	1.43289	650859.15	4189058.54	1.37586
650860.58	4189076.28	1.32006	650861.54	4189094.49	1.26685
650857.71	4189113.19	1.21812	650847.16	4189118.94	1.20769
650848.12	4189134.76	1.16846	650850.04	4189155.37	1.12089

650851.48	4189171.66	1.08610	650853.87	4189184.12	1.06050
650856.75	4189199.46	1.03065	650857.71	4189213.36	1.00564
650860.58	4189226.30	0.98275	650862.50	4189242.60	0.95590
650865.38	4189258.42	0.93084	650867.77	4189275.19	0.90579
650868.73	4189291.49	0.88302	650872.09	4189309.23	0.85867
650874.00	4189325.04	0.83822	650875.92	4189340.38	0.81913
650878.80	4189355.24	0.80104	650881.19	4189373.45	0.78002
650884.55	4189390.71	0.76066	650888.86	4189407.01	0.74283
650889.82	4189427.14	0.72264	650891.74	4189443.43	0.70673
650895.09	4189461.17	0.68984	650898.45	4189475.55	0.67653
650898.45	4189489.93	0.66429	650902.28	4189504.31	0.65176
650709.41	4188344.56	4.63804	650722.45	4188284.03	4.21982
650745.73	4188280.30	4.02759	650735.49	4188223.50	3.79057
650721.52	4188167.62	3.51983	650525.76	4188133.34	3.83282
651125.76	4188133.34	2.01826	649125.76	4188183.34	1.04508
649225.76	4188183.34	1.13765	649325.76	4188183.34	1.24058
649425.76	4188183.34	1.35012	649525.76	4188183.34	1.46220
649625.76	4188183.34	1.58963	649725.76	4188183.34	1.78985
649825.76	4188183.34	2.16732	649925.76	4188183.34	2.77515

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	3.16181	650125.76	4188183.34	3.28346
650225.76	4188183.34	3.96153	650325.76	4188183.34	4.55343
650425.76	4188183.34	4.59424	650525.76	4188183.34	4.40633
650625.76	4188183.34	4.05001	650725.76	4188183.34	3.59899
650825.76	4188183.34	3.14618	651125.76	4188183.34	2.07662
649125.76	4188233.34	1.09211	649225.76	4188233.34	1.19022
649325.76	4188233.34	1.30197	649425.76	4188233.34	1.42626
649525.76	4188233.34	1.55774	649625.76	4188233.34	1.69488
649725.76	4188233.34	1.88020	649825.76	4188233.34	2.23911
649925.76	4188233.34	2.94131	650025.76	4188233.34	3.53901
650125.76	4188233.34	3.74201	650225.76	4188233.34	4.70608
650325.76	4188233.34	5.43284	650425.76	4188233.34	5.42143
650525.76	4188233.34	5.08613	650625.76	4188233.34	4.52156
650725.76	4188233.34	3.90548	650825.76	4188233.34	3.33719
651125.76	4188233.34	2.12549	649125.76	4188283.34	1.14436
649225.76	4188283.34	1.24923	649325.76	4188283.34	1.36872
649425.76	4188283.34	1.50493	649525.76	4188283.34	1.65614
649625.76	4188283.34	1.81504	649725.76	4188283.34	1.99166
649825.76	4188283.34	2.30994	649925.76	4188283.34	3.06847
650025.76	4188283.34	3.97508	650125.76	4188283.34	4.32516

650225.76	4188283.34	5.75180	650325.76	4188283.34	6.62959
650425.76	4188283.34	6.49959	650525.76	4188283.34	5.86174
650625.76	4188283.34	5.00714	650725.76	4188283.34	4.19089
650825.76	4188283.34	3.50216	651125.76	4188283.34	2.16542
649125.76	4188333.34	1.19957	649225.76	4188333.34	1.31420
649325.76	4188333.34	1.44378	649425.76	4188333.34	1.59115
649525.76	4188333.34	1.75877	649625.76	4188333.34	1.94317
649725.76	4188333.34	2.12949	649825.76	4188333.34	2.39377
649925.76	4188333.34	3.13449	650025.76	4188333.34	4.46250
650125.76	4188333.34	5.10309	650225.76	4188333.34	7.31632
650325.76	4188333.34	8.33451	650425.76	4188333.34	7.86058
650525.76	4188333.34	6.69850	650625.76	4188333.34	5.46574
650725.76	4188333.34	4.43343	650825.76	4188333.34	3.63536
651125.76	4188333.34	2.19702	649125.76	4188383.34	1.25543
649225.76	4188383.34	1.38174	649325.76	4188383.34	1.52526
649425.76	4188383.34	1.68794	649525.76	4188383.34	1.87216
649625.76	4188383.34	2.07801	649725.76	4188383.34	2.28687
649825.76	4188383.34	2.51345	649925.76	4188383.34	3.13959
650025.76	4188383.34	4.96042	650125.76	4188383.34	6.20805
650225.76	4188383.34	9.84177	650325.76	4188383.34	10.84113

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 79

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	9.46923	650525.76	4188383.34	7.51292
650625.76	4188383.34	5.84854	650725.76	4188383.34	4.62119
650825.76	4188383.34	3.73583	651125.76	4188383.34	2.21954
649125.76	4188433.34	1.31303	649225.76	4188433.34	1.45077
649325.76	4188433.34	1.60929	649425.76	4188433.34	1.79125
649525.76	4188433.34	1.99838	649625.76	4188433.34	2.22760
649725.76	4188433.34	2.45900	649825.76	4188433.34	2.68719
649925.76	4188433.34	3.13677	650025.76	4188433.34	5.31441
650125.76	4188433.34	7.87797	650225.76	4188433.34	14.27560
650325.76	4188433.34	14.43060	650425.76	4188433.34	11.15161
650525.76	4188433.34	8.18049	650625.76	4188433.34	6.12590
650725.76	4188433.34	4.75100	650825.76	4188433.34	3.80237
651125.76	4188433.34	2.22992	649125.76	4188483.34	1.37578
649225.76	4188483.34	1.52574	649325.76	4188483.34	1.69933
649425.76	4188483.34	1.90048	649525.76	4188483.34	2.13270
649625.76	4188483.34	2.39167	649725.76	4188483.34	2.65036
650425.76	4188483.34	12.52444	650525.76	4188483.34	8.61157
650625.76	4188483.34	6.28614	650725.76	4188483.34	4.81582
650825.76	4188483.34	3.82771	651125.76	4188483.34	2.22395

649125.76	4188533.34	1.44420	649225.76	4188533.34	1.61017
649325.76	4188533.34	1.80364	649425.76	4188533.34	2.02903
649525.76	4188533.34	2.29003	649625.76	4188533.34	2.58031
649725.76	4188533.34	2.86645	650425.76	4188533.34	13.22581
650525.76	4188533.34	8.75724	650625.76	4188533.34	6.30322
650725.76	4188533.34	4.79669	650825.76	4188533.34	3.79919
651125.76	4188533.34	2.19963	649125.76	4188583.34	1.51258
649225.76	4188583.34	1.69796	649325.76	4188583.34	1.91798
649425.76	4188583.34	2.17977	649525.76	4188583.34	2.49023
649625.76	4188583.34	2.84430	649725.76	4188583.34	3.19937
650425.76	4188583.34	13.03214	650525.76	4188583.34	8.53675
650625.76	4188583.34	6.13886	650725.76	4188583.34	4.67687
650825.76	4188583.34	3.71057	651125.76	4188583.34	2.15895
649125.76	4188633.34	1.57046	649225.76	4188633.34	1.77347
649325.76	4188633.34	2.01900	649425.76	4188633.34	2.31896
649525.76	4188633.34	2.68862	649625.76	4188633.34	3.13907
649725.76	4188633.34	3.65540	649825.76	4188633.34	4.26050
649925.76	4188633.34	5.14764	650025.76	4188633.34	7.45071
650125.76	4188633.34	0.00000	650225.76	4188633.34	51.10462
650325.76	4188633.34	20.52066	650425.76	4188633.34	11.72926
650525.76	4188633.34	7.89813	650625.76	4188633.34	5.78271

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 80

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	4.45776	650825.76	4188633.34	3.56616
651125.76	4188633.34	2.10489	649125.76	4188683.34	1.60632
649225.76	4188683.34	1.81885	649325.76	4188683.34	2.07792
649425.76	4188683.34	2.39792	649525.76	4188683.34	2.79881
649625.76	4188683.34	3.30333	649725.76	4188683.34	3.92136
649825.76	4188683.34	4.74085	649925.76	4188683.34	6.25205
650025.76	4188683.34	12.24268	650125.76	4188683.34	11.04727
650225.76	4188683.34	15.34643	650325.76	4188683.34	13.27242
650425.76	4188683.34	9.33369	650525.76	4188683.34	6.84451
650625.76	4188683.34	5.23498	650725.76	4188683.34	4.13884
650825.76	4188683.34	3.36525	651125.76	4188683.34	2.03680
649125.76	4188733.34	1.61269	649225.76	4188733.34	1.82411
649325.76	4188733.34	2.08121	649425.76	4188733.34	2.39811
649525.76	4188733.34	2.79518	649625.76	4188733.34	3.30069
649725.76	4188733.34	3.94634	649825.76	4188733.34	4.90394
649925.76	4188733.34	7.03320	650025.76	4188733.34	13.23046
650125.76	4188733.34	6.86096	650225.76	4188733.34	5.40203
650325.76	4188733.34	6.93389	650425.76	4188733.34	6.55939

650525.76	4188733.34	5.51249	650625.76	4188733.34	4.51981
650725.76	4188733.34	3.71923	650825.76	4188733.34	3.10178
651125.76	4188733.34	1.95040	649125.76	4188783.34	1.59211
649225.76	4188783.34	1.79604	649325.76	4188783.34	2.04370
649425.76	4188783.34	2.34946	649525.76	4188783.34	2.73558
649625.76	4188783.34	3.23894	649725.76	4188783.34	3.92153
649825.76	4188783.34	4.99769	649925.76	4188783.34	7.18141
650025.76	4188783.34	9.24837	650125.76	4188783.34	4.37252
650225.76	4188783.34	3.49896	650325.76	4188783.34	4.07492
650425.76	4188783.34	4.46413	650525.76	4188783.34	4.25254
650625.76	4188783.34	3.75955	650725.76	4188783.34	3.24232
650825.76	4188783.34	2.78993	651125.76	4188783.34	1.84335
649125.76	4188833.34	1.55732	649225.76	4188833.34	1.75405
649325.76	4188833.34	1.99372	649425.76	4188833.34	2.29087
649525.76	4188833.34	2.66839	649625.76	4188833.34	3.16682
649725.76	4188833.34	3.85906	649825.76	4188833.34	4.92400
649925.76	4188833.34	6.49664	650025.76	4188833.34	6.10191
650125.76	4188833.34	3.22036	650225.76	4188833.34	2.72614
650325.76	4188833.34	2.92304	650425.76	4188833.34	3.21982
650525.76	4188833.34	3.28078	650625.76	4188833.34	3.08617
650725.76	4188833.34	2.78139	650825.76	4188833.34	2.46836
651125.76	4188833.34	1.71995	649125.76	4188883.34	1.52118

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 81

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.71228	649325.76	4188883.34	1.94440
649425.76	4188883.34	2.23087	649525.76	4188883.34	2.59344
649625.76	4188883.34	3.07048	649725.76	4188883.34	3.73423
649825.76	4188883.34	4.67882	649925.76	4188883.34	5.39996
650025.76	4188883.34	4.27594	650125.76	4188883.34	2.60407
650225.76	4188883.34	2.31172	650325.76	4188883.34	2.36337
650425.76	4188883.34	2.52233	650525.76	4188883.34	2.59966
650625.76	4188883.34	2.54080	650725.76	4188883.34	2.37860
650825.76	4188883.34	2.17143	651125.76	4188883.34	1.59007
650125.76	4188933.34	2.23172	650225.76	4188933.34	2.04340
650325.76	4188933.34	2.03740	650425.76	4188933.34	2.10228
650525.76	4188933.34	2.14179	650625.76	4188933.34	2.11799
650725.76	4188933.34	2.03766	650825.76	4188933.34	1.90958
651125.76	4188933.34	1.46398	650425.76	4188983.34	1.82107
650525.76	4188983.34	1.82710	650625.76	4188983.34	1.80343
650725.76	4188983.34	1.75571	650825.76	4188983.34	1.67962
651125.76	4188983.34	1.34757	650525.76	4189033.34	1.59778

650625.76	4189033.34	1.57167	650725.76	4189033.34	1.53150
650825.76	4189033.34	1.48069	651125.76	4189033.34	1.24119
650525.76	4189083.34	1.42295	650625.76	4189083.34	1.39510
650725.76	4189083.34	1.35742	650825.76	4189083.34	1.31485
651125.76	4189083.34	1.14233	650525.76	4189133.34	1.28610
650625.76	4189133.34	1.25446	650725.76	4189133.34	1.22055
650825.76	4189133.34	1.18077	651125.76	4189133.34	1.04915
650781.98	4189510.65	0.67413	650760.33	4189397.50	0.78211

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 82

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	1.82205	649629.66	4188294.84	1.69939
649810.15	4188312.48	2.05594	649364.10	4188360.20	1.41208
649327.80	4188355.01	1.35659	649380.70	4188758.52	1.96261
650495.81	4188841.51	3.00694	650597.47	4188832.17	3.29209
650536.27	4188878.85	2.58093	650577.76	4188877.81	2.63318
650602.66	4188860.18	2.86593	650610.95	4188880.93	2.61187
650638.10	4188858.53	2.88188	650664.10	4188331.03	6.10986
650668.72	4188350.83	6.28731	650677.96	4188379.86	6.45188
650699.74	4188414.84	6.35685	650758.47	4188658.36	4.97710
650765.73	4188678.82	4.70190	650773.65	4188706.54	4.33888
650778.27	4188726.34	4.08339	650805.33	4188805.53	3.07518
650806.65	4188824.01	2.89427	650811.27	4188843.81	2.70285
650814.57	4188862.29	2.54068	650846.24	4188924.98	2.04867
650850.86	4188951.38	1.89260	650854.82	4188976.46	1.75936
650698.00	4188307.32	5.45530	650692.60	4188291.80	5.34061
650724.82	4189245.80	1.01956	650726.07	4189273.37	0.97590
650856.27	4189006.30	1.62009	650857.23	4189022.60	1.55119
650859.15	4189041.29	1.47790	650859.15	4189058.54	1.41658
650860.58	4189076.28	1.35798	650861.54	4189094.49	1.30298
650857.71	4189113.19	1.25314	650847.16	4189118.94	1.24245
650848.12	4189134.76	1.20273	650850.04	4189155.37	1.15449
650851.48	4189171.66	1.11903	650853.87	4189184.12	1.09285
650856.75	4189199.46	1.06216	650857.71	4189213.36	1.03623
650860.58	4189226.30	1.01248	650862.50	4189242.60	0.98440
650865.38	4189258.42	0.95814	650867.77	4189275.19	0.93177
650868.73	4189291.49	0.90768	650872.09	4189309.23	0.88209
650874.00	4189325.04	0.86060	650875.92	4189340.38	0.84061
650878.80	4189355.24	0.82180	650881.19	4189373.45	0.80005
650884.55	4189390.71	0.78017	650888.86	4189407.01	0.76196
650889.82	4189427.14	0.74158	650891.74	4189443.43	0.72564
650895.09	4189461.17	0.70875	650898.45	4189475.55	0.69545

650898.45	4189489.93	0.68347	650902.28	4189504.31	0.67097
650709.41	4188344.56	5.68510	650722.45	4188284.03	4.99311
650745.73	4188280.30	4.76214	650735.49	4188223.50	4.34084
650721.52	4188167.62	3.90868	650525.76	4188133.34	3.96692
651125.76	4188133.34	2.27092	649125.76	4188183.34	0.96993
649225.76	4188183.34	1.05229	649325.76	4188183.34	1.14579
649425.76	4188183.34	1.24959	649525.76	4188183.34	1.35978
649625.76	4188183.34	1.47254	649725.76	4188183.34	1.60267
649825.76	4188183.34	1.81099	649925.76	4188183.34	2.20571

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 83

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	2.82268	650125.76	4188183.34	3.17682
650225.76	4188183.34	3.32139	650325.76	4188183.34	4.03289
650425.76	4188183.34	4.59127	650525.76	4188183.34	4.60307
650625.76	4188183.34	4.40181	650725.76	4188183.34	4.03078
650825.76	4188183.34	3.57383	651125.76	4188183.34	2.35609
649125.76	4188233.34	1.01276	649225.76	4188233.34	1.09979
649325.76	4188233.34	1.19897	649425.76	4188233.34	1.31188
649525.76	4188233.34	1.43723	649625.76	4188233.34	1.56947
649725.76	4188233.34	1.70810	649825.76	4188233.34	1.90003
649925.76	4188233.34	2.27785	650025.76	4188233.34	3.00300
650125.76	4188233.34	3.56342	650225.76	4188233.34	3.79545
650325.76	4188233.34	4.80298	650425.76	4188233.34	5.47461
650525.76	4188233.34	5.43013	650625.76	4188233.34	5.06920
650725.76	4188233.34	4.48964	650825.76	4188233.34	3.87036
651125.76	4188233.34	2.42823	649125.76	4188283.34	1.05877
649225.76	4188283.34	1.15263	649325.76	4188283.34	1.25863
649425.76	4188283.34	1.37946	649525.76	4188283.34	1.51711
649625.76	4188283.34	1.66960	649725.76	4188283.34	1.82948
649825.76	4188283.34	2.00973	649925.76	4188283.34	2.34648
650025.76	4188283.34	3.14486	650125.76	4188283.34	4.01674
650225.76	4188283.34	4.40403	650325.76	4188283.34	5.88723
650425.76	4188283.34	6.67650	650525.76	4188283.34	6.49849
650625.76	4188283.34	5.82366	650725.76	4188283.34	4.95803
650825.76	4188283.34	4.14415	651125.76	4188283.34	2.48722
649125.76	4188333.34	1.10575	649225.76	4188333.34	1.20854
649325.76	4188333.34	1.32442	649425.76	4188333.34	1.45544
649525.76	4188333.34	1.60449	649625.76	4188333.34	1.77388
649725.76	4188333.34	1.95957	649825.76	4188333.34	2.14661
649925.76	4188333.34	2.42523	650025.76	4188333.34	3.22139
650125.76	4188333.34	4.53743	650225.76	4188333.34	5.22685

650325.76	4188333.34	7.51017	650425.76	4188333.34	8.38507
650525.76	4188333.34	7.82856	650625.76	4188333.34	6.62856
650725.76	4188333.34	5.39533	650825.76	4188333.34	4.37507
651125.76	4188333.34	2.53374	649125.76	4188383.34	1.15300
649225.76	4188383.34	1.26516	649325.76	4188383.34	1.39290
649425.76	4188383.34	1.53807	649525.76	4188383.34	1.70262
649625.76	4188383.34	1.88891	649725.76	4188383.34	2.09633
649825.76	4188383.34	2.30528	649925.76	4188383.34	2.53865
650025.76	4188383.34	3.22490	650125.76	4188383.34	5.09771
650225.76	4188383.34	6.41689	650325.76	4188383.34	10.12238

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 84

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	10.86992	650525.76	4188383.34	9.37330
650625.76	4188383.34	7.39949	650725.76	4188383.34	5.75632
650825.76	4188383.34	4.55293	651125.76	4188383.34	2.56767
649125.76	4188433.34	1.20234	649225.76	4188433.34	1.32355
649325.76	4188433.34	1.46293	649425.76	4188433.34	1.62338
649525.76	4188433.34	1.80754	649625.76	4188433.34	2.01708
649725.76	4188433.34	2.24780	649825.76	4188433.34	2.47958
649925.76	4188433.34	2.70947	650025.76	4188433.34	3.20538
650125.76	4188433.34	5.55315	650225.76	4188433.34	8.26980
650325.76	4188433.34	14.67428	650425.76	4188433.34	14.34151
650525.76	4188433.34	10.95047	650625.76	4188433.34	8.02030
650725.76	4188433.34	6.01571	650825.76	4188433.34	4.67509
651125.76	4188433.34	2.58612	649125.76	4188483.34	1.25576
649225.76	4188483.34	1.38724	649325.76	4188483.34	1.53907
649425.76	4188483.34	1.71487	649525.76	4188483.34	1.91859
649625.76	4188483.34	2.15368	649725.76	4188483.34	2.41410
650425.76	4188483.34	18.51145	650525.76	4188483.34	12.19738
650625.76	4188483.34	8.41471	650725.76	4188483.34	6.16292
650825.76	4188483.34	4.73423	651125.76	4188483.34	2.58357
649125.76	4188533.34	1.31226	649225.76	4188533.34	1.45676
649325.76	4188533.34	1.62497	649425.76	4188533.34	1.82113
649525.76	4188533.34	2.04966	649625.76	4188533.34	2.31414
649725.76	4188533.34	2.60607	650425.76	4188533.34	21.89151
650525.76	4188533.34	12.80609	650625.76	4188533.34	8.53728
650725.76	4188533.34	6.17191	650825.76	4188533.34	4.71168
651125.76	4188533.34	2.55597	649125.76	4188583.34	1.36704
649225.76	4188583.34	1.52620	649325.76	4188583.34	1.71429
649425.76	4188583.34	1.93768	649525.76	4188583.34	2.20370
649625.76	4188583.34	2.51923	649725.76	4188583.34	2.87720



650425.76	4188583.34	22.57814	650525.76	4188583.34	12.57679
650625.76	4188583.34	8.31118	650725.76	4188583.34	6.00676
650825.76	4188583.34	4.59207	651125.76	4188583.34	2.50465
649125.76	4188633.34	1.41283	649225.76	4188633.34	1.58472
649325.76	4188633.34	1.79075	649425.76	4188633.34	2.04019
649525.76	4188633.34	2.34530	649625.76	4188633.34	2.72174
649725.76	4188633.34	3.17964	649825.76	4188633.34	3.70389
649925.76	4188633.34	4.32839	650025.76	4188633.34	5.27293
650125.76	4188633.34	7.89672	650225.76	4188633.34	0.07612
650325.76	4188633.34	46.39027	650425.76	4188633.34	19.44368
650525.76	4188633.34	11.31877	650625.76	4188633.34	7.69080

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 85

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	5.65916	650825.76	4188633.34	4.37746
651125.76	4188633.34	2.43332	649125.76	4188683.34	1.44170
649225.76	4188683.34	1.62048	649325.76	4188683.34	1.83600
649425.76	4188683.34	2.09894	649525.76	4188683.34	2.42407
649625.76	4188683.34	2.83179	649725.76	4188683.34	3.34443
649825.76	4188683.34	3.97253	649925.76	4188683.34	4.81963
650025.76	4188683.34	6.44814	650125.76	4188683.34	13.45554
650225.76	4188683.34	9.82126	650325.76	4188683.34	15.13998
650425.76	4188683.34	12.77542	650525.76	4188683.34	9.05414
650625.76	4188683.34	6.68008	650725.76	4188683.34	5.12907
650825.76	4188683.34	4.06701	651125.76	4188683.34	2.34108
649125.76	4188733.34	1.44798	649225.76	4188733.34	1.62605
649325.76	4188733.34	1.84017	649425.76	4188733.34	2.10075
649525.76	4188733.34	2.42227	649625.76	4188733.34	2.82564
649725.76	4188733.34	3.33973	649825.76	4188733.34	3.99881
649925.76	4188733.34	5.00086	650025.76	4188733.34	7.30239
650125.76	4188733.34	13.62687	650225.76	4188733.34	6.33916
650325.76	4188733.34	5.42950	650425.76	4188733.34	6.86221
650525.76	4188733.34	6.43426	650625.76	4188733.34	5.40661
650725.76	4188733.34	4.43912	650825.76	4188733.34	3.65962
651125.76	4188733.34	2.22267	649125.76	4188783.34	1.43236
649225.76	4188783.34	1.60448	649325.76	4188783.34	1.81091
649425.76	4188783.34	2.06188	649525.76	4188783.34	2.37219
649625.76	4188783.34	2.76491	649725.76	4188783.34	3.27857
649825.76	4188783.34	3.97881	649925.76	4188783.34	5.10301
650025.76	4188783.34	7.38713	650125.76	4188783.34	9.02052
650225.76	4188783.34	4.16801	650325.76	4188783.34	3.48573
650425.76	4188783.34	4.07994	650525.76	4188783.34	4.42777

650625.76	4188783.34	4.19670	650725.76	4188783.34	3.70500
650825.76	4188783.34	3.19684	651125.76	4188783.34	2.07715
649125.76	4188833.34	1.40330	649225.76	4188833.34	1.56905
649325.76	4188833.34	1.76828	649425.76	4188833.34	2.01128
649525.76	4188833.34	2.31297	649625.76	4188833.34	2.69712
649725.76	4188833.34	3.20608	649825.76	4188833.34	3.91568
649925.76	4188833.34	5.01779	650025.76	4188833.34	6.55990
650125.76	4188833.34	5.84380	650225.76	4188833.34	3.12522
650325.76	4188833.34	2.71157	650425.76	4188833.34	2.92813
650525.76	4188833.34	3.21162	650625.76	4188833.34	3.25470
650725.76	4188833.34	3.05223	650825.76	4188833.34	2.74876
651125.76	4188833.34	1.91381	649125.76	4188833.34	1.37150

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 86

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.53261	649325.76	4188883.34	1.72611
649425.76	4188883.34	1.96132	649525.76	4188883.34	2.25195
649625.76	4188883.34	2.62057	649725.76	4188883.34	3.10709
649825.76	4188883.34	3.78695	649925.76	4188883.34	4.74339
650025.76	4188883.34	5.36879	650125.76	4188883.34	4.09006
650225.76	4188883.34	2.55343	650325.76	4188883.34	2.29815
650425.76	4188883.34	2.36346	650525.76	4188883.34	2.51902
650625.76	4188883.34	2.58667	650725.76	4188883.34	2.52063
650825.76	4188883.34	2.35612	651125.76	4188883.34	1.74809
650125.76	4188933.34	3.11072	650225.76	4188933.34	2.20140
650325.76	4188933.34	2.03180	650425.76	4188933.34	2.03452
650525.76	4188933.34	2.09880	650625.76	4188933.34	2.13302
650725.76	4188933.34	2.10546	650825.76	4188933.34	2.02259
651125.76	4188933.34	1.59249	650425.76	4188983.34	1.80928
650525.76	4188983.34	1.81615	650625.76	4188983.34	1.82003
650725.76	4188983.34	1.79439	650825.76	4188983.34	1.74531
651125.76	4188983.34	1.45120	650525.76	4189033.34	1.61097
650625.76	4189033.34	1.59169	650725.76	4189033.34	1.56437
650825.76	4189033.34	1.52359	651125.76	4189033.34	1.32205
650525.76	4189083.34	1.45150	650625.76	4189083.34	1.41729
650725.76	4189083.34	1.38904	650825.76	4189083.34	1.35083
651125.76	4189083.34	1.20240	650525.76	4189133.34	1.32119
650625.76	4189133.34	1.28055	650725.76	4189133.34	1.24931
650825.76	4189133.34	1.21490	651125.76	4189133.34	1.09256
650781.98	4189510.65	0.69925	650760.33	4189397.50	0.80945

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	1.66869	649629.66	4188294.84	1.55858
649810.15	4188312.48	1.89489	649364.10	4188360.20	1.29752
649327.80	4188355.01	1.24822	649380.70	4188758.52	1.75931
650495.81	4188841.51	2.79473	650597.47	4188832.17	3.24752
650536.27	4188878.85	2.46512	650577.76	4188877.81	2.55142
650602.66	4188860.18	2.81011	650610.95	4188880.93	2.56938
650638.10	4188858.53	2.88675	650664.10	4188331.03	7.13585
650668.72	4188350.83	7.50203	650677.96	4188379.86	7.94271
650699.74	4188414.84	8.06387	650758.47	4188658.36	6.32169
650765.73	4188678.82	5.88548	650773.65	4188706.54	5.31201
650778.27	4188726.34	4.91387	650805.33	4188805.53	3.46103
650806.65	4188824.01	3.21261	650811.27	4188843.81	2.96046
650814.57	4188862.29	2.75052	650846.24	4188924.98	2.15979
650850.86	4188951.38	1.97696	650854.82	4188976.46	1.82642
650698.00	4188307.32	6.30942	650692.60	4188291.80	6.08714
650724.82	4189245.80	1.05673	650726.07	4189273.37	1.01284
650856.27	4189006.30	1.67421	650857.23	4189022.60	1.60114
650859.15	4189041.29	1.52475	650859.15	4189058.54	1.46141
650860.58	4189076.28	1.40130	650861.54	4189094.49	1.34492
650857.71	4189113.19	1.29342	650847.16	4189118.94	1.28167
650848.12	4189134.76	1.24049	650850.04	4189155.37	1.19027
650851.48	4189171.66	1.15323	650853.87	4189184.12	1.12593
650856.75	4189199.46	1.09395	650857.71	4189213.36	1.06685
650860.58	4189226.30	1.04220	650862.50	4189242.60	1.01309
650865.38	4189258.42	0.98602	650867.77	4189275.19	0.95900
650868.73	4189291.49	0.93450	650872.09	4189309.23	0.90859
650874.00	4189325.04	0.88700	650875.92	4189340.38	0.86700
650878.80	4189355.24	0.84818	650881.19	4189373.45	0.82653
650884.55	4189390.71	0.80667	650888.86	4189407.01	0.78839
650889.82	4189427.14	0.76819	650891.74	4189443.43	0.75223
650895.09	4189461.17	0.73516	650898.45	4189475.55	0.72163
650898.45	4189489.93	0.70952	650902.28	4189504.31	0.69668
650709.41	4188344.56	6.80710	650722.45	4188284.03	5.71099
650745.73	4188280.30	5.46461	650735.49	4188223.50	4.78807
650721.52	4188167.62	4.16112	650525.76	4188133.34	3.92020
651125.76	4188133.34	2.52855	649125.76	4188183.34	0.90508
649225.76	4188183.34	0.97857	649325.76	4188183.34	1.06220
649425.76	4188183.34	1.15691	649525.76	4188183.34	1.26134
649625.76	4188183.34	1.37119	649725.76	4188183.34	1.48386
649825.76	4188183.34	1.62003	649925.76	4188183.34	1.84703

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	2.27687	650125.76	4188183.34	2.89192
650225.76	4188183.34	3.16739	650325.76	4188183.34	3.36615
650425.76	4188183.34	4.10481	650525.76	4188183.34	4.58307
650625.76	4188183.34	4.54989	650725.76	4188183.34	4.33195
650825.76	4188183.34	3.95031	651125.76	4188183.34	2.65235
649125.76	4188233.34	0.94371	649225.76	4188233.34	1.02182
649325.76	4188233.34	1.11010	649425.76	4188233.34	1.21081
649525.76	4188233.34	1.32518	649625.76	4188233.34	1.45115
649725.76	4188233.34	1.58284	649825.76	4188233.34	1.72363
649925.76	4188233.34	1.93193	650025.76	4188233.34	2.35240
650125.76	4188233.34	3.10419	650225.76	4188233.34	3.56239
650325.76	4188233.34	3.86493	650425.76	4188233.34	4.89802
650525.76	4188233.34	5.44810	650625.76	4188233.34	5.35423
650725.76	4188233.34	4.96587	650825.76	4188233.34	4.38305
651125.76	4188233.34	2.75999	649125.76	4188283.34	0.98398
649225.76	4188283.34	1.06865	649325.76	4188283.34	1.16363
649425.76	4188283.34	1.27110	649525.76	4188283.34	1.39373
649625.76	4188283.34	1.53310	649725.76	4188283.34	1.68610
649825.76	4188283.34	1.84562	649925.76	4188283.34	2.03541
650025.76	4188283.34	2.41798	650125.76	4188283.34	3.28484
650225.76	4188283.34	4.03582	650325.76	4188283.34	4.51579
650425.76	4188283.34	6.01147	650525.76	4188283.34	6.62137
650625.76	4188283.34	6.37613	650725.76	4188283.34	5.67320
650825.76	4188283.34	4.82017	651125.76	4188283.34	2.84916
649125.76	4188333.34	1.02441	649225.76	4188333.34	1.11675
649325.76	4188333.34	1.22076	649425.76	4188333.34	1.33802
649525.76	4188333.34	1.47072	649625.76	4188333.34	1.62185
649725.76	4188333.34	1.79313	649825.76	4188333.34	1.97861
649925.76	4188333.34	2.16667	650025.76	4188333.34	2.48524
650125.76	4188333.34	3.39865	650225.76	4188333.34	4.60412
650325.76	4188333.34	5.41506	650425.76	4188333.34	7.66421
650525.76	4188333.34	8.27354	650625.76	4188333.34	7.62096
650725.76	4188333.34	6.41718	650825.76	4188333.34	5.22357
651125.76	4188333.34	2.91984	649125.76	4188383.34	1.06522
649225.76	4188383.34	1.16511	649325.76	4188383.34	1.27882
649425.76	4188383.34	1.40823	649525.76	4188383.34	1.55517
649625.76	4188383.34	1.72165	649725.76	4188383.34	1.91013
649825.76	4188383.34	2.11830	649925.76	4188383.34	2.32527
650025.76	4188383.34	2.58021	650125.76	4188383.34	3.41685
650225.76	4188383.34	5.27369	650325.76	4188383.34	6.75632

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	10.28478	650525.76	4188383.34	10.61907
650625.76	4188383.34	9.03219	650725.76	4188383.34	7.11752
650825.76	4188383.34	5.55394	651125.76	4188383.34	2.97239
649125.76	4188433.34	1.10806	649225.76	4188433.34	1.21540
649325.76	4188433.34	1.33846	649425.76	4188433.34	1.47998
649525.76	4188433.34	1.64277	649625.76	4188433.34	1.82934
649725.76	4188433.34	2.04111	649825.76	4188433.34	2.27168
649925.76	4188433.34	2.50168	650025.76	4188433.34	2.73650
650125.76	4188433.34	3.36776	650225.76	4188433.34	5.95683
650325.76	4188433.34	8.95241	650425.76	4188433.34	14.74451
650525.76	4188433.34	13.76472	650625.76	4188433.34	10.43225
650725.76	4188433.34	7.67399	650825.76	4188433.34	5.79114
651125.76	4188433.34	3.00471	649125.76	4188483.34	1.15390
649225.76	4188483.34	1.26989	649325.76	4188483.34	1.40338
649425.76	4188483.34	1.55757	649525.76	4188483.34	1.73612
649625.76	4188483.34	1.94295	649725.76	4188483.34	2.18119
650425.76	4188483.34	22.79833	650525.76	4188483.34	17.34565
650625.76	4188483.34	11.50972	650725.76	4188483.34	8.02676
650825.76	4188483.34	5.92622	651125.76	4188483.34	3.01036
649125.76	4188533.34	1.20135	649225.76	4188533.34	1.32791
649325.76	4188533.34	1.47471	649425.76	4188533.34	1.64554
649525.76	4188533.34	1.84465	649625.76	4188533.34	2.07640
649725.76	4188533.34	2.34398	650425.76	4188533.34	36.24807
650525.76	4188533.34	20.08075	650625.76	4188533.34	12.02897
650725.76	4188533.34	8.13707	650825.76	4188533.34	5.93520
651125.76	4188533.34	2.98227	649125.76	4188583.34	1.24673
649225.76	4188583.34	1.38469	649325.76	4188583.34	1.54674
649425.76	4188583.34	1.73822	649525.76	4188583.34	1.96553
649625.76	4188583.34	2.23584	649725.76	4188583.34	2.55523
650425.76	4188583.34	48.10915	650525.76	4188583.34	20.58451
650625.76	4188583.34	11.82603	650725.76	4188583.34	7.93601
650825.76	4188583.34	5.78539	651125.76	4188583.34	2.91969
649125.76	4188633.34	1.28486	649225.76	4188633.34	1.43262
649325.76	4188633.34	1.60819	649425.76	4188633.34	1.81879
649525.76	4188633.34	2.07393	649625.76	4188633.34	2.38611
649725.76	4188633.34	2.77086	649825.76	4188633.34	3.23409
649925.76	4188633.34	3.75809	650025.76	4188633.34	4.38931
650125.76	4188633.34	5.37601	650225.76	4188633.34	8.40190
650325.76	4188633.34	30.52961	650425.76	4188633.34	40.91944

650525.76 4188633.34 18.02196 650625.76 4188633.34 10.73949  
 \*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 90

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	7.38366	650825.76	4188633.34	5.46950
651125.76	4188633.34	2.82698	649125.76	4188683.34	1.30999
649225.76	4188683.34	1.46335	649325.76	4188683.34	1.64646
649425.76	4188683.34	1.86754	649525.76	4188683.34	2.13773
649625.76	4188683.34	2.47243	649725.76	4188683.34	2.89277
649825.76	4188683.34	3.41928	649925.76	4188683.34	4.06375
650025.76	4188683.34	4.95703	650125.76	4188683.34	6.78379
650225.76	4188683.34	15.88093	650325.76	4188683.34	9.11957
650425.76	4188683.34	16.40515	650525.76	4188683.34	12.48699
650625.76	4188683.34	8.77352	650725.76	4188683.34	6.48178
650825.76	4188683.34	4.98762	651125.76	4188683.34	2.70357
649125.76	4188733.34	1.31745	649225.76	4188733.34	1.47074
649325.76	4188733.34	1.65343	649425.76	4188733.34	1.87350
649525.76	4188733.34	2.14184	649625.76	4188733.34	2.47365
649725.76	4188733.34	2.89085	649825.76	4188733.34	3.42216
649925.76	4188733.34	4.10625	650025.76	4188733.34	5.18860
650125.76	4188733.34	7.83592	650225.76	4188733.34	14.58109
650325.76	4188733.34	5.92431	650425.76	4188733.34	5.86785
650525.76	4188733.34	7.09090	650625.76	4188733.34	6.41126
650725.76	4188733.34	5.32375	650825.76	4188733.34	4.35402
651125.76	4188733.34	2.54334	649125.76	4188783.34	1.30661
649225.76	4188783.34	1.45534	649325.76	4188783.34	1.63200
649425.76	4188783.34	1.84424	649525.76	4188783.34	2.10279
649625.76	4188783.34	2.42322	649725.76	4188783.34	2.83002
649825.76	4188783.34	3.36419	649925.76	4188783.34	4.09858
650025.76	4188783.34	5.32306	650125.76	4188783.34	7.84601
650225.76	4188783.34	8.79496	650325.76	4188783.34	3.99348
650425.76	4188783.34	3.58759	650525.76	4188783.34	4.24918
650625.76	4188783.34	4.49904	650725.76	4188783.34	4.18744
650825.76	4188783.34	3.66565	651125.76	4188783.34	2.34783
649125.76	4188833.34	1.28276	649225.76	4188833.34	1.42584
649325.76	4188833.34	1.59595	649425.76	4188833.34	1.80077
649525.76	4188833.34	2.05111	649625.76	4188833.34	2.36280
649725.76	4188833.34	2.76150	649825.76	4188833.34	3.29324
649925.76	4188833.34	4.04057	650025.76	4188833.34	5.22853
650125.76	4188833.34	6.76280	650225.76	4188833.34	5.50995
650325.76	4188833.34	3.04391	650425.76	4188833.34	2.74529
650525.76	4188833.34	3.01313	650625.76	4188833.34	3.27891

650725.76 4188833.34 3.27641 650825.76 4188833.34 3.04114  
651125.76 4188833.34 2.13374 649125.76 4188833.34 1.25452

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 91

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.39338	649325.76	4188883.34	1.55869
649425.76	4188883.34	1.75758	649525.76	4188883.34	1.99988
649625.76	4188883.34	2.30025	649725.76	4188883.34	2.68312
649825.76	4188883.34	3.19200	649925.76	4188883.34	3.90877
650025.76	4188883.34	4.90320	650125.76	4188883.34	5.39192
650225.76	4188883.34	3.84162	650325.76	4188883.34	2.51222
650425.76	4188883.34	2.30837	650525.76	4188883.34	2.40530
650625.76	4188883.34	2.56194	650725.76	4188883.34	2.61198
650825.76	4188883.34	2.52488	651125.76	4188883.34	1.92353
650125.76	4188933.34	4.24732	650225.76	4188933.34	2.94527
650325.76	4188933.34	2.17808	650425.76	4188933.34	2.03368
650525.76	4188933.34	2.05510	650625.76	4188933.34	2.12397
650725.76	4188933.34	2.15077	650825.76	4188933.34	2.11470
651125.76	4188933.34	1.73120	650425.76	4188983.34	1.83567
650525.76	4188983.34	1.81968	650625.76	4188983.34	1.82956
650725.76	4188983.34	1.83105	650825.76	4188983.34	1.80201
651125.76	4188983.34	1.55829	650525.76	4189033.34	1.63894
650625.76	4189033.34	1.61667	650725.76	4189033.34	1.59866
650825.76	4189033.34	1.56905	651125.76	4189033.34	1.40130
650525.76	4189083.34	1.48888	650625.76	4189083.34	1.45328
650725.76	4189083.34	1.42114	650825.76	4189083.34	1.39191
651125.76	4189083.34	1.25947	650525.76	4189133.34	1.36035
650625.76	4189133.34	1.32145	650725.76	4189133.34	1.28167
650825.76	4189133.34	1.25126	651125.76	4189133.34	1.13522
650781.98	4189510.65	0.72420	650760.33	4189397.50	0.84057

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 92

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	1.54006	649629.66	4188294.84	1.44100
649810.15	4188312.48	1.75295	649364.10	4188360.20	1.20305
649327.80	4188355.01	1.15876	649380.70	4188758.52	1.59309
650495.81	4188841.51	2.64533	650597.47	4188832.17	2.98609
650536.27	4188878.85	2.34518	650577.76	4188877.81	2.40091
650602.66	4188860.18	2.62181	650610.95	4188880.93	2.42670
650638.10	4188858.53	2.72573	650664.10	4188331.03	7.95866
650668.72	4188350.83	8.58988	650677.96	4188379.86	9.49573
650699.74	4188414.84	10.17404	650758.47	4188658.36	8.17619
650765.73	4188678.82	7.43306	650773.65	4188706.54	6.47178
650778.27	4188726.34	5.82645	650805.33	4188805.53	3.74731
650806.65	4188824.01	3.41900	650811.27	4188843.81	3.10539
650814.57	4188862.29	2.85205	650846.24	4188924.98	2.20395
650850.86	4188951.38	2.00990	650854.82	4188976.46	1.85508
650698.00	4188307.32	7.03152	650692.60	4188291.80	6.66855
650724.82	4189245.80	1.08768	650726.07	4189273.37	1.04234
650856.27	4189006.30	1.70136	650857.23	4189022.60	1.62825
650859.15	4189041.29	1.55191	650859.15	4189058.54	1.48823
650860.58	4189076.28	1.42768	650861.54	4189094.49	1.37060
650857.71	4189113.19	1.31792	650847.16	4189118.94	1.30526
650848.12	4189134.76	1.26384	650850.04	4189155.37	1.21363
650851.48	4189171.66	1.17681	650853.87	4189184.12	1.14977
650856.75	4189199.46	1.11817	650857.71	4189213.36	1.09160
650860.58	4189226.30	1.06733	650862.50	4189242.60	1.03885
650865.38	4189258.42	1.01227	650867.77	4189275.19	0.98576
650868.73	4189291.49	0.96179	650872.09	4189309.23	0.93611
650874.00	4189325.04	0.91467	650875.92	4189340.38	0.89470
650878.80	4189355.24	0.87572	650881.19	4189373.45	0.85381
650884.55	4189390.71	0.83353	650888.86	4189407.01	0.81475
650889.82	4189427.14	0.79389	650891.74	4189443.43	0.77730
650895.09	4189461.17	0.75951	650898.45	4189475.55	0.74538
650898.45	4189489.93	0.73260	650902.28	4189504.31	0.71915
650709.41	4188344.56	7.92491	650722.45	4188284.03	6.32498
650745.73	4188280.30	6.10277	650735.49	4188223.50	5.12079
650721.52	4188167.62	4.32577	650525.76	4188133.34	3.61782
651125.76	4188133.34	2.80331	649125.76	4188183.34	0.85151
649225.76	4188183.34	0.91802	649325.76	4188183.34	0.99326
649425.76	4188183.34	1.07889	649525.76	4188183.34	1.17562
649625.76	4188183.34	1.28155	649725.76	4188183.34	1.39206
649825.76	4188183.34	1.50636	649925.76	4188183.34	1.65247

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*



X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	1.90606	650125.76	4188183.34	2.38313
650225.76	4188183.34	2.98594	650325.76	4188183.34	3.17813
650425.76	4188183.34	3.47919	650525.76	4188183.34	4.23934
650625.76	4188183.34	4.61270	650725.76	4188183.34	4.53068
650825.76	4188183.34	4.28119	651125.76	4188183.34	2.97898
649125.76	4188233.34	0.88628	649225.76	4188233.34	0.95752
649325.76	4188233.34	1.03737	649425.76	4188233.34	1.12778
649525.76	4188233.34	1.23098	649625.76	4188233.34	1.34783
649725.76	4188233.34	1.47549	649825.76	4188233.34	1.60802
649925.76	4188233.34	1.75436	650025.76	4188233.34	1.98672
650125.76	4188233.34	2.46703	650225.76	4188233.34	3.24097
650325.76	4188233.34	3.58388	650425.76	4188233.34	4.02820
650525.76	4188233.34	5.07296	650625.76	4188233.34	5.47118
650725.76	4188233.34	5.31679	650825.76	4188233.34	4.87775
651125.76	4188233.34	3.13775	649125.76	4188283.34	0.92162
649225.76	4188283.34	0.99895	649325.76	4188283.34	1.08544
649425.76	4188283.34	1.18257	649525.76	4188283.34	1.29264
649625.76	4188283.34	1.41835	649725.76	4188283.34	1.56074
649825.76	4188283.34	1.71559	649925.76	4188283.34	1.87693
650025.76	4188283.34	2.08315	650125.76	4188283.34	2.53209
650225.76	4188283.34	3.47750	650325.76	4188283.34	4.07863
650425.76	4188283.34	4.76274	650525.76	4188283.34	6.23816
650625.76	4188283.34	6.63447	650725.76	4188283.34	6.29048
650825.76	4188283.34	5.53081	651125.76	4188283.34	3.27246
649125.76	4188333.34	0.95685	649225.76	4188333.34	1.04064
649325.76	4188333.34	1.13507	649425.76	4188333.34	1.24144
649525.76	4188333.34	1.36142	649625.76	4188333.34	1.49733
649725.76	4188333.34	1.65222	649825.76	4188333.34	1.82704
649925.76	4188333.34	2.01345	650025.76	4188333.34	2.20716
650125.76	4188333.34	2.58697	650225.76	4188333.34	3.65352
650325.76	4188333.34	4.69509	650425.76	4188333.34	5.81120
650525.76	4188333.34	7.95070	650625.76	4188333.34	8.24849
650725.76	4188333.34	7.44013	650825.76	4188333.34	6.20087
651125.76	4188333.34	3.38028	649125.76	4188383.34	0.99273
649225.76	4188383.34	1.08268	649325.76	4188383.34	1.18500
649425.76	4188383.34	1.30150	649525.76	4188383.34	1.43408
649625.76	4188383.34	1.58455	649725.76	4188383.34	1.75500
649825.76	4188383.34	1.94789	649925.76	4188383.34	2.15780
650025.76	4188383.34	2.36453	650125.76	4188383.34	2.65926
650225.76	4188383.34	3.71472	650325.76	4188383.34	5.47720

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	7.44131	650525.76	4188383.34	10.62358
650625.76	4188383.34	10.45404	650725.76	4188383.34	8.69707
650825.76	4188383.34	6.81184	651125.76	4188383.34	3.46122
649125.76	4188433.34	1.03050	649225.76	4188433.34	1.12678
649325.76	4188433.34	1.23684	649425.76	4188433.34	1.36312
649525.76	4188433.34	1.50838	649625.76	4188433.34	1.67546
649725.76	4188433.34	1.86674	649825.76	4188433.34	2.08331
649925.76	4188433.34	2.31504	650025.76	4188433.34	2.54380
650125.76	4188433.34	2.79334	650225.76	4188433.34	3.64727
650325.76	4188433.34	6.42190	650425.76	4188433.34	10.27165
650525.76	4188433.34	15.05369	650625.76	4188433.34	13.23918
650725.76	4188433.34	9.88303	650825.76	4188433.34	7.28349
651125.76	4188433.34	3.51384	649125.76	4188483.34	1.07035
649225.76	4188483.34	1.17408	649325.76	4188483.34	1.29311
649425.76	4188483.34	1.43021	649525.76	4188483.34	1.58865
649625.76	4188483.34	1.77219	649725.76	4188483.34	1.98472
650425.76	4188483.34	16.06155	650525.76	4188483.34	22.53507
650625.76	4188483.34	16.15059	650725.76	4188483.34	10.74882
650825.76	4188483.34	7.57564	651125.76	4188483.34	3.53108
649125.76	4188533.34	1.11076	649225.76	4188533.34	1.22326
649325.76	4188533.34	1.35332	649425.76	4188533.34	1.50432
649525.76	4188533.34	1.68013	649625.76	4188533.34	1.88509
649725.76	4188533.34	2.12348	650425.76	4188533.34	31.00976
650525.76	4188533.34	33.18366	650625.76	4188533.34	18.13968
650725.76	4188533.34	11.13546	650825.76	4188533.34	7.65436
651125.76	4188533.34	3.50232	649125.76	4188583.34	1.14884
649225.76	4188583.34	1.27039	649325.76	4188583.34	1.41245
649425.76	4188583.34	1.57954	649525.76	4188583.34	1.77721
649625.76	4188583.34	2.01207	649725.76	4188583.34	2.29137
650425.76	4188583.34	80.39681	650525.76	4188583.34	40.18433
650625.76	4188583.34	18.32457	650725.76	4188583.34	10.91070
650825.76	4188583.34	7.45895	651125.76	4188583.34	3.42356
649125.76	4188633.34	1.18075	649225.76	4188633.34	1.30993
649325.76	4188633.34	1.46232	649425.76	4188633.34	1.64371
649525.76	4188633.34	1.86171	649625.76	4188633.34	2.12634
649725.76	4188633.34	2.45077	649825.76	4188633.34	2.85076
649925.76	4188633.34	3.32755	650025.76	4188633.34	3.86540
650125.76	4188633.34	4.53840	650225.76	4188633.34	5.68538
650325.76	4188633.34	9.45637	650425.76	4188633.34	92.34819
650525.76	4188633.34	33.92966	650625.76	4188633.34	16.13221

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 95

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	9.94898	650825.76	4188633.34	6.95941
651125.76	4188633.34	3.29934	649125.76	4188683.34	1.20216
649225.76	4188683.34	1.33575	649325.76	4188683.34	1.49396
649425.76	4188683.34	1.68324	649525.76	4188683.34	1.91224
649625.76	4188683.34	2.19276	649725.76	4188683.34	2.54117
649825.76	4188683.34	2.97953	649925.76	4188683.34	3.52624
650025.76	4188683.34	4.19862	650125.76	4188683.34	5.17888
650225.76	4188683.34	7.43328	650325.76	4188683.34	20.97207
650425.76	4188683.34	9.43116	650525.76	4188683.34	15.93242
650625.76	4188683.34	11.62932	650725.76	4188683.34	8.25592
650825.76	4188683.34	6.15735	651125.76	4188683.34	3.12902
649125.76	4188733.34	1.20932	649225.76	4188733.34	1.34298
649325.76	4188733.34	1.50100	649425.76	4188733.34	1.68967
649525.76	4188733.34	1.91739	649625.76	4188733.34	2.19571
649725.76	4188733.34	2.54082	649825.76	4188733.34	2.97605
649925.76	4188733.34	3.53060	650025.76	4188733.34	4.25619
650125.76	4188733.34	5.48605	650225.76	4188733.34	8.74143
650325.76	4188733.34	14.52431	650425.76	4188733.34	5.45385
650525.76	4188733.34	6.17867	650625.76	4188733.34	7.01342
650725.76	4188733.34	6.19534	650825.76	4188733.34	5.12360
651125.76	4188733.34	2.90616	649125.76	4188783.34	1.20117
649225.76	4188783.34	1.33120	649325.76	4188783.34	1.48439
649425.76	4188783.34	1.66669	649525.76	4188783.34	1.88622
649625.76	4188783.34	2.15439	649725.76	4188783.34	2.48800
649825.76	4188783.34	2.91377	649925.76	4188783.34	3.47680
650025.76	4188783.34	4.26608	650125.76	4188783.34	5.65042
650225.76	4188783.34	8.40940	650325.76	4188783.34	7.81485
650425.76	4188783.34	3.75873	650525.76	4188783.34	3.66500
650625.76	4188783.34	4.32222	650725.76	4188783.34	4.45673
650825.76	4188783.34	4.08894	651125.76	4188783.34	2.63909
649125.76	4188833.34	1.18119	649225.76	4188833.34	1.30630
649325.76	4188833.34	1.45369	649425.76	4188833.34	1.62930
649525.76	4188833.34	1.84128	649625.76	4188833.34	2.10116
649725.76	4188833.34	2.42600	649825.76	4188833.34	2.84404
649925.76	4188833.34	3.40684	650025.76	4188833.34	4.20866
650125.76	4188833.34	5.50955	650225.76	4188833.34	6.85108
650325.76	4188833.34	4.83131	650425.76	4188833.34	2.92192
650525.76	4188833.34	2.76319	650625.76	4188833.34	3.06310
650725.76	4188833.34	3.28941	650825.76	4188833.34	3.23800
651125.76	4188833.34	2.35754	649125.76	4188883.34	1.15612

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 96

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.27733	649325.76	4188883.34	1.42044
649425.76	4188883.34	1.59111	649525.76	4188883.34	1.79686
649625.76	4188883.34	2.04815	649725.76	4188883.34	2.36089
649825.76	4188883.34	2.76211	649925.76	4188883.34	3.30031
650025.76	4188883.34	4.06585	650125.76	4188883.34	5.07189
650225.76	4188883.34	5.26289	650325.76	4188883.34	3.43399
650425.76	4188883.34	2.44510	650525.76	4188883.34	2.30689
650625.76	4188883.34	2.42984	650725.76	4188883.34	2.57436
650825.76	4188883.34	2.59931	651125.76	4188883.34	2.09214
650125.76	4188933.34	4.44010	650225.76	4188933.34	4.07063
650325.76	4188933.34	2.69948	650425.76	4188933.34	2.13660
650525.76	4188933.34	2.02500	650625.76	4188933.34	2.06263
650725.76	4188933.34	2.12935	650825.76	4188933.34	2.14391
651125.76	4188933.34	1.85533	650425.76	4188983.34	1.91438
650525.76	4188983.34	1.82485	650625.76	4188983.34	1.81845
650725.76	4188983.34	1.82881	650825.76	4188983.34	1.82445
651125.76	4188983.34	1.64507	650525.76	4189033.34	1.66460
650625.76	4189033.34	1.63319	650725.76	4189033.34	1.61078
650825.76	4189033.34	1.59224	651125.76	4189033.34	1.45902
650525.76	4189083.34	1.52301	650625.76	4189083.34	1.48096
650725.76	4189083.34	1.44476	650825.76	4189083.34	1.41457
651125.76	4189083.34	1.29916	650525.76	4189133.34	1.39485
650625.76	4189133.34	1.35189	650725.76	4189133.34	1.31256
650825.76	4189133.34	1.27426	651125.76	4189133.34	1.16682
650781.98	4189510.65	0.74330	650760.33	4189397.50	0.86449

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 97

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	3.05826	649629.66	4188294.84	2.83915
649810.15	4188312.48	3.71294	649364.10	4188360.20	2.37047
649327.80	4188355.01	2.24601	649380.70	4188758.52	2.53274
650495.81	4188841.51	1.55185	650597.47	4188832.17	1.54468
650536.27	4188878.85	1.40214	650577.76	4188877.81	1.38833
650602.66	4188860.18	1.43700	650610.95	4188880.93	1.36417
650638.10	4188858.53	1.42626	650664.10	4188331.03	3.80210
650668.72	4188350.83	3.74069	650677.96	4188379.86	3.61750
650699.74	4188414.84	3.37948	650758.47	4188658.36	2.10928

650765.73	4188678.82	2.00164	650773.65	4188706.54	1.87026
650778.27	4188726.34	1.78497	650805.33	4188805.53	1.48074
650806.65	4188824.01	1.42434	650811.27	4188843.81	1.36365
650814.57	4188862.29	1.31042	650846.24	4188924.98	1.13789
650850.86	4188951.38	1.07895	650854.82	4188976.46	1.02727
650698.00	4188307.32	3.55487	650692.60	4188291.80	3.59903
650724.82	4189245.80	0.71122	650726.07	4189273.37	0.68576
650856.27	4189006.30	0.97207	650857.23	4189022.60	0.94409
650859.15	4189041.29	0.91363	650859.15	4189058.54	0.88779
650860.58	4189076.28	0.86236	650861.54	4189094.49	0.83797
650857.71	4189113.19	0.81590	650847.16	4189118.94	0.81224
650848.12	4189134.76	0.79366	650850.04	4189155.37	0.77054
650851.48	4189171.66	0.75322	650853.87	4189184.12	0.74012
650856.75	4189199.46	0.72457	650857.71	4189213.36	0.71141
650860.58	4189226.30	0.69904	650862.50	4189242.60	0.68436
650865.38	4189258.42	0.67036	650867.77	4189275.19	0.65616
650868.73	4189291.49	0.64307	650872.09	4189309.23	0.62879
650874.00	4189325.04	0.61667	650875.92	4189340.38	0.60521
650878.80	4189355.24	0.59423	650881.19	4189373.45	0.58136
650884.55	4189390.71	0.56938	650888.86	4189407.01	0.55825
650889.82	4189427.14	0.54558	650891.74	4189443.43	0.53551
650895.09	4189461.17	0.52474	650898.45	4189475.55	0.51619
650898.45	4189489.93	0.50832	650902.28	4189504.31	0.50019
650709.41	4188344.56	3.44259	650722.45	4188284.03	3.38838
650745.73	4188280.30	3.23750	650735.49	4188223.50	3.28005
650721.52	4188167.62	3.30589	650525.76	4188133.34	4.75802
651125.76	4188133.34	1.75475	649125.76	4188183.34	1.45966
649225.76	4188183.34	1.61279	649325.76	4188183.34	1.78632
649425.76	4188183.34	1.98242	649525.76	4188183.34	2.19048
649625.76	4188183.34	2.39746	649725.76	4188183.34	2.79226
649825.76	4188183.34	4.17318	649925.76	4188183.34	5.55251

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 98

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	8.14228	650125.76	4188183.34	10.46718
650225.76	4188183.34	9.86885	650325.76	4188183.34	8.10884
650425.76	4188183.34	6.36457	650525.76	4188183.34	5.00972
650625.76	4188183.34	4.02256	650725.76	4188183.34	3.30054
650825.76	4188183.34	2.76087	651125.76	4188183.34	1.76676
649125.76	4188233.34	1.53727	649225.76	4188233.34	1.70797
649325.76	4188233.34	1.90266	649425.76	4188233.34	2.12173
649525.76	4188233.34	2.35086	649625.76	4188233.34	2.57530

649725.76	4188233.34	2.87229	649825.76	4188233.34	4.18203
649925.76	4188233.34	6.70601	650025.76	4188233.34	11.53289
650125.76	4188233.34	14.45728	650225.76	4188233.34	12.16316
650325.76	4188233.34	9.08191	650425.76	4188233.34	6.76287
650525.76	4188233.34	5.18938	650625.76	4188233.34	4.11269
650725.76	4188233.34	3.34911	650825.76	4188233.34	2.78806
651125.76	4188233.34	1.77024	649125.76	4188283.34	1.62006
649225.76	4188283.34	1.80812	649325.76	4188283.34	2.02555
649425.76	4188283.34	2.27356	649525.76	4188283.34	2.53018
649625.76	4188283.34	2.77888	649725.76	4188283.34	3.05459
649825.76	4188283.34	4.00163	649925.76	4188283.34	8.24111
650025.76	4188283.34	18.45525	650125.76	4188283.34	20.57565
650225.76	4188283.34	14.40067	650325.76	4188283.34	9.77740
650425.76	4188283.34	7.01160	650525.76	4188283.34	5.29091
650625.76	4188283.34	4.15596	650725.76	4188283.34	3.36624
650825.76	4188283.34	2.79243	651125.76	4188283.34	1.76289
649125.76	4188333.34	1.71483	649225.76	4188333.34	1.92437
649325.76	4188333.34	2.16751	649425.76	4188333.34	2.44534
649525.76	4188333.34	2.73174	649625.76	4188333.34	3.00696
649725.76	4188333.34	3.32581	649825.76	4188333.34	3.99266
649925.76	4188333.34	9.77417	650025.76	4188333.34	35.21765
650125.76	4188333.34	28.02100	650225.76	4188333.34	15.85012
650325.76	4188333.34	10.09305	650425.76	4188333.34	7.08455
650525.76	4188333.34	5.29450	650625.76	4188333.34	4.13801
650725.76	4188333.34	3.34232	650825.76	4188333.34	2.76805
651125.76	4188333.34	1.74443	649125.76	4188383.34	1.81818
649225.76	4188383.34	2.05904	649325.76	4188383.34	2.34420
649425.76	4188383.34	2.67585	649525.76	4188383.34	3.02303
649625.76	4188383.34	3.34291	649725.76	4188383.34	3.68128
649825.76	4188383.34	4.45703	649925.76	4188383.34	9.16139
650025.76	4188383.34	78.03564	650125.76	4188383.34	32.18575
650225.76	4188383.34	15.98951	650325.76	4188383.34	9.92694

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 99

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	6.93034	650525.76	4188383.34	5.17557
650625.76	4188383.34	4.04793	650725.76	4188383.34	3.27345
650825.76	4188383.34	2.71455	651125.76	4188383.34	1.71680
649125.76	4188433.34	1.91143	649225.76	4188433.34	2.18583
649325.76	4188433.34	2.52189	649425.76	4188433.34	2.93338
649525.76	4188433.34	3.41078	649625.76	4188433.34	3.94010
649725.76	4188433.34	4.61377	649825.76	4188433.34	5.87115

649925.76	4188433.34	7.88712	650025.76	4188433.34	90.66235
650125.76	4188433.34	28.39842	650225.76	4188433.34	14.42895
650325.76	4188433.34	9.18101	650425.76	4188433.34	6.52366
650525.76	4188433.34	4.93028	650625.76	4188433.34	3.88843
650725.76	4188433.34	3.16388	650825.76	4188433.34	2.63601
651125.76	4188433.34	1.68212	649125.76	4188483.34	1.97029
649225.76	4188483.34	2.26442	649325.76	4188483.34	2.63081
649425.76	4188483.34	3.09206	649525.76	4188483.34	3.66130
649625.76	4188483.34	4.36894	649725.76	4188483.34	5.46490
650425.76	4188483.34	5.86483	650525.76	4188483.34	4.55964
650625.76	4188483.34	3.66030	650725.76	4188483.34	3.01405
650825.76	4188483.34	2.53258	651125.76	4188483.34	1.64019
649125.76	4188533.34	1.98041	649225.76	4188533.34	2.27393
649325.76	4188533.34	2.63936	649425.76	4188533.34	3.10151
649525.76	4188533.34	3.68802	649625.76	4188533.34	4.47148
649725.76	4188533.34	5.92221	650425.76	4188533.34	4.98929
650525.76	4188533.34	4.06444	650625.76	4188533.34	3.35746
650725.76	4188533.34	2.81739	650825.76	4188533.34	2.39868
651125.76	4188533.34	1.58830	649125.76	4188583.34	1.95006
649225.76	4188583.34	2.23317	649325.76	4188583.34	2.58692
649425.76	4188583.34	3.04082	649525.76	4188583.34	3.64390
649625.76	4188583.34	4.51582	649725.76	4188583.34	6.16468
650425.76	4188583.34	4.06514	650525.76	4188583.34	3.50072
650625.76	4188583.34	2.99737	650725.76	4188583.34	2.57755
650825.76	4188583.34	2.23307	651125.76	4188583.34	1.52370
649125.76	4188633.34	1.90365	649225.76	4188633.34	2.17806
649325.76	4188633.34	2.52300	649425.76	4188633.34	2.97077
649525.76	4188633.34	3.58069	649625.76	4188633.34	4.47152
649725.76	4188633.34	5.96112	649825.76	4188633.34	7.03301
649925.76	4188633.34	4.17614	650025.76	4188633.34	2.87504
650125.76	4188633.34	2.89334	650225.76	4188633.34	3.24030
650325.76	4188633.34	3.40471	650425.76	4188633.34	3.26739
650525.76	4188633.34	2.96210	650625.76	4188633.34	2.62788

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 100

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	2.31813	650825.76	4188633.34	2.04689
651125.76	4188633.34	1.44654	649125.76	4188683.34	1.85728
649225.76	4188683.34	2.12275	649325.76	4188683.34	2.45533
649425.76	4188683.34	2.88623	649525.76	4188683.34	3.47256
649625.76	4188683.34	4.31735	649725.76	4188683.34	5.35066
649825.76	4188683.34	5.15750	649925.76	4188683.34	3.08179

650025.76	4188683.34	2.41870	650125.76	4188683.34	2.36563
650225.76	4188683.34	2.52737	650325.76	4188683.34	2.65726
650425.76	4188683.34	2.64382	650525.76	4188683.34	2.49944
650625.76	4188683.34	2.29017	650725.76	4188683.34	2.06808
650825.76	4188683.34	1.85882	651125.76	4188683.34	1.36068
649125.76	4188733.34	1.81012	649225.76	4188733.34	2.06244
649325.76	4188733.34	2.37654	649425.76	4188733.34	2.78025
649525.76	4188733.34	3.32797	649625.76	4188733.34	4.06216
649725.76	4188733.34	4.55808	649825.76	4188733.34	3.89828
649925.76	4188733.34	2.50042	650025.76	4188733.34	2.12215
650125.76	4188733.34	2.05362	650225.76	4188733.34	2.11452
650325.76	4188733.34	2.18086	650425.76	4188733.34	2.18096
650525.76	4188733.34	2.11649	650625.76	4188733.34	1.99552
650725.76	4188733.34	1.84259	650825.76	4188733.34	1.68345
651125.76	4188733.34	1.27213	649125.76	4188783.34	1.75774
649225.76	4188783.34	1.99432	649325.76	4188783.34	2.28655
649425.76	4188783.34	2.66099	649525.76	4188783.34	3.16175
649625.76	4188783.34	3.70516	649725.76	4188783.34	3.80394
649825.76	4188783.34	3.07932	649925.76	4188783.34	2.14487
650025.76	4188783.34	1.90581	650125.76	4188783.34	1.83857
650225.76	4188783.34	1.84504	650325.76	4188783.34	1.86040
650425.76	4188783.34	1.84930	650525.76	4188783.34	1.80952
650625.76	4188783.34	1.74061	650725.76	4188783.34	1.64158
650825.76	4188783.34	1.52496	651125.76	4188783.34	1.18646
649125.76	4188833.34	1.70024	649225.76	4188833.34	1.92009
649325.76	4188833.34	2.19059	649425.76	4188833.34	2.53892
649525.76	4188833.34	2.96791	649625.76	4188833.34	3.29095
649725.76	4188833.34	3.17322	649825.76	4188833.34	2.53121
649925.76	4188833.34	1.89815	650025.76	4188833.34	1.73598
650125.76	4188833.34	1.67092	650225.76	4188833.34	1.64727
650325.76	4188833.34	1.62852	650425.76	4188833.34	1.60883
650525.76	4188833.34	1.57276	650625.76	4188833.34	1.52523
650725.76	4188833.34	1.46172	650825.76	4188833.34	1.38064
651125.76	4188833.34	1.10687	649125.76	4188883.34	1.63936

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 101

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.84286	649325.76	4188883.34	2.09535
649425.76	4188883.34	2.41388	649525.76	4188883.34	2.74185
649625.76	4188883.34	2.88011	649725.76	4188883.34	2.66751
649825.76	4188883.34	2.14208	649925.76	4188883.34	1.70570
650025.76	4188883.34	1.58878	650125.76	4188883.34	1.52628



650225.76	4188883.34	1.48880	650325.76	4188883.34	1.45326
650425.76	4188883.34	1.42603	650525.76	4188883.34	1.39194
650625.76	4188883.34	1.35019	650725.76	4188883.34	1.30397
650825.76	4188883.34	1.24814	651125.76	4188883.34	1.03364
650125.76	4188933.34	1.39686	650225.76	4188933.34	1.35626
650325.76	4188933.34	1.31613	650425.76	4188933.34	1.28130
650525.76	4188933.34	1.24997	650625.76	4188933.34	1.21102
650725.76	4188933.34	1.17070	650825.76	4188933.34	1.12868
651125.76	4188933.34	0.96516	650425.76	4188983.34	1.16447
650525.76	4188983.34	1.13391	650625.76	4188983.34	1.09920
650725.76	4188983.34	1.06122	650825.76	4188983.34	1.02473
651125.76	4188983.34	0.89968	650525.76	4189033.34	1.03653
650625.76	4189033.34	1.00645	650725.76	4189033.34	0.97150
650825.76	4189033.34	0.93700	651125.76	4189033.34	0.83664
650525.76	4189083.34	0.95427	650625.76	4189083.34	0.92696
650725.76	4189083.34	0.89644	650825.76	4189083.34	0.86376
651125.76	4189083.34	0.77687	650525.76	4189133.34	0.88475
650625.76	4189133.34	0.85767	650725.76	4189133.34	0.83168
650825.76	4189133.34	0.80199	651125.76	4189133.34	0.72181
650781.98	4189510.65	0.51618	650760.33	4189397.50	0.58478

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 102

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	2.82208	649629.66	4188294.84	2.61835
649810.15	4188312.48	3.19769	649364.10	4188360.20	2.12482
649327.80	4188355.01	2.01695	649380.70	4188758.52	2.21998
650495.81	4188841.51	1.57590	650597.47	4188832.17	1.57959
650536.27	4188878.85	1.43037	650577.76	4188877.81	1.41984
650602.66	4188860.18	1.47032	650610.95	4188880.93	1.39717
650638.10	4188858.53	1.46171	650664.10	4188331.03	4.66443
650668.72	4188350.83	4.58344	650677.96	4188379.86	4.41522
650699.74	4188414.84	4.08512	650758.47	4188658.36	2.32849
650765.73	4188678.82	2.19400	650773.65	4188706.54	2.03166
650778.27	4188726.34	1.92704	650805.33	4188805.53	1.56311
650806.65	4188824.01	1.49558	650811.27	4188843.81	1.42492
650814.57	4188862.29	1.36370	650846.24	4188924.98	1.17501
650850.86	4188951.38	1.11182	650854.82	4188976.46	1.05757
650698.00	4188307.32	4.31619	650692.60	4188291.80	4.37189
650724.82	4189245.80	0.72927	650726.07	4189273.37	0.70408
650856.27	4189006.30	1.00063	650857.23	4189022.60	0.97212
650859.15	4189041.29	0.94122	650859.15	4189058.54	0.91508
650860.58	4189076.28	0.88931	650861.54	4189094.49	0.86452

650857.71	4189113.19	0.84197	650847.16	4189118.94	0.83814
650848.12	4189134.76	0.81886	650850.04	4189155.37	0.79469
650851.48	4189171.66	0.77643	650853.87	4189184.12	0.76260
650856.75	4189199.46	0.74613	650857.71	4189213.36	0.73206
650860.58	4189226.30	0.71890	650862.50	4189242.60	0.70319
650865.38	4189258.42	0.68825	650867.77	4189275.19	0.67308
650868.73	4189291.49	0.65909	650872.09	4189309.23	0.64399
650874.00	4189325.04	0.63120	650875.92	4189340.38	0.61920
650878.80	4189355.24	0.60779	650881.19	4189373.45	0.59449
650884.55	4189390.71	0.58221	650888.86	4189407.01	0.57085
650889.82	4189427.14	0.55811	650891.74	4189443.43	0.54804
650895.09	4189461.17	0.53728	650898.45	4189475.55	0.52875
650898.45	4189489.93	0.52107	650902.28	4189504.31	0.51297
650709.41	4188344.56	4.17099	650722.45	4188284.03	4.08331
650745.73	4188280.30	3.87960	650735.49	4188223.50	3.92028
650721.52	4188167.62	3.93203	650525.76	4188133.34	5.72448
651125.76	4188133.34	1.97583	649125.76	4188183.34	1.34045
649225.76	4188183.34	1.47785	649325.76	4188183.34	1.63355
649425.76	4188183.34	1.80999	649525.76	4188183.34	2.00898
649625.76	4188183.34	2.21716	649725.76	4188183.34	2.42778
649825.76	4188183.34	2.87912	649925.76	4188183.34	4.40628

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 103

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	5.67463	650125.76	4188183.34	8.63712
650225.76	4188183.34	10.58110	650325.76	4188183.34	9.74825
650425.76	4188183.34	7.92247	650525.76	4188183.34	6.20154
650625.76	4188183.34	4.88698	650725.76	4188183.34	3.93239
650825.76	4188183.34	3.23336	651125.76	4188183.34	1.99304
649125.76	4188233.34	1.40588	649225.76	4188233.34	1.55729
649325.76	4188233.34	1.73104	649425.76	4188233.34	1.92909
649525.76	4188233.34	2.15118	649625.76	4188233.34	2.38072
649725.76	4188233.34	2.60531	649825.76	4188233.34	2.93557
649925.76	4188233.34	4.48434	650025.76	4188233.34	6.92770
650125.76	4188233.34	12.37576	650225.76	4188233.34	14.47734
650325.76	4188233.34	11.85194	650425.76	4188233.34	8.79631
650525.76	4188233.34	6.56035	650625.76	4188233.34	5.05077
650725.76	4188233.34	4.01524	650825.76	4188233.34	3.27816
651125.76	4188233.34	2.00017	649125.76	4188283.34	1.47659
649225.76	4188283.34	1.64204	649325.76	4188283.34	1.83368
649425.76	4188283.34	2.05515	649525.76	4188283.34	2.30658
649625.76	4188283.34	2.56361	649725.76	4188283.34	2.81226

649825.76	4188283.34	3.10235	649925.76	4188283.34	4.28712
650025.76	4188283.34	8.70612	650125.76	4188283.34	19.93694
650225.76	4188283.34	20.12733	650325.76	4188283.34	13.80171
650425.76	4188283.34	9.40266	650525.76	4188283.34	6.78050
650625.76	4188283.34	5.14103	650725.76	4188283.34	4.05325
650825.76	4188283.34	3.29254	651125.76	4188283.34	1.99393
649125.76	4188333.34	1.55573	649225.76	4188333.34	1.73936
649325.76	4188333.34	1.95315	649425.76	4188333.34	2.20108
649525.76	4188333.34	2.48281	649625.76	4188333.34	2.76916
649725.76	4188333.34	3.04438	649825.76	4188333.34	3.37888
649925.76	4188333.34	4.17131	650025.76	4188333.34	10.90203
650125.76	4188333.34	37.45106	650225.76	4188333.34	26.35938
650325.76	4188333.34	14.98552	650425.76	4188333.34	9.66232
650525.76	4188333.34	6.83643	650625.76	4188333.34	5.13821
650725.76	4188333.34	4.03256	650825.76	4188333.34	3.26735
651125.76	4188333.34	1.97314	649125.76	4188383.34	1.63814
649225.76	4188383.34	1.84582	649325.76	4188383.34	2.09223
649425.76	4188383.34	2.38400	649525.76	4188383.34	2.72173
649625.76	4188383.34	3.07012	649725.76	4188383.34	3.38923
649825.76	4188383.34	3.74362	649925.76	4188383.34	4.64787
650025.76	4188383.34	11.05347	650125.76	4188383.34	74.65690
650225.76	4188383.34	29.28091	650325.76	4188383.34	15.00915

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 104

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	9.48068	650525.76	4188383.34	6.68077
650625.76	4188383.34	5.02002	650725.76	4188383.34	3.94356
650825.76	4188383.34	3.19948	651125.76	4188383.34	1.93973
649125.76	4188433.34	1.71030	649225.76	4188433.34	1.94165
649325.76	4188433.34	2.22300	649425.76	4188433.34	2.56811
649525.76	4188433.34	2.99012	649625.76	4188433.34	3.47694
649725.76	4188433.34	4.02146	649825.76	4188433.34	4.73967
649925.76	4188433.34	6.19915	650025.76	4188433.34	4.92699
650125.76	4188433.34	76.70501	650225.76	4188433.34	25.67402
650325.76	4188433.34	13.54631	650425.76	4188433.34	8.77476
650525.76	4188433.34	6.29274	650625.76	4188433.34	4.78430
650725.76	4188433.34	3.78952	650825.76	4188433.34	3.09326
651125.76	4188433.34	1.89633	649125.76	4188483.34	1.75621
649225.76	4188483.34	2.00123	649325.76	4188483.34	2.30273
649425.76	4188483.34	2.67893	649525.76	4188483.34	3.15270
649625.76	4188483.34	3.73542	649725.76	4188483.34	4.47018
650425.76	4188483.34	7.54092	650525.76	4188483.34	5.67315

650625.76	4188483.34	4.43181	650725.76	4188483.34	3.57091
650825.76	4188483.34	2.94887	651125.76	4188483.34	1.84271
649125.76	4188533.34	1.76554	649225.76	4188533.34	2.01009
649325.76	4188533.34	2.31049	649425.76	4188533.34	2.68516
649525.76	4188533.34	3.15983	649625.76	4188533.34	3.76224
649725.76	4188533.34	4.58695	650425.76	4188533.34	5.95474
650525.76	4188533.34	4.85229	650625.76	4188533.34	3.96240
650725.76	4188533.34	3.28154	650825.76	4188533.34	2.75982
651125.76	4188533.34	1.77542	649125.76	4188583.34	1.74208
649225.76	4188583.34	1.97796	649325.76	4188583.34	2.26770
649425.76	4188583.34	2.63075	649525.76	4188583.34	3.09849
649625.76	4188583.34	3.72304	649725.76	4188583.34	4.64680
650425.76	4188583.34	4.47743	650525.76	4188583.34	3.98122
650625.76	4188583.34	3.42705	650725.76	4188583.34	2.93736
650825.76	4188583.34	2.52935	651125.76	4188583.34	1.69159
649125.76	4188633.34	1.70266	649225.76	4188633.34	1.93050
649325.76	4188633.34	2.21154	649425.76	4188633.34	2.56587
649525.76	4188633.34	3.02797	649625.76	4188633.34	3.66110
649725.76	4188633.34	4.59933	649825.76	4188633.34	6.15086
649925.76	4188633.34	6.87271	650025.76	4188633.34	3.80882
650125.76	4188633.34	2.82323	650225.76	4188633.34	2.91020
650325.76	4188633.34	3.24966	650425.76	4188633.34	3.38142
650525.76	4188633.34	3.22154	650625.76	4188633.34	2.91270

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 105

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	2.58301	650825.76	4188633.34	2.27958
651125.76	4188633.34	1.59279	649125.76	4188683.34	1.66228
649225.76	4188683.34	1.88330	649325.76	4188683.34	2.15498
649425.76	4188683.34	2.49633	649525.76	4188683.34	2.94058
649625.76	4188683.34	3.54902	649725.76	4188683.34	4.42813
649825.76	4188683.34	5.41048	649925.76	4188683.34	4.94235
650025.76	4188683.34	2.90065	650125.76	4188683.34	2.38446
650225.76	4188683.34	2.36883	650325.76	4188683.34	2.53427
650425.76	4188683.34	2.64916	650525.76	4188683.34	2.62023
650625.76	4188683.34	2.46808	650725.76	4188683.34	2.25775
650825.76	4188683.34	2.03803	651125.76	4188683.34	1.48550
649125.76	4188733.34	1.62330	649225.76	4188733.34	1.83478
649325.76	4188733.34	2.09269	649425.76	4188733.34	2.41467
649525.76	4188733.34	2.83038	649625.76	4188733.34	3.39823
649725.76	4188733.34	4.13790	649825.76	4188733.34	4.53349
649925.76	4188733.34	3.71704	650025.76	4188733.34	2.40058

650125.76	4188733.34	2.09864	650225.76	4188733.34	2.05119
650325.76	4188733.34	2.11570	650425.76	4188733.34	2.17520
650525.76	4188733.34	2.16746	650625.76	4188733.34	2.09726
650725.76	4188733.34	1.97292	650825.76	4188733.34	1.81964
651125.76	4188733.34	1.37799	649125.76	4188783.34	1.58145
649225.76	4188783.34	1.78071	649325.76	4188783.34	2.02229
649425.76	4188783.34	2.32150	649525.76	4188783.34	2.70726
649625.76	4188783.34	3.22123	649725.76	4188783.34	3.73973
649825.76	4188783.34	3.74662	649925.76	4188783.34	2.94286
650025.76	4188783.34	2.08433	650125.76	4188783.34	1.88852
650225.76	4188783.34	1.83289	650325.76	4188783.34	1.84098
650425.76	4188783.34	1.85449	650525.76	4188783.34	1.83933
650625.76	4188783.34	1.79691	650725.76	4188783.34	1.72526
650825.76	4188783.34	1.62456	651125.76	4188783.34	1.27656
649125.76	4188833.34	1.53505	649225.76	4188833.34	1.72147
649325.76	4188833.34	1.94573	649425.76	4188833.34	2.22286
649525.76	4188833.34	2.58110	649625.76	4188833.34	3.01023
649725.76	4188833.34	3.29397	649825.76	4188833.34	3.11060
649925.76	4188833.34	2.43138	650025.76	4188833.34	1.85883
650125.76	4188833.34	1.72230	650225.76	4188833.34	1.66322
650325.76	4188833.34	1.64066	650425.76	4188833.34	1.62201
650525.76	4188833.34	1.60051	650625.76	4188833.34	1.56303
650725.76	4188833.34	1.51435	650825.76	4188833.34	1.44940
651125.76	4188833.34	1.18348	649125.76	4188883.34	1.48547

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 106

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.65888	649325.76	4188883.34	1.86650
649425.76	4188883.34	2.12552	649525.76	4188883.34	2.44955
649625.76	4188883.34	2.76507	649725.76	4188883.34	2.86498
649825.76	4188883.34	2.61012	649925.76	4188883.34	2.06920
650025.76	4188883.34	1.67851	650125.76	4188883.34	1.57701
650225.76	4188883.34	1.51790	650325.76	4188883.34	1.48143
650425.76	4188883.34	1.44599	650525.76	4188883.34	1.41895
650625.76	4188883.34	1.38363	650725.76	4188883.34	1.34154
650825.76	4188883.34	1.29478	651125.76	4188883.34	1.09756
650125.76	4188933.34	1.44407	650225.76	4188933.34	1.38887
650325.76	4188933.34	1.34905	650425.76	4188933.34	1.30856
650525.76	4188933.34	1.27490	650625.76	4188933.34	1.24282
650725.76	4188933.34	1.20348	650825.76	4188933.34	1.16324
651125.76	4188933.34	1.01652	650425.76	4188983.34	1.19701
650525.76	4188983.34	1.15818	650625.76	4188983.34	1.12784

650725.76	4188983.34	1.09251	650825.76	4188983.34	1.05465
651125.76	4188983.34	0.93930	650525.76	4189033.34	1.06258
650625.76	4189033.34	1.03118	650725.76	4189033.34	1.00065
650825.76	4189033.34	0.96554	651125.76	4189033.34	0.86677
650525.76	4189083.34	0.98286	650625.76	4189083.34	0.94920
650725.76	4189083.34	0.92201	650825.76	4189083.34	0.89109
651125.76	4189083.34	0.80064	650525.76	4189133.34	0.91456
650625.76	4189133.34	0.87972	650725.76	4189133.34	0.85335
650825.76	4189133.34	0.82702	651125.76	4189133.34	0.74219
650781.98	4189510.65	0.53372	650760.33	4189397.50	0.60321

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 107

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	2.58022	649629.66	4188294.84	2.38373
649810.15	4188312.48	2.92843	649364.10	4188360.20	1.90677
649327.80	4188355.01	1.81434	649380.70	4188758.52	1.98114
650495.81	4188841.51	1.60421	650597.47	4188832.17	1.62190
650536.27	4188878.85	1.46279	650577.76	4188877.81	1.45594
650602.66	4188860.18	1.51079	650610.95	4188880.93	1.43658
650638.10	4188858.53	1.50563	650664.10	4188331.03	5.84096
650668.72	4188350.83	5.73793	650677.96	4188379.86	5.50943
650699.74	4188414.84	5.04341	650758.47	4188658.36	2.57906
650765.73	4188678.82	2.40917	650773.65	4188706.54	2.20626
650778.27	4188726.34	2.07674	650805.33	4188805.53	1.64392
650806.65	4188824.01	1.56549	650811.27	4188843.81	1.48600
650814.57	4188862.29	1.41828	650846.24	4188924.98	1.21776
650850.86	4188951.38	1.15182	650854.82	4188976.46	1.09577
650698.00	4188307.32	5.32928	650692.60	4188291.80	5.39640
650724.82	4189245.80	0.75604	650726.07	4189273.37	0.73076
650856.27	4189006.30	1.03721	650857.23	4189022.60	1.00784
650859.15	4189041.29	0.97588	650859.15	4189058.54	0.94868
650860.58	4189076.28	0.92169	650861.54	4189094.49	0.89555
650857.71	4189113.19	0.87137	650847.16	4189118.94	0.86671
650848.12	4189134.76	0.84606	650850.04	4189155.37	0.82019
650851.48	4189171.66	0.80068	650853.87	4189184.12	0.78598
650856.75	4189199.46	0.76852	650857.71	4189213.36	0.75363
650860.58	4189226.30	0.73980	650862.50	4189242.60	0.72337
650865.38	4189258.42	0.70784	650867.77	4189275.19	0.69219
650868.73	4189291.49	0.67788	650872.09	4189309.23	0.66250
650874.00	4189325.04	0.64959	650875.92	4189340.38	0.63753
650878.80	4189355.24	0.62605	650881.19	4189373.45	0.61279
650884.55	4189390.71	0.60050	650888.86	4189407.01	0.58909

650889.82	4189427.14	0.57649	650891.74	4189443.43	0.56646
650895.09	4189461.17	0.55565	650898.45	4189475.55	0.54703
650898.45	4189489.93	0.53936	650902.28	4189504.31	0.53110
650709.41	4188344.56	5.14703	650722.45	4188284.03	4.99063
650745.73	4188280.30	4.70955	650735.49	4188223.50	4.73072
650721.52	4188167.62	4.69702	650525.76	4188133.34	6.69904
651125.76	4188133.34	2.22985	649125.76	4188183.34	1.23317
649225.76	4188183.34	1.35579	649325.76	4188183.34	1.49491
649425.76	4188183.34	1.65248	649525.76	4188183.34	1.83112
649625.76	4188183.34	2.03177	649725.76	4188183.34	2.23767
649825.76	4188183.34	2.45692	649925.76	4188183.34	3.01502

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 108

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	4.68195	650125.76	4188183.34	5.79516
650225.76	4188183.34	8.99234	650325.76	4188183.34	10.40175
650425.76	4188183.34	9.39239	650525.76	4188183.34	7.59423
650625.76	4188183.34	5.95665	650725.76	4188183.34	4.71398
650825.76	4188183.34	3.80884	651125.76	4188183.34	2.25519
649125.76	4188233.34	1.28914	649225.76	4188233.34	1.42292
649325.76	4188233.34	1.57664	649425.76	4188233.34	1.75276
649525.76	4188233.34	1.95302	649625.76	4188233.34	2.17622
649725.76	4188233.34	2.40415	649825.76	4188233.34	2.62827
649925.76	4188233.34	3.03289	650025.76	4188233.34	4.92718
650125.76	4188233.34	7.17393	650225.76	4188233.34	12.87595
650325.76	4188233.34	13.99261	650425.76	4188233.34	11.25242
650525.76	4188233.34	8.36912	650625.76	4188233.34	6.28074
650725.76	4188233.34	4.86496	650825.76	4188233.34	3.88645
651125.76	4188233.34	2.26870	649125.76	4188283.34	1.34967
649225.76	4188283.34	1.49505	649325.76	4188283.34	1.66321
649425.76	4188283.34	1.85794	649525.76	4188283.34	2.08264
649625.76	4188283.34	2.33524	649725.76	4188283.34	2.58989
649825.76	4188283.34	2.83629	649925.76	4188283.34	3.15469
650025.76	4188283.34	4.80674	650125.76	4188283.34	9.26881
650225.76	4188283.34	20.45206	650325.76	4188283.34	18.88858
650425.76	4188283.34	12.91397	650525.76	4188283.34	8.90177
650625.76	4188283.34	6.48045	650725.76	4188283.34	4.94887
650825.76	4188283.34	3.92261	651125.76	4188283.34	2.26604
649125.76	4188333.34	1.41585	649225.76	4188333.34	1.57615
649325.76	4188333.34	1.76266	649425.76	4188333.34	1.97962
649525.76	4188333.34	2.23089	649625.76	4188333.34	2.51358
649725.76	4188333.34	2.79659	649825.76	4188333.34	3.07165

649925.76	4188333.34	3.42603	650025.76	4188333.34	4.49661
650125.76	4188333.34	12.39551	650225.76	4188333.34	36.60764
650325.76	4188333.34	23.86431	650425.76	4188333.34	13.89775
650525.76	4188333.34	9.13144	650625.76	4188333.34	6.53287
650725.76	4188333.34	4.94777	650825.76	4188333.34	3.90441
651125.76	4188333.34	2.24440	649125.76	4188383.34	1.48300
649225.76	4188383.34	1.66179	649325.76	4188383.34	1.87318
649425.76	4188383.34	2.12362	649525.76	4188383.34	2.41925
649625.76	4188383.34	2.75694	649725.76	4188383.34	3.09634
649825.76	4188383.34	3.40516	649925.76	4188383.34	3.78447
650025.76	4188383.34	4.89903	650125.76	4188383.34	14.64233
650225.76	4188383.34	64.38248	650325.76	4188383.34	26.02229

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 109

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	13.91346	650525.76	4188383.34	8.97610
650625.76	4188383.34	6.39564	650725.76	4188383.34	4.84115
650825.76	4188383.34	3.82283	651125.76	4188383.34	2.20511
649125.76	4188433.34	1.54162	649225.76	4188433.34	1.73806
649325.76	4188433.34	1.97480	649425.76	4188433.34	2.26271
649525.76	4188433.34	2.61552	649625.76	4188433.34	3.04357
649725.76	4188433.34	3.52859	649825.76	4188433.34	4.06859
649925.76	4188433.34	4.79235	650025.76	4188433.34	6.41802
650125.76	4188433.34	0.78053	650225.76	4188433.34	64.61434
650325.76	4188433.34	23.23015	650425.76	4188433.34	12.69445
650525.76	4188433.34	8.36299	650625.76	4188433.34	6.04987
650725.76	4188433.34	4.62706	650825.76	4188433.34	3.68099
651125.76	4188433.34	2.15145	649125.76	4188483.34	1.58064
649225.76	4188483.34	1.78779	649325.76	4188483.34	2.03984
649425.76	4188483.34	2.35053	649525.76	4188483.34	2.73888
649625.76	4188483.34	3.22721	649725.76	4188483.34	3.82390
650425.76	4188483.34	10.19323	650525.76	4188483.34	7.28672
650625.76	4188483.34	5.49668	650725.76	4188483.34	4.30696
650825.76	4188483.34	3.48000	651125.76	4188483.34	2.08353
649125.76	4188533.34	1.59180	649225.76	4188533.34	1.79946
649325.76	4188533.34	2.05177	649425.76	4188533.34	2.36240
649525.76	4188533.34	2.75084	649625.76	4188533.34	3.24356
649725.76	4188533.34	3.86659	650425.76	4188533.34	7.11180
650525.76	4188533.34	5.86903	650625.76	4188533.34	4.75419
650725.76	4188533.34	3.87792	650825.76	4188533.34	3.21322
651125.76	4188533.34	1.99724	649125.76	4188583.34	1.57555
649225.76	4188583.34	1.77645	649325.76	4188583.34	2.01998



649425.76	4188583.34	2.31980	649525.76	4188583.34	2.69665
649625.76	4188583.34	3.18411	649725.76	4188583.34	3.83647
650425.76	4188583.34	4.73547	650525.76	4188583.34	4.49150
650625.76	4188583.34	3.94489	650725.76	4188583.34	3.37971
650825.76	4188583.34	2.89197	651125.76	4188583.34	1.88955
649125.76	4188633.34	1.54281	649225.76	4188633.34	1.73630
649325.76	4188633.34	1.97152	649425.76	4188633.34	2.26243
649525.76	4188633.34	2.63070	649625.76	4188633.34	3.11399
649725.76	4188633.34	3.78049	649825.76	4188633.34	4.79233
649925.76	4188633.34	6.45349	650025.76	4188633.34	6.77631
650125.76	4188633.34	3.54184	650225.76	4188633.34	2.82644
650325.76	4188633.34	3.00875	650425.76	4188633.34	3.34758
650525.76	4188633.34	3.42732	650625.76	4188633.34	3.22020

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 110

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	2.89103	650825.76	4188633.34	2.55554
651125.76	4188633.34	1.76398	649125.76	4188683.34	1.50696
649225.76	4188683.34	1.69488	649325.76	4188683.34	1.92305
649425.76	4188683.34	2.20437	649525.76	4188683.34	2.55950
649625.76	4188683.34	3.02487	649725.76	4188683.34	3.66788
649825.76	4188683.34	4.60244	649925.76	4188683.34	5.54464
650025.76	4188683.34	4.75319	650125.76	4188683.34	2.77347
650225.76	4188683.34	2.37875	650325.76	4188683.34	2.41387
650425.76	4188683.34	2.59209	650525.76	4188683.34	2.68993
650625.76	4188683.34	2.63475	650725.76	4188683.34	2.46268
650825.76	4188683.34	2.24257	651125.76	4188683.34	1.63039
649125.76	4188733.34	1.47340	649225.76	4188733.34	1.65478
649325.76	4188733.34	1.87305	649425.76	4188733.34	2.14014
649525.76	4188733.34	2.47512	649625.76	4188733.34	2.91067
649725.76	4188733.34	3.51085	649825.76	4188733.34	4.26679
649925.76	4188733.34	4.55648	650025.76	4188733.34	3.54860
650125.76	4188733.34	2.33257	650225.76	4188733.34	2.09306
650325.76	4188733.34	2.07398	650425.76	4188733.34	2.14845
650525.76	4188733.34	2.20201	650625.76	4188733.34	2.18412
650725.76	4188733.34	2.10151	650825.76	4188733.34	1.96676
651125.76	4188733.34	1.49976	649125.76	4188783.34	1.43950
649225.76	4188783.34	1.61161	649325.76	4188783.34	1.81722
649425.76	4188783.34	2.06729	649525.76	4188783.34	2.37845
649625.76	4188783.34	2.78287	649725.76	4188783.34	3.31936
649825.76	4188783.34	3.81666	649925.76	4188783.34	3.72036
650025.76	4188783.34	2.81516	650125.76	4188783.34	2.04477

650225.76	4188783.34	1.88439	650325.76	4188783.34	1.84446
650425.76	4188783.34	1.85753	650525.76	4188783.34	1.87108
650625.76	4188783.34	1.85148	650725.76	4188783.34	1.80421
650825.76	4188783.34	1.72543	651125.76	4188783.34	1.37883
649125.76	4188833.34	1.40207	649225.76	4188833.34	1.56376
649325.76	4188833.34	1.75600	649425.76	4188833.34	1.98799
649525.76	4188833.34	2.27636	649625.76	4188833.34	2.65069
649725.76	4188833.34	3.08574	649825.76	4188833.34	3.33066
649925.76	4188833.34	3.06925	650025.76	4188833.34	2.33925
650125.76	4188833.34	1.83490	650225.76	4188833.34	1.71915
650325.76	4188833.34	1.66830	650425.76	4188833.34	1.64829
650525.76	4188833.34	1.63207	650625.76	4188833.34	1.60830
650725.76	4188833.34	1.56892	650825.76	4188833.34	1.51732
651125.76	4188833.34	1.26847	649125.76	4188883.34	1.36121

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 111

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.51262	649325.76	4188883.34	1.69128
649425.76	4188883.34	1.90612	649525.76	4188883.34	2.17575
649625.76	4188883.34	2.50991	649725.76	4188883.34	2.81601
649825.76	4188883.34	2.87598	649925.76	4188883.34	2.56868
650025.76	4188883.34	2.00427	650125.76	4188883.34	1.66406
650225.76	4188883.34	1.57461	650325.76	4188883.34	1.51993
650425.76	4188883.34	1.48500	650525.76	4188883.34	1.45111
650625.76	4188883.34	1.42423	650725.76	4188883.34	1.38716
650825.76	4188883.34	1.34432	651125.76	4188883.34	1.16618
650125.76	4188933.34	1.51391	650225.76	4188933.34	1.44230
650325.76	4188933.34	1.38983	650425.76	4188933.34	1.35073
650525.76	4188933.34	1.31021	650625.76	4188933.34	1.27844
650725.76	4188933.34	1.24491	650825.76	4188933.34	1.20494
651125.76	4188933.34	1.06999	650425.76	4188983.34	1.23745
650525.76	4188983.34	1.19687	650625.76	4188983.34	1.15989
650725.76	4188983.34	1.12937	650825.76	4188983.34	1.09292
651125.76	4188983.34	0.98034	650525.76	4189033.34	1.10212
650625.76	4189033.34	1.06254	650725.76	4189033.34	1.03232
650825.76	4189033.34	1.00068	651125.76	4189033.34	0.89925
650525.76	4189083.34	1.02047	650625.76	4189083.34	0.98164
650725.76	4189083.34	0.94965	650825.76	4189083.34	0.92213
651125.76	4189083.34	0.82830	650525.76	4189133.34	0.94884
650625.76	4189133.34	0.91288	650725.76	4189133.34	0.87922
650825.76	4189133.34	0.85355	651125.76	4189133.34	0.76757
650781.98	4189510.65	0.55274	650760.33	4189397.50	0.62632

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	2.33145	649629.66	4188294.84	2.14727
649810.15	4188312.48	2.68971	649364.10	4188360.20	1.71353
649327.80	4188355.01	1.63437	649380.70	4188758.52	1.76551
650495.81	4188841.51	1.62405	650597.47	4188832.17	1.63956
650536.27	4188878.85	1.49128	650577.76	4188877.81	1.48010
650602.66	4188860.18	1.53209	650610.95	4188880.93	1.46027
650638.10	4188858.53	1.53034	650664.10	4188331.03	7.71688
650668.72	4188350.83	7.57877	650677.96	4188379.86	7.24167
650699.74	4188414.84	6.52245	650758.47	4188658.36	2.81659
650765.73	4188678.82	2.60124	650773.65	4188706.54	2.34865
650778.27	4188726.34	2.19079	650805.33	4188805.53	1.69797
650806.65	4188824.01	1.61282	650811.27	4188843.81	1.52904
650814.57	4188862.29	1.45875	650846.24	4188924.98	1.25469
650850.86	4188951.38	1.18765	650854.82	4188976.46	1.13039
650698.00	4188307.32	6.89951	650692.60	4188291.80	6.98095
650724.82	4189245.80	0.78448	650726.07	4189273.37	0.75784
650856.27	4189006.30	1.06990	650857.23	4189022.60	1.03928
650859.15	4189041.29	1.00579	650859.15	4189058.54	0.97704
650860.58	4189076.28	0.94855	650861.54	4189094.49	0.92093
650857.71	4189113.19	0.89526	650847.16	4189118.94	0.89006
650848.12	4189134.76	0.86873	650850.04	4189155.37	0.84224
650851.48	4189171.66	0.82245	650853.87	4189184.12	0.80759
650856.75	4189199.46	0.79003	650857.71	4189213.36	0.77520
650860.58	4189226.30	0.76137	650862.50	4189242.60	0.74508
650865.38	4189258.42	0.72966	650867.77	4189275.19	0.71417
650868.73	4189291.49	0.70010	650872.09	4189309.23	0.68478
650874.00	4189325.04	0.67194	650875.92	4189340.38	0.65989
650878.80	4189355.24	0.64832	650881.19	4189373.45	0.63492
650884.55	4189390.71	0.62239	650888.86	4189407.01	0.61066
650889.82	4189427.14	0.59772	650891.74	4189443.43	0.58731
650895.09	4189461.17	0.57603	650898.45	4189475.55	0.56699
650898.45	4189489.93	0.55890	650902.28	4189504.31	0.55020
650709.41	4188344.56	6.65980	650722.45	4188284.03	6.36802
650745.73	4188280.30	5.95367	650735.49	4188223.50	5.91912
650721.52	4188167.62	5.76164	650525.76	4188133.34	7.64087
651125.76	4188133.34	2.56273	649125.76	4188183.34	1.13489
649225.76	4188183.34	1.24408	649325.76	4188183.34	1.36818
649425.76	4188183.34	1.50894	649525.76	4188183.34	1.66838
649625.76	4188183.34	1.84914	649725.76	4188183.34	2.05141

649825.76 4188183.34 2.25664 649925.76 4188183.34 2.48443  
 \*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 113

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	3.11760	650125.76	4188183.34	4.85032
650225.76	4188183.34	5.96009	650325.76	4188183.34	9.28453
650425.76	4188183.34	10.37975	650525.76	4188183.34	9.23458
650625.76	4188183.34	7.42544	650725.76	4188183.34	5.82249
650825.76	4188183.34	4.61584	651125.76	4188183.34	2.60065
649125.76	4188233.34	1.18294	649225.76	4188233.34	1.30097
649325.76	4188233.34	1.43652	649425.76	4188233.34	1.59225
649525.76	4188233.34	1.77059	649625.76	4188233.34	1.97318
649725.76	4188233.34	2.19781	649825.76	4188233.34	2.42559
649925.76	4188233.34	2.65109	650025.76	4188233.34	3.11387
650125.76	4188233.34	5.21634	650225.76	4188233.34	7.47919
650325.76	4188233.34	13.29043	650425.76	4188233.34	13.82116
650525.76	4188233.34	10.95538	650625.76	4188233.34	8.13726
650725.76	4188233.34	6.12254	650825.76	4188233.34	4.75712
651125.76	4188233.34	2.62346	649125.76	4188283.34	1.23476
649225.76	4188283.34	1.36251	649325.76	4188283.34	1.50988
649425.76	4188283.34	1.68038	649525.76	4188283.34	1.87781
649625.76	4188283.34	2.10546	649725.76	4188283.34	2.35942
649825.76	4188283.34	2.61349	649925.76	4188283.34	2.86016
650025.76	4188283.34	3.20505	650125.76	4188283.34	5.19626
650225.76	4188283.34	9.91145	650325.76	4188283.34	20.93865
650425.76	4188283.34	18.31004	650525.76	4188283.34	12.44249
650625.76	4188283.34	8.61960	650725.76	4188283.34	6.30590
650825.76	4188283.34	4.83465	651125.76	4188283.34	2.62585
649125.76	4188333.34	1.28994	649225.76	4188333.34	1.42995
649325.76	4188333.34	1.59255	649425.76	4188333.34	1.78175
649525.76	4188333.34	2.00180	649625.76	4188333.34	2.25645
649725.76	4188333.34	2.54051	649825.76	4188333.34	2.82245
649925.76	4188333.34	3.09921	650025.76	4188333.34	3.47194
650125.76	4188333.34	4.79517	650225.76	4188333.34	14.00931
650325.76	4188333.34	36.35457	650425.76	4188333.34	22.58400
650525.76	4188333.34	13.29288	650625.76	4188333.34	8.82109
650725.76	4188333.34	6.35027	650825.76	4188333.34	4.83097
651125.76	4188333.34	2.60283	649125.76	4188383.34	1.34441
649225.76	4188383.34	1.49863	649325.76	4188383.34	1.68023
649425.76	4188383.34	1.89503	649525.76	4188383.34	2.14949
649625.76	4188383.34	2.44958	649725.76	4188383.34	2.78949
649825.76	4188383.34	3.12663	649925.76	4188383.34	3.43431

650025.76 4188383.34 3.83641 650125.76 4188383.34 5.12340  
650225.76 4188383.34 18.84334 650325.76 4188383.34 59.04697

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 114

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	24.24501	650525.76	4188383.34	13.26710
650625.76	4188383.34	8.66477	650725.76	4188383.34	6.21596
650825.76	4188383.34	4.72701	651125.76	4188383.34	2.55456
649125.76	4188433.34	1.39145	649225.76	4188433.34	1.55867
649325.76	4188433.34	1.75852	649425.76	4188433.34	1.99957
649525.76	4188433.34	2.29298	649625.76	4188433.34	2.65265
649725.76	4188433.34	3.08721	649825.76	4188433.34	3.57625
649925.76	4188433.34	4.12590	650025.76	4188433.34	4.88083
650125.76	4188433.34	6.73193	650225.76	4188433.34	0.12472
650325.76	4188433.34	57.01863	650425.76	4188433.34	21.67163
650525.76	4188433.34	12.13163	650625.76	4188433.34	8.08645
650725.76	4188433.34	5.88674	650825.76	4188433.34	4.52161
651125.76	4188433.34	2.48491	649125.76	4188483.34	1.42336
649225.76	4188483.34	1.59855	649325.76	4188483.34	1.80946
649425.76	4188483.34	2.06639	649525.76	4188483.34	2.38349
649625.76	4188483.34	2.78033	649725.76	4188483.34	3.27876
650425.76	4188483.34	14.66833	650525.76	4188483.34	9.84639
650625.76	4188483.34	7.08191	650725.76	4188483.34	5.36365
650825.76	4188483.34	4.21618	651125.76	4188483.34	2.39419
649125.76	4188533.34	1.43393	649225.76	4188533.34	1.60977
649325.76	4188533.34	1.82116	649425.76	4188533.34	2.07832
649525.76	4188533.34	2.39535	649625.76	4188533.34	2.79238
649725.76	4188533.34	3.29643	650425.76	4188533.34	7.68387
650525.76	4188533.34	7.00087	650625.76	4188533.34	5.75481
650725.76	4188533.34	4.66126	650825.76	4188533.34	3.80709
651125.76	4188533.34	2.27730	649125.76	4188583.34	1.42231
649225.76	4188583.34	1.59295	649325.76	4188583.34	1.79742
649425.76	4188583.34	2.04560	649525.76	4188583.34	2.35164
649625.76	4188583.34	2.73725	649725.76	4188583.34	3.23768
650425.76	4188583.34	4.35534	650525.76	4188583.34	4.73737
650625.76	4188583.34	4.44686	650725.76	4188583.34	3.88971
650825.76	4188583.34	3.33000	651125.76	4188583.34	2.13193
649125.76	4188633.34	1.39542	649225.76	4188633.34	1.55956
649325.76	4188633.34	1.75652	649425.76	4188633.34	1.99631
649525.76	4188633.34	2.29341	649625.76	4188633.34	2.67059
649725.76	4188633.34	3.16776	649825.76	4188633.34	3.85653
649925.76	4188633.34	4.91916	650025.76	4188633.34	6.61577

650125.76 4188633.34 6.55728 650225.76 4188633.34 3.38537  
650325.76 4188633.34 2.81762 650425.76 4188633.34 3.04415  
650525.76 4188633.34 3.36904 650625.76 4188633.34 3.41791

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 115

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	3.19172	650825.76	4188633.34	2.85870
651125.76	4188633.34	1.96611	649125.76	4188683.34	1.36391
649225.76	4188683.34	1.52323	649325.76	4188683.34	1.71452
649425.76	4188683.34	1.94706	649525.76	4188683.34	2.23429
649625.76	4188683.34	2.59792	649725.76	4188683.34	3.07647
649825.76	4188683.34	3.74148	649925.76	4188683.34	4.70694
650025.76	4188683.34	5.57570	650125.76	4188683.34	4.54884
650225.76	4188683.34	2.69606	650325.76	4188683.34	2.36708
650425.76	4188683.34	2.42863	650525.76	4188683.34	2.60702
650625.76	4188683.34	2.69138	650725.76	4188683.34	2.62237
650825.76	4188683.34	2.44306	651125.76	4188683.34	1.79549
649125.76	4188733.34	1.33439	649225.76	4188733.34	1.48916
649325.76	4188733.34	1.67364	649425.76	4188733.34	1.89592
649525.76	4188733.34	2.16846	649625.76	4188733.34	2.51122
649725.76	4188733.34	2.95891	649825.76	4188733.34	3.57854
649925.76	4188733.34	4.33079	650025.76	4188733.34	4.52197
650125.76	4188733.34	3.39860	650225.76	4188733.34	2.28928
650325.76	4188733.34	2.08251	650425.76	4188733.34	2.07937
650525.76	4188733.34	2.15619	650625.76	4188733.34	2.20328
650725.76	4188733.34	2.17905	650825.76	4188733.34	2.09065
651125.76	4188733.34	1.63400	649125.76	4188783.34	1.30634
649225.76	4188783.34	1.45452	649325.76	4188783.34	1.62943
649425.76	4188783.34	1.83870	649525.76	4188783.34	2.09370
649625.76	4188783.34	2.41189	649725.76	4188783.34	2.82768
649825.76	4188783.34	3.37447	649925.76	4188783.34	3.84179
650025.76	4188783.34	3.66580	650125.76	4188783.34	2.71098
650225.76	4188783.34	2.01790	650325.76	4188783.34	1.87585
650425.76	4188783.34	1.84510	650525.76	4188783.34	1.85931
650625.76	4188783.34	1.87069	650725.76	4188783.34	1.84817
650825.76	4188783.34	1.79820	651125.76	4188783.34	1.48720
649125.76	4188833.34	1.27637	649225.76	4188833.34	1.41620
649325.76	4188833.34	1.58046	649425.76	4188833.34	1.77600
649525.76	4188833.34	2.01240	649625.76	4188833.34	2.30750
649725.76	4188833.34	2.69092	649825.76	4188833.34	3.12287
649925.76	4188833.34	3.33068	650025.76	4188833.34	3.01512
650125.76	4188833.34	2.26725	650225.76	4188833.34	1.81705

650325.76 4188833.34 1.71187 650425.76 4188833.34 1.66598  
650525.76 4188833.34 1.64640 650625.76 4188833.34 1.63059  
650725.76 4188833.34 1.60510 650825.76 4188833.34 1.56465  
651125.76 4188833.34 1.35344 649125.76 4188833.34 1.24311

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 116

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.37448	649325.76	4188883.34	1.52820
649425.76	4188883.34	1.70979	649525.76	4188883.34	1.92883
649625.76	4188883.34	2.20478	649725.76	4188883.34	2.54285
649825.76	4188883.34	2.83556	649925.76	4188883.34	2.86296
650025.76	4188883.34	2.52187	650125.76	4188883.34	1.95415
650225.76	4188883.34	1.65152	650325.76	4188883.34	1.56804
650425.76	4188883.34	1.51619	650525.76	4188883.34	1.48163
650625.76	4188883.34	1.44856	650725.76	4188883.34	1.42123
650825.76	4188883.34	1.38327	651125.76	4188883.34	1.22981
650125.76	4188933.34	1.71349	650225.76	4188933.34	1.50470
650325.76	4188933.34	1.43637	650425.76	4188933.34	1.38591
650525.76	4188933.34	1.34705	650625.76	4188933.34	1.30669
650725.76	4188933.34	1.27566	650825.76	4188933.34	1.24128
651125.76	4188933.34	1.11630	650425.76	4188983.34	1.27168
650525.76	4188983.34	1.23386	650625.76	4188983.34	1.19290
650725.76	4188983.34	1.15702	650825.76	4188983.34	1.12620
651125.76	4188983.34	1.01522	650525.76	4189033.34	1.13678
650625.76	4189033.34	1.09823	650725.76	4189033.34	1.05932
650825.76	4189033.34	1.02959	651125.76	4189033.34	0.92827
650525.76	4189083.34	1.05215	650625.76	4189083.34	1.01693
650725.76	4189083.34	0.97815	650825.76	4189083.34	0.94709
651125.76	4189083.34	0.85503	650525.76	4189133.34	0.97734
650625.76	4189133.34	0.94565	650725.76	4189133.34	0.90938
650825.76	4189133.34	0.87657	651125.76	4189133.34	0.79338
650781.98	4189510.65	0.57006	650760.33	4189397.50	0.64780

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 117

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	2.10710	649629.66	4188294.84	1.94530
649810.15	4188312.48	2.45714	649364.10	4188360.20	1.55583
649327.80	4188355.01	1.48727	649380.70	4188758.52	1.59755
650495.81	4188841.51	1.64768	650597.47	4188832.17	1.65756
650536.27	4188878.85	1.52287	650577.76	4188877.81	1.51266
650602.66	4188860.18	1.55954	650610.95	4188880.93	1.49194
650638.10	4188858.53	1.55438	650664.10	4188331.03	10.48901
650668.72	4188350.83	10.32287	650677.96	4188379.86	9.82729
650699.74	4188414.84	8.67690	650758.47	4188658.36	2.99540
650765.73	4188678.82	2.73531	650773.65	4188706.54	2.43922
650778.27	4188726.34	2.26036	650805.33	4188805.53	1.73872
650806.65	4188824.01	1.65157	650811.27	4188843.81	1.56680
650814.57	4188862.29	1.49569	650846.24	4188924.98	1.28951
650850.86	4188951.38	1.22052	650854.82	4188976.46	1.16125
650698.00	4188307.32	9.12109	650692.60	4188291.80	9.19934
650724.82	4189245.80	0.80996	650726.07	4189273.37	0.78188
650856.27	4189006.30	1.09832	650857.23	4189022.60	1.06658
650859.15	4189041.29	1.03208	650859.15	4189058.54	1.00266
650860.58	4189076.28	0.97375	650861.54	4189094.49	0.94597
650857.71	4189113.19	0.92069	650847.16	4189118.94	0.91638
650848.12	4189134.76	0.89536	650850.04	4189155.37	0.86920
650851.48	4189171.66	0.84962	650853.87	4189184.12	0.83478
650856.75	4189199.46	0.81718	650857.71	4189213.36	0.80236
650860.58	4189226.30	0.78836	650862.50	4189242.60	0.77186
650865.38	4189258.42	0.75611	650867.77	4189275.19	0.74020
650868.73	4189291.49	0.72568	650872.09	4189309.23	0.70974
650874.00	4189325.04	0.69632	650875.92	4189340.38	0.68367
650878.80	4189355.24	0.67150	650881.19	4189373.45	0.65735
650884.55	4189390.71	0.64411	650888.86	4189407.01	0.63173
650889.82	4189427.14	0.61793	650891.74	4189443.43	0.60687
650895.09	4189461.17	0.59492	650898.45	4189475.55	0.58537
650898.45	4189489.93	0.57674	650902.28	4189504.31	0.56757
650709.41	4188344.56	8.83023	650722.45	4188284.03	8.25500
650745.73	4188280.30	7.63421	650735.49	4188223.50	7.43177
650721.52	4188167.62	6.96468	650525.76	4188133.34	7.97381
651125.76	4188133.34	2.94295	649125.76	4188183.34	1.05248
649225.76	4188183.34	1.15036	649325.76	4188183.34	1.26159
649425.76	4188183.34	1.38795	649525.76	4188183.34	1.53120
649625.76	4188183.34	1.69346	649725.76	4188183.34	1.87741
649825.76	4188183.34	2.08148	649925.76	4188183.34	2.28506

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,



\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	2.53562	650125.76	4188183.34	3.32359
650225.76	4188183.34	5.08007	650325.76	4188183.34	6.30768
650425.76	4188183.34	9.63071	650525.76	4188183.34	10.23518
650625.76	4188183.34	8.91761	650725.76	4188183.34	7.12610
650825.76	4188183.34	5.59459	651125.76	4188183.34	3.00033
649125.76	4188233.34	1.09445	649225.76	4188233.34	1.19962
649325.76	4188233.34	1.32006	649425.76	4188233.34	1.45839
649525.76	4188233.34	1.61724	649625.76	4188233.34	1.79891
649725.76	4188233.34	2.00486	649825.76	4188233.34	2.23081
649925.76	4188233.34	2.45755	650025.76	4188233.34	2.68826
650125.76	4188233.34	3.28819	650225.76	4188233.34	5.68017
650325.76	4188233.34	8.14662	650425.76	4188233.34	13.69080
650525.76	4188233.34	13.37648	650625.76	4188233.34	10.42152
650725.76	4188233.34	7.74666	650825.76	4188233.34	5.86080
651125.76	4188233.34	3.03759	649125.76	4188283.34	1.13933
649225.76	4188283.34	1.25277	649325.76	4188283.34	1.38318
649425.76	4188283.34	1.53370	649525.76	4188283.34	1.70788
649625.76	4188283.34	1.90951	649725.76	4188283.34	2.14158
649825.76	4188283.34	2.39631	649925.76	4188283.34	2.64823
650025.76	4188283.34	2.89644	650125.76	4188283.34	3.31187
650225.76	4188283.34	5.96754	650325.76	4188283.34	11.40167
650425.76	4188283.34	21.11918	650525.76	4188283.34	17.20038
650625.76	4188283.34	11.66316	650725.76	4188283.34	8.16100
650825.76	4188283.34	6.02235	651125.76	4188283.34	3.04890
649125.76	4188333.34	1.18612	649225.76	4188333.34	1.30969
649325.76	4188333.34	1.45274	649425.76	4188333.34	1.61889
649525.76	4188333.34	1.81220	649625.76	4188333.34	2.03691
649725.76	4188333.34	2.29645	649825.76	4188333.34	2.58116
649925.76	4188333.34	2.86044	650025.76	4188333.34	3.14144
650125.76	4188333.34	3.55089	650225.76	4188333.34	5.55020
650325.76	4188333.34	18.22570	650425.76	4188333.34	34.57687
650525.76	4188333.34	20.52131	650625.76	4188333.34	12.34554
650725.76	4188333.34	8.32870	650825.76	4188333.34	6.05835
651125.76	4188333.34	3.02655	649125.76	4188383.34	1.23149
649225.76	4188383.34	1.36626	649325.76	4188383.34	1.52417
649425.76	4188383.34	1.71019	649525.76	4188383.34	1.93021
649625.76	4188383.34	2.19066	649725.76	4188383.34	2.49685
649825.76	4188383.34	2.83747	649925.76	4188383.34	3.16766
650025.76	4188383.34	3.47375	650125.76	4188383.34	3.92824
650225.76	4188383.34	5.57887	650325.76	4188383.34	35.80559

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\* 15:03:05

PAGE 119

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	50.25674	650525.76	4188383.34	21.64013
650625.76	4188383.34	12.28850	650725.76	4188383.34	8.18150
650825.76	4188383.34	5.93335	651125.76	4188383.34	2.96829
649125.76	4188433.34	1.27059	649225.76	4188433.34	1.41540
649325.76	4188433.34	1.58710	649425.76	4188433.34	1.79253
649525.76	4188433.34	2.04058	649625.76	4188433.34	2.34276
649725.76	4188433.34	2.71300	649825.76	4188433.34	3.15558
649925.76	4188433.34	3.64659	650025.76	4188433.34	4.20646
650125.76	4188433.34	5.00813	650225.76	4188433.34	7.30564
650325.76	4188433.34	11.61320	650425.76	4188433.34	47.21088
650525.76	4188433.34	19.48930	650625.76	4188433.34	11.30317
650725.76	4188433.34	7.66586	650825.76	4188433.34	5.63405
651125.76	4188433.34	2.87827	649125.76	4188483.34	1.29781
649225.76	4188483.34	1.44891	649325.76	4188483.34	1.62915
649425.76	4188483.34	1.84653	649525.76	4188483.34	2.11185
649625.76	4188483.34	2.44001	649725.76	4188483.34	2.85142
650425.76	4188483.34	20.15663	650525.76	4188483.34	13.87077
650625.76	4188483.34	9.35359	650725.76	4188483.34	6.77848
650825.76	4188483.34	5.16170	651125.76	4188483.34	2.75724
649125.76	4188533.34	1.30823	649225.76	4188533.34	1.46017
649325.76	4188533.34	1.64123	649425.76	4188533.34	1.85932
649525.76	4188533.34	2.12519	649625.76	4188533.34	2.45375
649725.76	4188533.34	2.86626	650425.76	4188533.34	6.45903
650525.76	4188533.34	7.80664	650625.76	4188533.34	6.86246
650725.76	4188533.34	5.59417	650825.76	4188533.34	4.52471
651125.76	4188533.34	2.59922	649125.76	4188583.34	1.30034
649225.76	4188583.34	1.44832	649325.76	4188583.34	1.62402
649425.76	4188583.34	1.83497	649525.76	4188583.34	2.09160
649625.76	4188583.34	2.40896	649725.76	4188583.34	2.81035
650425.76	4188583.34	3.76695	650525.76	4188583.34	4.51781
650625.76	4188583.34	4.76716	650725.76	4188583.34	4.39258
650825.76	4188583.34	3.81286	651125.76	4188583.34	2.40386
649125.76	4188633.34	1.27835	649225.76	4188633.34	1.42069
649325.76	4188633.34	1.58971	649425.76	4188633.34	1.79294
649525.76	4188633.34	2.04099	649625.76	4188633.34	2.34933
649725.76	4188633.34	2.74275	649825.76	4188633.34	3.26529
649925.76	4188633.34	3.99565	650025.76	4188633.34	5.15621
650125.76	4188633.34	6.88935	650225.76	4188633.34	6.13398
650325.76	4188633.34	3.21769	650425.76	4188633.34	2.83547
650525.76	4188633.34	3.12722	650625.76	4188633.34	3.42377

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	3.41627	650825.76	4188633.34	3.15577
651125.76	4188633.34	2.18642	649125.76	4188683.34	1.25056
649225.76	4188683.34	1.38844	649325.76	4188683.34	1.55249
649425.76	4188683.34	1.74985	649525.76	4188683.34	1.99035
649625.76	4188683.34	2.28840	649725.76	4188683.34	2.66778
649825.76	4188683.34	3.17099	649925.76	4188683.34	3.87686
650025.76	4188683.34	4.89559	650125.76	4188683.34	5.61497
650225.76	4188683.34	4.20427	650325.76	4188683.34	2.61129
650425.76	4188683.34	2.36490	650525.76	4188683.34	2.46751
650625.76	4188683.34	2.64420	650725.76	4188683.34	2.70484
650825.76	4188683.34	2.61078	651125.76	4188683.34	1.97023
649125.76	4188733.34	1.22380	649225.76	4188733.34	1.35823
649325.76	4188733.34	1.51749	649425.76	4188733.34	1.70762
649525.76	4188733.34	1.93730	649625.76	4188733.34	2.21996
649725.76	4188733.34	2.57724	649825.76	4188733.34	3.04792
649925.76	4188733.34	3.70289	650025.76	4188733.34	4.44125
650125.76	4188733.34	4.45729	650225.76	4188733.34	3.16084
650325.76	4188733.34	2.24139	650425.76	4188733.34	2.07487
650525.76	4188733.34	2.09645	650625.76	4188733.34	2.17737
650725.76	4188733.34	2.21371	650825.76	4188733.34	2.17818
651125.76	4188733.34	1.77137	649125.76	4188783.34	1.19942
649225.76	4188783.34	1.32932	649325.76	4188783.34	1.48159
649425.76	4188783.34	1.66170	649525.76	4188783.34	1.87777
649625.76	4188783.34	2.14199	649725.76	4188783.34	2.47347
649825.76	4188783.34	2.91051	649925.76	4188783.34	3.47394
650025.76	4188783.34	3.88396	650125.76	4188783.34	3.57301
650225.76	4188783.34	2.55212	650325.76	4188783.34	1.98783
650425.76	4188783.34	1.86809	650525.76	4188783.34	1.85179
650625.76	4188783.34	1.86871	650725.76	4188783.34	1.87607
650825.76	4188783.34	1.84884	651125.76	4188783.34	1.59278
649125.76	4188833.34	1.17480	649225.76	4188833.34	1.29823
649325.76	4188833.34	1.44182	649425.76	4188833.34	1.61087
649525.76	4188833.34	1.81257	649625.76	4188833.34	2.05730
649725.76	4188833.34	2.36511	649825.76	4188833.34	2.76467
649925.76	4188833.34	3.18891	650025.76	4188833.34	3.33198
650125.76	4188833.34	2.92598	650225.76	4188833.34	2.16069
650325.76	4188833.34	1.79696	650425.76	4188833.34	1.70438
650525.76	4188833.34	1.66665	650625.76	4188833.34	1.64792
650725.76	4188833.34	1.63284	650825.76	4188833.34	1.60443
651125.76	4188833.34	1.43102	649125.76	4188883.34	1.14758

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.26379	649325.76	4188883.34	1.39864
649425.76	4188883.34	1.55669	649525.76	4188883.34	1.74379
649625.76	4188883.34	1.97081	649725.76	4188883.34	2.25829
649825.76	4188883.34	2.60247	649925.76	4188883.34	2.87087
650025.76	4188883.34	2.84372	650125.76	4188883.34	2.44657
650225.76	4188883.34	1.88201	650325.76	4188883.34	1.63758
650425.76	4188883.34	1.56078	650525.76	4188883.34	1.51364
650625.76	4188883.34	1.47939	650725.76	4188883.34	1.44833
650825.76	4188883.34	1.41974	651125.76	4188883.34	1.28488
650125.76	4188933.34	2.08126	650225.76	4188933.34	1.66431
650325.76	4188933.34	1.49469	650425.76	4188933.34	1.42963
650525.76	4188933.34	1.38234	650625.76	4188933.34	1.34361
650725.76	4188933.34	1.30410	650825.76	4188933.34	1.27394
651125.76	4188933.34	1.15665	650425.76	4188983.34	1.31185
650525.76	4188983.34	1.26812	650625.76	4188983.34	1.23018
650725.76	4188983.34	1.18878	650825.76	4188983.34	1.15485
651125.76	4188983.34	1.04814	650525.76	4189033.34	1.16814
650625.76	4189033.34	1.13312	650725.76	4189033.34	1.09367
650825.76	4189033.34	1.05627	651125.76	4189033.34	0.95825
650525.76	4189083.34	1.07993	650625.76	4189083.34	1.04871
650725.76	4189083.34	1.01258	650825.76	4189083.34	0.97422
651125.76	4189083.34	0.88357	650525.76	4189133.34	1.00166
650625.76	4189133.34	0.97432	650725.76	4189133.34	0.94171
650825.76	4189133.34	0.90505	651125.76	4189133.34	0.82015
650781.98	4189510.65	0.58526	650760.33	4189397.50	0.66691

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\* 15:03:05

PAGE 122

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	1.92895	649629.66	4188294.84	1.78577
649810.15	4188312.48	2.25036	649364.10	4188360.20	1.43306
649327.80	4188355.01	1.37250	649380.70	4188758.52	1.46978
650495.81	4188841.51	1.68766	650597.47	4188832.17	1.67694
650536.27	4188878.85	1.55746	650577.76	4188877.81	1.54242
650602.66	4188860.18	1.58609	650610.95	4188880.93	1.52176
650638.10	4188858.53	1.58166	650664.10	4188331.03	14.49813

650668.72	4188350.83	14.38001	650677.96	4188379.86	13.69206
650699.74	4188414.84	11.80457	650758.47	4188658.36	3.06556
650765.73	4188678.82	2.78090	650773.65	4188706.54	2.46832
650778.27	4188726.34	2.28532	650805.33	4188805.53	1.76712
650806.65	4188824.01	1.67972	650811.27	4188843.81	1.59491
650814.57	4188862.29	1.52344	650846.24	4188924.98	1.31689
650850.86	4188951.38	1.24709	650854.82	4188976.46	1.18743
650698.00	4188307.32	12.11707	650692.60	4188291.80	12.11339
650724.82	4189245.80	0.83071	650726.07	4189273.37	0.80115
650856.27	4189006.30	1.12469	650857.23	4189022.60	1.09329
650859.15	4189041.29	1.05924	650859.15	4189058.54	1.03038
650860.58	4189076.28	1.00189	650861.54	4189094.49	0.97445
650857.71	4189113.19	0.94964	650847.16	4189118.94	0.94586
650848.12	4189134.76	0.92456	650850.04	4189155.37	0.89782
650851.48	4189171.66	0.87765	650853.87	4189184.12	0.86231
650856.75	4189199.46	0.84404	650857.71	4189213.36	0.82856
650860.58	4189226.30	0.81396	650862.50	4189242.60	0.79668
650865.38	4189258.42	0.78017	650867.77	4189275.19	0.76347
650868.73	4189291.49	0.74815	650872.09	4189309.23	0.73143
650874.00	4189325.04	0.71731	650875.92	4189340.38	0.70400
650878.80	4189355.24	0.69125	650881.19	4189373.45	0.67638
650884.55	4189390.71	0.66252	650888.86	4189407.01	0.64959
650889.82	4189427.14	0.63510	650891.74	4189443.43	0.62351
650895.09	4189461.17	0.61103	650898.45	4189475.55	0.60107
650898.45	4189489.93	0.59200	650902.28	4189504.31	0.58245
650709.41	4188344.56	11.85734	650722.45	4188284.03	10.67381
650745.73	4188280.30	9.76222	650735.49	4188223.50	9.12870
650721.52	4188167.62	8.07098	650525.76	4188133.34	7.55399
651125.76	4188133.34	3.34898	649125.76	4188183.34	0.98664
649225.76	4188183.34	1.07552	649325.76	4188183.34	1.17647
649425.76	4188183.34	1.29115	649525.76	4188183.34	1.42131
649625.76	4188183.34	1.56876	649725.76	4188183.34	1.73585
649825.76	4188183.34	1.92516	649925.76	4188183.34	2.13072

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 123

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	2.33331	650125.76	4188183.34	2.65009
650225.76	4188183.34	3.74559	650325.76	4188183.34	5.31237
650425.76	4188183.34	7.09659	650525.76	4188183.34	9.97894
650625.76	4188183.34	9.92359	650725.76	4188183.34	8.40095
650825.76	4188183.34	6.66463	651125.76	4188183.34	3.43465
649125.76	4188233.34	1.02405	649225.76	4188233.34	1.11917

649325.76	4188233.34	1.22783	649425.76	4188233.34	1.35238
649525.76	4188233.34	1.49541	649625.76	4188233.34	1.65947
649725.76	4188233.34	1.84665	649825.76	4188233.34	2.05809
649925.76	4188233.34	2.28489	650025.76	4188233.34	2.50896
650125.76	4188233.34	2.76527	650225.76	4188233.34	3.70297
650325.76	4188233.34	6.24823	650425.76	4188233.34	9.64544
650525.76	4188233.34	13.94204	650625.76	4188233.34	12.57332
650725.76	4188233.34	9.60309	650825.76	4188233.34	7.16219
651125.76	4188233.34	3.49290	649125.76	4188283.34	1.06365
649225.76	4188283.34	1.16596	649325.76	4188283.34	1.28325
649425.76	4188283.34	1.41822	649525.76	4188283.34	1.57411
649625.76	4188283.34	1.75454	649725.76	4188283.34	1.96319
649825.76	4188283.34	2.20225	649925.76	4188283.34	2.45649
650025.76	4188283.34	2.70452	650125.76	4188283.34	2.96083
650225.76	4188283.34	3.60265	650325.76	4188283.34	7.24326
650425.76	4188283.34	14.68210	650525.76	4188283.34	20.62613
650625.76	4188283.34	15.47299	650725.76	4188283.34	10.53398
650825.76	4188283.34	7.48784	651125.76	4188283.34	3.51800
649125.76	4188333.34	1.10429	649225.76	4188333.34	1.21517
649325.76	4188333.34	1.34312	649425.76	4188333.34	1.49135
649525.76	4188333.34	1.66355	649625.76	4188333.34	1.86385
649725.76	4188333.34	2.09640	649825.76	4188333.34	2.36391
649925.76	4188333.34	2.64808	650025.76	4188333.34	2.92300
650125.76	4188333.34	3.21787	650225.76	4188333.34	3.72472
650325.76	4188333.34	7.59946	650425.76	4188333.34	27.01966
650525.76	4188333.34	30.62642	650625.76	4188333.34	17.68050
650725.76	4188333.34	11.01675	650825.76	4188333.34	7.61258
651125.76	4188333.34	3.49942	649125.76	4188383.34	1.14329
649225.76	4188383.34	1.26333	649325.76	4188383.34	1.40333
649425.76	4188383.34	1.56753	649525.76	4188383.34	1.76108
649625.76	4188383.34	1.98995	649725.76	4188383.34	2.26040
649825.76	4188383.34	2.57628	649925.76	4188383.34	2.91537
650025.76	4188383.34	3.23272	650125.76	4188383.34	3.54647
650225.76	4188383.34	4.14002	650325.76	4188383.34	6.86832

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 124

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	66.25991	650525.76	4188383.34	38.95290
650625.76	4188383.34	18.26156	650725.76	4188383.34	10.92997
650825.76	4188383.34	7.47888	651125.76	4188383.34	3.43115
649125.76	4188433.34	1.17696	649225.76	4188433.34	1.30513
649325.76	4188433.34	1.45611	649425.76	4188433.34	1.63549

649525.76	4188433.34	1.85051	649625.76	4188433.34	2.11059
649725.76	4188433.34	2.42775	649825.76	4188433.34	2.81545
649925.76	4188433.34	3.26904	650025.76	4188433.34	3.76294
650125.76	4188433.34	4.34459	650225.76	4188433.34	5.26683
650325.76	4188433.34	8.43747	650425.76	4188433.34	112.59204
650525.76	4188433.34	35.88043	650625.76	4188433.34	16.61982
650725.76	4188433.34	10.13555	650825.76	4188433.34	7.04719
651125.76	4188433.34	3.31682	649125.76	4188483.34	1.20099
649225.76	4188483.34	1.33440	649325.76	4188483.34	1.49237
649425.76	4188483.34	1.68134	649525.76	4188483.34	1.90989
649625.76	4188483.34	2.18975	649725.76	4188483.34	2.53710
650425.76	4188483.34	11.81387	650525.76	4188483.34	19.47691
650625.76	4188483.34	12.59134	650725.76	4188483.34	8.60737
650825.76	4188483.34	6.31597	651125.76	4188483.34	3.15786
649125.76	4188533.34	1.21135	649225.76	4188533.34	1.34575
649325.76	4188533.34	1.50479	649425.76	4188533.34	1.69486
649525.76	4188533.34	1.92451	649625.76	4188533.34	2.20548
649725.76	4188533.34	2.55413	650425.76	4188533.34	5.98036
650525.76	4188533.34	7.32015	650625.76	4188533.34	7.82041
650725.76	4188533.34	6.59360	650825.76	4188533.34	5.32718
651125.76	4188533.34	2.94765	649125.76	4188583.34	1.20622
649225.76	4188583.34	1.33759	649325.76	4188583.34	1.49248
649425.76	4188583.34	1.67690	649525.76	4188583.34	1.89903
649625.76	4188583.34	2.17033	649725.76	4188583.34	2.50749
650425.76	4188583.34	3.99421	650525.76	4188583.34	3.99063
650625.76	4188583.34	4.73906	650725.76	4188583.34	4.76624
650825.76	4188583.34	4.28215	651125.76	4188583.34	2.68974
649125.76	4188633.34	1.18813	649225.76	4188633.34	1.31459
649325.76	4188633.34	1.46355	649425.76	4188633.34	1.64097
649525.76	4188633.34	1.85507	649625.76	4188633.34	2.11751
649725.76	4188633.34	2.44559	649825.76	4188633.34	2.86783
649925.76	4188633.34	3.43608	650025.76	4188633.34	4.24652
650125.76	4188633.34	5.59624	650225.76	4188633.34	7.21996
650325.76	4188633.34	5.19778	650425.76	4188633.34	3.04561
650525.76	4188633.34	2.90279	650625.76	4188633.34	3.26134

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 125

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	3.49049	650825.76	4188633.34	3.39314
651125.76	4188633.34	2.41010	649125.76	4188683.34	1.16346
649225.76	4188683.34	1.28571	649325.76	4188683.34	1.43004
649425.76	4188683.34	1.60225	649525.76	4188683.34	1.81012

649625.76	4188683.34	2.06446	649725.76	4188683.34	2.38157
649825.76	4188683.34	2.78917	649925.76	4188683.34	3.33727
650025.76	4188683.34	4.11864	650125.76	4188683.34	5.20405
650225.76	4188683.34	5.55121	650325.76	4188683.34	3.60995
650425.76	4188683.34	2.52002	650525.76	4188683.34	2.38381
650625.76	4188683.34	2.53625	650725.76	4188683.34	2.69730
650825.76	4188683.34	2.71483	651125.76	4188683.34	2.14107
649125.76	4188733.34	1.13872	649225.76	4188733.34	1.25803
649325.76	4188733.34	1.39865	649425.76	4188733.34	1.56560
649525.76	4188733.34	1.76551	649625.76	4188733.34	2.00808
649725.76	4188733.34	2.30853	649825.76	4188733.34	2.69180
649925.76	4188733.34	3.20457	650025.76	4188733.34	3.91621
650125.76	4188733.34	4.58575	650225.76	4188733.34	4.26672
650325.76	4188733.34	2.79585	650425.76	4188733.34	2.18816
650525.76	4188733.34	2.07494	650625.76	4188733.34	2.12733
650725.76	4188733.34	2.20821	650825.76	4188733.34	2.22549
651125.76	4188733.34	1.89938	649125.76	4188783.34	1.11653
649225.76	4188783.34	1.23261	649325.76	4188783.34	1.36820
649425.76	4188783.34	1.52751	649525.76	4188783.34	1.71658
649625.76	4188783.34	1.94452	649725.76	4188783.34	2.22489
649825.76	4188783.34	2.58031	649925.76	4188783.34	3.05489
650025.76	4188783.34	3.63249	650125.76	4188783.34	3.91232
650225.76	4188783.34	3.37193	650325.76	4188783.34	2.32390
650425.76	4188783.34	1.95304	650525.76	4188783.34	1.86159
650625.76	4188783.34	1.86345	650725.76	4188783.34	1.88356
650825.76	4188783.34	1.88202	651125.76	4188783.34	1.68490
649125.76	4188833.34	1.09537	649225.76	4188833.34	1.20658
649325.76	4188833.34	1.33518	649425.76	4188833.34	1.48522
649525.76	4188833.34	1.66252	649625.76	4188833.34	1.87491
649725.76	4188833.34	2.13438	649825.76	4188833.34	2.46498
649925.76	4188833.34	2.88881	650025.76	4188833.34	3.28286
650125.76	4188833.34	3.30190	650225.76	4188833.34	2.75277
650325.76	4188833.34	2.01396	650425.76	4188833.34	1.77258
650525.76	4188833.34	1.69513	650625.76	4188833.34	1.66818
650725.76	4188833.34	1.65093	650825.76	4188833.34	1.63490
651125.76	4188833.34	1.49444	649125.76	4188883.34	1.07260

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 126

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	1.17770	649325.76	4188883.34	1.29870
649425.76	4188883.34	1.43951	649525.76	4188883.34	1.60499
649625.76	4188883.34	1.80171	649725.76	4188883.34	2.04300



649825.76	4188883.34	2.34990	649925.76	4188883.34	2.69734
650025.76	4188883.34	2.91235	650125.76	4188883.34	2.79012
650225.76	4188883.34	2.30832	650325.76	4188883.34	1.78547
650425.76	4188883.34	1.61971	650525.76	4188883.34	1.55043
650625.76	4188883.34	1.50996	650725.76	4188883.34	1.47547
650825.76	4188883.34	1.44765	651125.76	4188883.34	1.32930
650125.76	4188933.34	2.37846	650225.76	4188933.34	1.97267
650325.76	4188933.34	1.59977	650425.76	4188933.34	1.48116
650525.76	4188933.34	1.41948	650625.76	4188933.34	1.37647
650725.76	4188933.34	1.33722	650825.76	4188933.34	1.30041
651125.76	4188933.34	1.19147	650425.76	4188983.34	1.35568
650525.76	4188983.34	1.30257	650625.76	4188983.34	1.26200
650725.76	4188983.34	1.22342	650825.76	4188983.34	1.18243
651125.76	4188983.34	1.07917	650525.76	4189033.34	1.19935
650625.76	4189033.34	1.16259	650725.76	4189033.34	1.12654
650825.76	4189033.34	1.08602	651125.76	4189033.34	0.98736
650525.76	4189083.34	1.10837	650625.76	4189083.34	1.07504
650725.76	4189083.34	1.04252	650825.76	4189083.34	1.00492
651125.76	4189083.34	0.91039	650525.76	4189133.34	1.02779
650625.76	4189133.34	0.99730	650725.76	4189133.34	0.96870
650825.76	4189133.34	0.93467	651125.76	4189133.34	0.84378
650781.98	4189510.65	0.59616	650760.33	4189397.50	0.68154

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 127

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	3.29685	649629.66	4188294.84	2.77611
649810.15	4188312.48	4.50843	649364.10	4188360.20	2.03018
649327.80	4188355.01	1.94325	649380.70	4188758.52	3.37649
650495.81	4188841.51	2.57880	650597.47	4188832.17	2.34589
650536.27	4188878.85	2.22768	650577.76	4188877.81	2.14454
650602.66	4188860.18	2.18113	650610.95	4188880.93	2.05808
650638.10	4188858.53	2.10534	650664.10	4188331.03	3.01897
650668.72	4188350.83	3.01893	650677.96	4188379.86	2.99874
650699.74	4188414.84	2.90778	650758.47	4188658.36	2.42510
650765.73	4188678.82	2.35610	650773.65	4188706.54	2.26625
650778.27	4188726.34	2.20265	650805.33	4188805.53	1.90725
650806.65	4188824.01	1.84941	650811.27	4188843.81	1.78053
650814.57	4188862.29	1.71940	650846.24	4188924.98	1.49591
650850.86	4188951.38	1.42470	650854.82	4188976.46	1.36155
650698.00	4188307.32	2.81928	650692.60	4188291.80	2.82355
650724.82	4189245.80	0.90169	650726.07	4189273.37	0.86260
650856.27	4189006.30	1.29431	650857.23	4189022.60	1.25896

650859.15	4189041.29	1.21890	650859.15	4189058.54	1.18444
650860.58	4189076.28	1.14873	650861.54	4189094.49	1.11333
650857.71	4189113.19	1.08065	650847.16	4189118.94	1.07586
650848.12	4189134.76	1.04596	650850.04	4189155.37	1.00793
650851.48	4189171.66	0.97898	650853.87	4189184.12	0.95704
650856.75	4189199.46	0.93096	650857.71	4189213.36	0.90877
650860.58	4189226.30	0.88819	650862.50	4189242.60	0.86384
650865.38	4189258.42	0.84098	650867.77	4189275.19	0.81810
650868.73	4189291.49	0.79733	650872.09	4189309.23	0.77528
650874.00	4189325.04	0.75692	650875.92	4189340.38	0.73993
650878.80	4189355.24	0.72397	650881.19	4189373.45	0.70565
650884.55	4189390.71	0.68891	650888.86	4189407.01	0.67357
650889.82	4189427.14	0.65661	650891.74	4189443.43	0.64327
650895.09	4189461.17	0.62907	650898.45	4189475.55	0.61786
650898.45	4189489.93	0.60777	650902.28	4189504.31	0.59716
650709.41	4188344.56	2.80724	650722.45	4188284.03	2.67981
650745.73	4188280.30	2.57843	650735.49	4188223.50	2.54109
650721.52	4188167.62	2.49138	650525.76	4188133.34	3.08804
651125.76	4188133.34	1.48058	649125.76	4188183.34	1.31598
649225.76	4188183.34	1.42870	649325.76	4188183.34	1.54756
649425.76	4188183.34	1.71108	649525.76	4188183.34	2.00781
649625.76	4188183.34	2.55348	649725.76	4188183.34	3.11390
649825.76	4188183.34	3.23226	649925.76	4188183.34	3.71713

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 128

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	4.46524	650125.76	4188183.34	4.68707
650225.76	4188183.34	4.54973	650325.76	4188183.34	4.24034
650425.76	4188183.34	3.79610	650525.76	4188183.34	3.32663
650625.76	4188183.34	2.88942	650725.76	4188183.34	2.50735
650825.76	4188183.34	2.18434	651125.76	4188183.34	1.50264
649125.76	4188233.34	1.38615	649225.76	4188233.34	1.51735
649325.76	4188233.34	1.65296	649425.76	4188233.34	1.81099
649525.76	4188233.34	2.08361	649625.76	4188233.34	2.65805
649725.76	4188233.34	3.43000	649825.76	4188233.34	3.65845
649925.76	4188233.34	4.36390	650025.76	4188233.34	5.35829
650125.76	4188233.34	5.55602	650225.76	4188233.34	5.31185
650325.76	4188233.34	4.78816	650425.76	4188233.34	4.15637
650525.76	4188233.34	3.55224	650625.76	4188233.34	3.02802
650725.76	4188233.34	2.59391	650825.76	4188233.34	2.24018
651125.76	4188233.34	1.52145	649125.76	4188283.34	1.46027
649225.76	4188283.34	1.60792	649325.76	4188283.34	1.76688

649425.76	4188283.34	1.93324	649525.76	4188283.34	2.17050
649625.76	4188283.34	2.73041	649725.76	4188283.34	3.75466
649825.76	4188283.34	4.18641	649925.76	4188283.34	5.25905
650025.76	4188283.34	6.59611	650125.76	4188283.34	6.72627
650225.76	4188283.34	6.21912	650325.76	4188283.34	5.37005
650425.76	4188283.34	4.50148	650525.76	4188283.34	3.75024
650625.76	4188283.34	3.14389	650725.76	4188283.34	2.66481
650825.76	4188283.34	2.28569	651125.76	4188283.34	1.53720
649125.76	4188333.34	1.54300	649225.76	4188333.34	1.70438
649325.76	4188333.34	1.88549	649425.76	4188333.34	2.07437
649525.76	4188333.34	2.28351	649625.76	4188333.34	2.77286
649725.76	4188333.34	4.04563	649825.76	4188333.34	4.86559
649925.76	4188333.34	6.58875	650025.76	4188333.34	8.39564
650125.76	4188333.34	8.29421	650225.76	4188333.34	7.24282
650325.76	4188333.34	5.94155	650425.76	4188333.34	4.80164
650525.76	4188333.34	3.91123	650625.76	4188333.34	3.23576
650725.76	4188333.34	2.72061	650825.76	4188333.34	2.32151
651125.76	4188333.34	1.54914	649125.76	4188383.34	1.63476
649225.76	4188383.34	1.81254	649325.76	4188383.34	2.01313
649425.76	4188383.34	2.22565	649525.76	4188383.34	2.43545
649625.76	4188383.34	2.81291	649725.76	4188383.34	4.22469
649825.76	4188383.34	5.77722	649925.76	4188383.34	8.74924
650025.76	4188383.34	11.15773	650125.76	4188383.34	10.29942
650225.76	4188383.34	8.29698	650325.76	4188383.34	6.43567

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 129

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	5.03629	650525.76	4188383.34	4.03261
650625.76	4188383.34	3.30391	650725.76	4188383.34	2.76134
650825.76	4188383.34	2.34698	651125.76	4188383.34	1.55551
649125.76	4188433.34	1.73086	649225.76	4188433.34	1.93074
649325.76	4188433.34	2.15596	649425.76	4188433.34	2.39001
649525.76	4188433.34	2.61885	649625.76	4188433.34	2.90701
649725.76	4188433.34	4.19173	649825.76	4188433.34	7.01937
649925.76	4188433.34	12.67887	650025.76	4188433.34	15.52786
650125.76	4188433.34	12.60390	650225.76	4188433.34	9.21259
650325.76	4188433.34	6.79953	650425.76	4188433.34	5.19871
650525.76	4188433.34	4.11302	650625.76	4188433.34	3.34627
650725.76	4188433.34	2.78414	650825.76	4188433.34	2.35886
651125.76	4188433.34	1.55427	649125.76	4188483.34	1.83356
649225.76	4188483.34	2.05614	649325.76	4188483.34	2.31043
649425.76	4188483.34	2.57338	649525.76	4188483.34	2.82801

649625.76	4188483.34	3.11109	649725.76	4188483.34	3.99581
650425.76	4188483.34	5.28091	650525.76	4188483.34	4.14441
650625.76	4188483.34	3.35539	650725.76	4188483.34	2.78279
650825.76	4188483.34	2.35245	651125.76	4188483.34	1.54436
649125.76	4188533.34	1.95467	649225.76	4188533.34	2.20547
649325.76	4188533.34	2.49186	649425.76	4188533.34	2.78558
649525.76	4188533.34	3.06445	649625.76	4188533.34	3.39329
649725.76	4188533.34	4.07966	650425.76	4188533.34	5.26023
650525.76	4188533.34	4.11182	650625.76	4188533.34	3.32210
650725.76	4188533.34	2.75218	650825.76	4188533.34	2.32535
651125.76	4188533.34	1.52654	649125.76	4188583.34	2.09133
649225.76	4188583.34	2.38797	649325.76	4188583.34	2.73616
649425.76	4188583.34	3.10638	649525.76	4188583.34	3.45454
649625.76	4188583.34	3.81582	649725.76	4188583.34	4.60058
650425.76	4188583.34	5.11524	650525.76	4188583.34	4.00721
650625.76	4188583.34	3.24462	650725.76	4188583.34	2.69335
650825.76	4188583.34	2.27965	651125.76	4188583.34	1.50272
649125.76	4188633.34	2.21182	649225.76	4188633.34	2.55785
649325.76	4188633.34	2.98531	649425.76	4188633.34	3.49038
649525.76	4188633.34	4.07234	649625.76	4188633.34	4.86475
649725.76	4188633.34	6.47703	649825.76	4188633.34	8.70309
649925.76	4188633.34	73.59652	650025.76	4188633.34	26.12823
650125.76	4188633.34	13.76962	650225.76	4188633.34	8.90269
650325.76	4188633.34	6.37980	650425.76	4188633.34	4.84610
650525.76	4188633.34	3.83482	650625.76	4188633.34	3.12759

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 130

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	2.61025	650825.76	4188633.34	2.21850
651125.76	4188633.34	1.47426	649125.76	4188683.34	2.27678
649225.76	4188683.34	2.64638	649325.76	4188683.34	3.11240
649425.76	4188683.34	3.69041	649525.76	4188683.34	4.41822
649625.76	4188683.34	5.58990	649725.76	4188683.34	8.97257
649825.76	4188683.34	25.78333	649925.76	4188683.34	10.38835
650025.76	4188683.34	13.88968	650125.76	4188683.34	10.23642
650225.76	4188683.34	7.47491	650325.76	4188683.34	5.67574
650425.76	4188683.34	4.45144	650525.76	4188683.34	3.59296
650625.76	4188683.34	2.96942	650725.76	4188683.34	2.50153
650825.76	4188683.34	2.14074	651125.76	4188683.34	1.44046
649125.76	4188733.34	2.27296	649225.76	4188733.34	2.63718
649325.76	4188733.34	3.09877	649425.76	4188733.34	3.68974
649525.76	4188733.34	4.49764	649625.76	4188733.34	6.03710

649725.76	4188733.34	10.37503	649825.76	4188733.34	11.02081
649925.76	4188733.34	4.96414	650025.76	4188733.34	6.19012
650125.76	4188733.34	6.58388	650225.76	4188733.34	5.75864
650325.76	4188733.34	4.78006	650425.76	4188733.34	3.93877
650525.76	4188733.34	3.27751	650625.76	4188733.34	2.76397
650725.76	4188733.34	2.36149	650825.76	4188733.34	2.04165
651125.76	4188733.34	1.39898	649125.76	4188783.34	2.22641
649225.76	4188783.34	2.57936	649325.76	4188783.34	3.03406
649425.76	4188783.34	3.64344	649525.76	4188783.34	4.53269
649625.76	4188783.34	6.19395	649725.76	4188783.34	8.86965
649825.76	4188783.34	5.81713	649925.76	4188783.34	3.46889
650025.76	4188783.34	3.69489	650125.76	4188783.34	4.25578
650225.76	4188783.34	4.27115	650325.76	4188783.34	3.87817
650425.76	4188783.34	3.37665	650525.76	4188783.34	2.91324
650625.76	4188783.34	2.51891	650725.76	4188783.34	2.19112
650825.76	4188783.34	1.91974	651125.76	4188783.34	1.34767
649125.76	4188833.34	2.17095	649225.76	4188833.34	2.51505
649325.76	4188833.34	2.96220	649425.76	4188833.34	3.57243
649525.76	4188833.34	4.46357	649625.76	4188833.34	5.88530
649725.76	4188833.34	6.57543	649825.76	4188833.34	3.83966
649925.76	4188833.34	2.75447	650025.76	4188833.34	2.75739
650125.76	4188833.34	3.05721	650225.76	4188833.34	3.22031
650325.76	4188833.34	3.12021	650425.76	4188833.34	2.85462
650525.76	4188833.34	2.54975	650625.76	4188833.34	2.26053
650725.76	4188833.34	2.00381	650825.76	4188833.34	1.78149
651125.76	4188833.34	1.28647	649125.76	4188883.34	2.11498

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 131

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	2.44526	649325.76	4188883.34	2.87283
649425.76	4188883.34	3.45448	649525.76	4188883.34	4.28688
649625.76	4188883.34	5.19977	649725.76	4188883.34	4.82731
649825.76	4188883.34	2.91144	649925.76	4188883.34	2.34438
650025.76	4188883.34	2.28985	650125.76	4188883.34	2.42604
650225.76	4188883.34	2.54087	650325.76	4188883.34	2.53382
650425.76	4188883.34	2.41088	650525.76	4188883.34	2.22237
650625.76	4188883.34	2.01597	650725.76	4188883.34	1.81822
650825.76	4188883.34	1.63893	651125.76	4188883.34	1.21798
650125.76	4188933.34	2.05070	650225.76	4188933.34	2.10467
650325.76	4188933.34	2.10186	650425.76	4188933.34	2.04515
650525.76	4188933.34	1.93737	650625.76	4188933.34	1.79670
650725.76	4188933.34	1.64694	650825.76	4188933.34	1.50298

651125.76	4188933.34	1.14646	650425.76	4188983.34	1.75404
650525.76	4188983.34	1.69129	650625.76	4188983.34	1.60093
650725.76	4188983.34	1.49222	650825.76	4188983.34	1.37857
651125.76	4188983.34	1.07617	650525.76	4189033.34	1.48475
650625.76	4189033.34	1.42597	650725.76	4189033.34	1.35089
650825.76	4189033.34	1.26479	651125.76	4189033.34	1.01005
650525.76	4189083.34	1.31788	650625.76	4189083.34	1.27346
650725.76	4189083.34	1.22126	650825.76	4189083.34	1.15882
651125.76	4189083.34	0.94902	650525.76	4189133.34	1.18519
650625.76	4189133.34	1.14545	650725.76	4189133.34	1.10507
650825.76	4189133.34	1.05968	651125.76	4189133.34	0.89230
650781.98	4189510.65	0.61782	650760.33	4189397.50	0.71535

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 132

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	2.48336	649629.66	4188294.84	2.23975
649810.15	4188312.48	3.85588	649364.10	4188360.20	1.84968
649327.80	4188355.01	1.77034	649380.70	4188758.52	2.89109
650495.81	4188841.51	2.83172	650597.47	4188832.17	2.61565
650536.27	4188878.85	2.41139	650577.76	4188877.81	2.33740
650602.66	4188860.18	2.40218	650610.95	4188880.93	2.24829
650638.10	4188858.53	2.32514	650664.10	4188331.03	3.56019
650668.72	4188350.83	3.56858	650677.96	4188379.86	3.55246
650699.74	4188414.84	3.44308	650758.47	4188658.36	2.82828
650765.73	4188678.82	2.73566	650773.65	4188706.54	2.61443
650778.27	4188726.34	2.52838	650805.33	4188805.53	2.13903
650806.65	4188824.01	2.06349	650811.27	4188843.81	1.97578
650814.57	4188862.29	1.89876	650846.24	4188924.98	1.62847
650850.86	4188951.38	1.54282	650854.82	4188976.46	1.46716
650698.00	4188307.32	3.29652	650692.60	4188291.80	3.29476
650724.82	4189245.80	0.93221	650726.07	4189273.37	0.89216
650856.27	4189006.30	1.38605	650857.23	4189022.60	1.34342
650859.15	4189041.29	1.29531	650859.15	4189058.54	1.25366
650860.58	4189076.28	1.21102	650861.54	4189094.49	1.16901
650857.71	4189113.19	1.12986	650847.16	4189118.94	1.12256
650848.12	4189134.76	1.08838	650850.04	4189155.37	1.04571
650851.48	4189171.66	1.01380	650853.87	4189184.12	0.99000
650856.75	4189199.46	0.96203	650857.71	4189213.36	0.93843
650860.58	4189226.30	0.91681	650862.50	4189242.60	0.89143
650865.38	4189258.42	0.86781	650867.77	4189275.19	0.84432
650868.73	4189291.49	0.82314	650872.09	4189309.23	0.80067
650874.00	4189325.04	0.78202	650875.92	4189340.38	0.76476

650878.80	4189355.24	0.74849	650881.19	4189373.45	0.72980
650884.55	4189390.71	0.71262	650888.86	4189407.01	0.69681
650889.82	4189427.14	0.67924	650891.74	4189443.43	0.66532
650895.09	4189461.17	0.65042	650898.45	4189475.55	0.63859
650898.45	4189489.93	0.62783	650902.28	4189504.31	0.61655
650709.41	4188344.56	3.29471	650722.45	4188284.03	3.11252
650745.73	4188280.30	2.98554	650735.49	4188223.50	2.91470
650721.52	4188167.62	2.82161	650525.76	4188133.34	3.41242
651125.76	4188133.34	1.64117	649125.76	4188183.34	1.21704
649225.76	4188183.34	1.32653	649325.76	4188183.34	1.43944
649425.76	4188183.34	1.56004	649525.76	4188183.34	1.73164
649625.76	4188183.34	2.04742	649725.76	4188183.34	2.61564
649825.76	4188183.34	3.14194	649925.76	4188183.34	3.24606

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 133

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	3.79442	650125.76	4188183.34	4.51381
650225.76	4188183.34	4.68182	650325.76	4188183.34	4.52862
650425.76	4188183.34	4.20225	650525.76	4188183.34	3.75157
650625.76	4188183.34	3.28344	650725.76	4188183.34	2.85082
650825.76	4188183.34	2.47438	651125.76	4188183.34	1.67109
649125.76	4188233.34	1.27593	649225.76	4188233.34	1.39820
649325.76	4188233.34	1.53002	649425.76	4188233.34	1.66614
649525.76	4188233.34	1.82967	649625.76	4188233.34	2.12139
649725.76	4188233.34	2.73259	649825.76	4188233.34	3.47863
649925.76	4188233.34	3.67923	650025.76	4188233.34	4.47319
650125.76	4188233.34	5.41308	650225.76	4188233.34	5.54566
650325.76	4188233.34	5.27279	650425.76	4188233.34	4.73012
650525.76	4188233.34	4.09691	650625.76	4188233.34	3.49895
650725.76	4188233.34	2.98325	650825.76	4188233.34	2.55731
651125.76	4188233.34	1.69623	649125.76	4188283.34	1.34102
649225.76	4188283.34	1.47352	649325.76	4188283.34	1.62258
649425.76	4188283.34	1.78216	649525.76	4188283.34	1.95029
649625.76	4188283.34	2.20396	649725.76	4188283.34	2.81323
649825.76	4188283.34	3.83727	649925.76	4188283.34	4.21864
650025.76	4188283.34	5.41980	650125.76	4188283.34	6.65338
650225.76	4188283.34	6.70133	650325.76	4188283.34	6.14751
650425.76	4188283.34	5.28554	650525.76	4188283.34	4.42456
650625.76	4188283.34	3.68690	650725.76	4188283.34	3.09365
650825.76	4188283.34	2.62517	651125.76	4188283.34	1.71711
649125.76	4188333.34	1.41398	649225.76	4188333.34	1.55735
649325.76	4188333.34	1.72070	649425.76	4188333.34	1.90335

649525.76	4188333.34	2.09202	649625.76	4188333.34	2.31043
649725.76	4188333.34	2.85498	649825.76	4188333.34	4.18113
649925.76	4188333.34	4.91839	650025.76	4188333.34	6.83588
650125.76	4188333.34	8.44777	650225.76	4188333.34	8.22544
650325.76	4188333.34	7.12081	650425.76	4188333.34	5.82403
650525.76	4188333.34	4.70701	650625.76	4188333.34	3.83916
650725.76	4188333.34	3.18107	650825.76	4188333.34	2.67855
651125.76	4188333.34	1.73338	649125.76	4188383.34	1.49179
649225.76	4188383.34	1.65061	649325.76	4188383.34	1.83048
649425.76	4188383.34	2.03311	649525.76	4188383.34	2.24531
649625.76	4188383.34	2.45690	649725.76	4188383.34	2.88204
649825.76	4188383.34	4.43175	649925.76	4188383.34	5.87029
650025.76	4188383.34	9.14861	650125.76	4188383.34	11.17747
650225.76	4188383.34	10.12996	650325.76	4188383.34	8.10512

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 134

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650425.76	4188383.34	6.28348	650525.76	4188383.34	4.92663
650625.76	4188383.34	3.95373	650725.76	4188383.34	3.24583
650825.76	4188383.34	2.71745	651125.76	4188383.34	1.74333
649125.76	4188433.34	1.57164	649225.76	4188433.34	1.74863
649325.76	4188433.34	1.95096	649425.76	4188433.34	2.17817
649525.76	4188433.34	2.41203	649625.76	4188433.34	2.64054
649725.76	4188433.34	2.95409	649825.76	4188433.34	4.45529
649925.76	4188433.34	7.20228	650025.76	4188433.34	13.35153
650125.76	4188433.34	15.39359	650225.76	4188433.34	12.25518
650325.76	4188433.34	8.94192	650425.76	4188433.34	6.61884
650525.76	4188433.34	5.07806	650625.76	4188433.34	4.02927
650725.76	4188433.34	3.28577	650825.76	4188433.34	2.73895
651125.76	4188433.34	1.74435	649125.76	4188483.34	1.65821
649225.76	4188483.34	1.85322	649325.76	4188483.34	2.07883
649425.76	4188483.34	2.33546	649525.76	4188483.34	2.59814
649625.76	4188483.34	2.85228	649725.76	4188483.34	3.14578
650425.76	4188483.34	6.81226	650525.76	4188483.34	5.15333
650625.76	4188483.34	4.05773	650725.76	4188483.34	3.29355
650825.76	4188483.34	2.73695	651125.76	4188483.34	1.73457
649125.76	4188533.34	1.75791	649225.76	4188533.34	1.97679
649325.76	4188533.34	2.23107	649425.76	4188533.34	2.52001
649525.76	4188533.34	2.81273	649625.76	4188533.34	3.09103
649725.76	4188533.34	3.43375	650425.76	4188533.34	6.83309
650525.76	4188533.34	5.13060	650625.76	4188533.34	4.02478
650725.76	4188533.34	3.26043	650825.76	4188533.34	2.70666



651125.76	4188533.34	1.71431	649125.76	4188583.34	1.86417
649225.76	4188583.34	2.11717	649325.76	4188583.34	2.41870
649425.76	4188583.34	2.77101	649525.76	4188583.34	3.14075
649625.76	4188583.34	3.48622	649725.76	4188583.34	3.85747
650425.76	4188583.34	6.63452	650525.76	4188583.34	4.99015
650625.76	4188583.34	3.92321	650725.76	4188583.34	3.18502
650825.76	4188583.34	2.64926	651125.76	4188583.34	1.68574
649125.76	4188633.34	1.95505	649225.76	4188633.34	2.24144
649325.76	4188633.34	2.59452	649425.76	4188633.34	3.03000
649525.76	4188633.34	3.54166	649625.76	4188633.34	4.13455
649725.76	4188633.34	4.96224	649825.76	4188633.34	6.75418
649925.76	4188633.34	5.62372	650025.76	4188633.34	66.19515
650125.76	4188633.34	24.26294	650225.76	4188633.34	13.12773
650325.76	4188633.34	8.59815	650425.76	4188633.34	6.20309
650525.76	4188633.34	4.73286	650625.76	4188633.34	3.75738

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 135

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	3.07190	650825.76	4188633.34	2.56865
651125.76	4188633.34	1.65060	649125.76	4188683.34	2.00572
649225.76	4188683.34	2.30821	649325.76	4188683.34	2.68587
649425.76	4188683.34	3.16218	649525.76	4188683.34	3.75111
649625.76	4188683.34	4.50159	649725.76	4188683.34	5.75495
649825.76	4188683.34	9.68107	649925.76	4188683.34	23.60443
650025.76	4188683.34	11.31227	650125.76	4188683.34	13.59101
650225.76	4188683.34	9.92177	650325.76	4188683.34	7.27167
650425.76	4188683.34	5.53971	650525.76	4188683.34	4.35729
650625.76	4188683.34	3.52560	650725.76	4188683.34	2.91953
650825.76	4188683.34	2.46348	651125.76	4188683.34	1.60811
649125.76	4188733.34	2.00554	649225.76	4188733.34	2.30394
649325.76	4188733.34	2.67612	649425.76	4188733.34	3.14859
649525.76	4188733.34	3.75349	649625.76	4188733.34	4.59704
649725.76	4188733.34	6.27062	649825.76	4188733.34	11.05085
649925.76	4188733.34	9.59579	650025.76	4188733.34	4.95183
650125.76	4188733.34	6.31907	650225.76	4188733.34	6.53347
650325.76	4188733.34	5.66477	650425.76	4188733.34	4.69310
650525.76	4188733.34	3.86895	650625.76	4188733.34	3.22334
650725.76	4188733.34	2.72174	650825.76	4188733.34	2.32814
651125.76	4188733.34	1.55534	649125.76	4188783.34	1.96866
649225.76	4188783.34	2.25632	649325.76	4188783.34	2.61733
649425.76	4188783.34	3.08394	649525.76	4188783.34	3.71165
649625.76	4188783.34	4.64368	649725.76	4188783.34	6.42418

649825.76	4188783.34	8.99478	649925.76	4188783.34	5.27508
650025.76	4188783.34	3.43137	650125.76	4188783.34	3.75797
650225.76	4188783.34	4.28313	650325.76	4188783.34	4.24609
650425.76	4188783.34	3.83189	650525.76	4188783.34	3.33031
650625.76	4188783.34	2.87298	650725.76	4188783.34	2.48526
650825.76	4188783.34	2.16326	651125.76	4188783.34	1.48998
649125.76	4188833.34	1.92072	649225.76	4188833.34	2.20005
649325.76	4188833.34	2.55219	649425.76	4188833.34	3.01157
649525.76	4188833.34	3.64154	649625.76	4188833.34	4.57197
649725.76	4188833.34	6.03433	649825.76	4188833.34	6.46024
649925.76	4188833.34	3.60086	650025.76	4188833.34	2.72526
650125.76	4188833.34	2.78158	650225.76	4188833.34	3.08244
650325.76	4188833.34	3.22189	650425.76	4188833.34	3.09978
650525.76	4188833.34	2.82622	650625.76	4188833.34	2.52133
650725.76	4188833.34	2.23481	650825.76	4188833.34	1.98137
651125.76	4188833.34	1.41282	649125.76	4188833.34	1.87372

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 136

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
649225.76	4188883.34	2.14296	649325.76	4188883.34	2.48084
649425.76	4188883.34	2.91992	649525.76	4188883.34	3.52071
649625.76	4188883.34	4.38011	649725.76	4188883.34	5.24815
649825.76	4188883.34	4.67741	649925.76	4188883.34	2.79137
650025.76	4188883.34	2.32449	650125.76	4188883.34	2.29852
650225.76	4188883.34	2.44054	650325.76	4188883.34	2.54570
650425.76	4188883.34	2.52649	650525.76	4188883.34	2.39503
650625.76	4188883.34	2.20307	650725.76	4188883.34	1.99669
650825.76	4188883.34	1.80043	651125.76	4188883.34	1.32811
650125.76	4188933.34	2.00552	650225.76	4188933.34	2.05684
650325.76	4188933.34	2.10709	650425.76	4188933.34	2.09875
650525.76	4188933.34	2.03703	650625.76	4188933.34	1.92510
650725.76	4188933.34	1.78264	650825.76	4188933.34	1.63295
651125.76	4188933.34	1.24176	650425.76	4188983.34	1.78984
650525.76	4188983.34	1.74927	650625.76	4188983.34	1.68389
650725.76	4188983.34	1.59124	650825.76	4188983.34	1.48152
651125.76	4188983.34	1.15888	650525.76	4189033.34	1.52652
650625.76	4189033.34	1.47987	650725.76	4189033.34	1.41955
650825.76	4189033.34	1.34310	651125.76	4189033.34	1.08210
650525.76	4189083.34	1.35539	650625.76	4189083.34	1.31385
650725.76	4189083.34	1.26895	650825.76	4189083.34	1.21579
651125.76	4189083.34	1.01137	650525.76	4189133.34	1.22013
650625.76	4189133.34	1.18141	650725.76	4189133.34	1.14173

650825.76 4189133.34 1.10106 651125.76 4189133.34 0.94499  
650781.98 4189510.65 0.63393 650760.33 4189397.50 0.73811

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 137

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC  
(YYMMDDHH)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
649676.34	4188314.55	678.93891 (15011509)	649629.66	4188294.84	375.42619 (14012608)
649810.15	4188312.48	200.94781 (17021308)	649364.10	4188360.20	237.52009 (17121807)
649327.80	4188355.01	218.17782 (17121807)	649380.70	4188758.52	153.65158 (17122608)
650495.81	4188841.51	193.01766 (17012720)	650597.47	4188832.17	191.28077 (17022508)
650536.27	4188878.85	169.17360 (17012905)	650577.76	4188877.81	161.10654 (17121401)
650602.66	4188860.18	176.97581 (17022508)	650610.95	4188880.93	167.20313 (17022508)
650638.10	4188858.53	161.51988 (17022508)	650664.10	4188331.03	169.03286 (17121906)
650668.72	4188350.83	193.30233 (17122519)	650677.96	4188379.86	216.49902 (17122719)
650699.74	4188414.84	219.83014 (16010203)	650758.47	4188658.36	229.92377 (13020908)
650765.73	4188678.82	211.35165 (13121617)	650773.65	4188706.54	201.38573 (17121119)
650778.27	4188726.34	182.58082 (17121119)	650805.33	4188805.53	145.95307 (17022407)
650806.65	4188824.01	137.73032 (17120704)	650811.27	4188843.81	135.50236 (17122321)
650814.57	4188862.29	132.93082 (17122321)	650846.24	4188924.98	114.02499 (17122321)
650850.86	4188951.38	109.17503 (17012601)	650854.82	4188976.46	106.66676 (17012601)
650698.00	4188307.32	156.57540 (17121906)	650692.60	4188291.80	161.77732 (17011509)
650724.82	4189245.80	82.15236 (17022508)	650726.07	4189273.37	78.04418 (17022508)
650856.27	4189006.30	100.63766 (17012601)	650857.23	4189022.60	98.12053 (17022706)
650859.15	4189041.29	96.57924 (17022706)	650859.15	4189058.54	94.46437 (17022706)
650860.58	4189076.28	91.48846 (17022706)	650861.54	4189094.49	87.93393 (17022706)
650857.71	4189113.19	87.37915 (17021405)	650847.16	4189118.94	88.53759 (17021405)
650848.12	4189134.76	86.70369 (17021405)	650850.04	4189155.37	83.81292 (17021405)
650851.48	4189171.66	81.25977 (17021405)	650853.87	4189184.12	79.33804 (17021405)
650856.75	4189199.46	76.94686 (17021405)	650857.71	4189213.36	74.53772 (17021405)
650860.58	4189226.30	72.58563 (17021405)	650862.50	4189242.60	69.88883 (17021405)
650865.38	4189258.42	67.49315 (17021405)	650867.77	4189275.19	66.21382 (17012921)
650868.73	4189291.49	65.26180 (17012921)	650872.09	4189309.23	63.97964 (17012921)
650874.00	4189325.04	62.82956 (17122223)	650875.92	4189340.38	62.33403 (17122223)
650878.80	4189355.24	61.64832 (17122223)	650881.19	4189373.45	60.85761 (17122223)
650884.55	4189390.71	59.94173 (17122223)	650888.86	4189407.01	58.98111 (17122223)
650889.82	4189427.14	57.96353 (17122223)	650891.74	4189443.43	57.01457 (17122223)
650895.09	4189461.17	55.93288 (17122223)	650898.45	4189475.55	55.05520 (17122223)
650898.45	4189489.93	54.12424 (17122223)	650902.28	4189504.31	53.25614 (17122223)
650709.41	4188344.56	174.38397 (17122519)	650722.45	4188284.03	145.91882 (17121906)

650745.73	4188280.30	138.56739	(17121906)	650735.49	4188223.50	162.58132	(17011509)
650721.52	4188167.62	124.71128	(17011509)	650525.76	4188133.34	163.72388	(17122917)
651125.76	4188133.34	90.04075	(17011509)	649125.76	4188183.34	127.57472	(17021308)
649225.76	4188183.34	135.04228	(17021308)	649325.76	4188183.34	134.18068	(17121504)
649425.76	4188183.34	139.51884	(15010804)	649525.76	4188183.34	160.08109	(15010507)
649625.76	4188183.34	248.89240	(17011609)	649725.76	4188183.34	216.26847	(17013024)
649825.76	4188183.34	135.62934	(17012903)	649925.76	4188183.34	124.57173	(15010907)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 138

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650025.76	4188183.34	135.02072	(13020106)	650125.76	4188183.34	146.69522	(13013108)
650225.76	4188183.34	181.85105	(16010309)	650325.76	4188183.34	215.76128	(15021203)
650425.76	4188183.34	266.01987	(17011609)	650525.76	4188183.34	178.42362	(17122917)
650625.76	4188183.34	137.13875	(17012908)	650725.76	4188183.34	139.20876	(17011509)
650825.76	4188183.34	133.07502	(17011509)	651125.76	4188183.34	100.11202	(17011509)
649125.76	4188233.34	134.55312	(17012823)	649225.76	4188233.34	147.26465	(17121823)
649325.76	4188233.34	164.76292	(17021308)	649425.76	4188233.34	165.03956	(17121504)
649525.76	4188233.34	189.42969	(16010309)	649625.76	4188233.34	277.81440	(15010901)
649725.76	4188233.34	254.20740	(17122701)	649825.76	4188233.34	139.92419	(17011208)
649925.76	4188233.34	144.28750	(17121504)	650025.76	4188233.34	147.55235	(15010907)
650125.76	4188233.34	162.77304	(15010804)	650225.76	4188233.34	192.91756	(16010309)
650325.76	4188233.34	255.71070	(13020205)	650425.76	4188233.34	337.24667	(17011609)
650525.76	4188233.34	198.93997	(17122917)	650625.76	4188233.34	158.64706	(17022501)
650725.76	4188233.34	166.87489	(17011509)	650825.76	4188233.34	116.43585	(17011509)
651125.76	4188233.34	95.03262	(17011509)	649125.76	4188283.34	144.81591	(17022506)
649225.76	4188283.34	167.50605	(17011605)	649325.76	4188283.34	182.22533	(17012823)
649425.76	4188283.34	215.31629	(17021308)	649525.76	4188283.34	223.38505	(17021403)
649625.76	4188283.34	343.17648	(14012608)	649725.76	4188283.34	279.39045	(17122318)
649825.76	4188283.34	176.45680	(17021308)	649925.76	4188283.34	170.65484	(17013022)
650025.76	4188283.34	175.04229	(17121504)	650125.76	4188283.34	181.79658	(14120904)
650225.76	4188283.34	204.06751	(13123102)	650325.76	4188283.34	293.32024	(16010309)
650425.76	4188283.34	454.05123	(17011609)	650525.76	4188283.34	228.55362	(17012908)
650625.76	4188283.34	225.48505	(17011509)	650725.76	4188283.34	144.83986	(17121906)
650825.76	4188283.34	118.84923	(17022501)	651125.76	4188283.34	87.80930	(17122519)
649125.76	4188333.34	152.28905	(17121807)	649225.76	4188333.34	175.73477	(17022506)
649325.76	4188333.34	214.01066	(17022506)	649425.76	4188333.34	255.70612	(17011605)
649525.76	4188333.34	311.25206	(17021308)	649625.76	4188333.34	447.16285	(16010309)
649725.76	4188333.34	271.74175	(17122318)	649825.76	4188333.34	222.11894	(17021308)

649925.76	4188333.34	230.75884	(17021308)	650025.76	4188333.34	225.88332	(17021308)
650125.76	4188333.34	224.69449	(17121504)	650225.76	4188333.34	238.52457	(14120904)
650325.76	4188333.34	299.03990	(16010309)	650425.76	4188333.34	673.70318	(15012509)
650525.76	4188333.34	353.45796	(17011509)	650625.76	4188333.34	197.90942	(17121906)
650725.76	4188333.34	157.99683	(14012017)	650825.76	4188333.34	141.56938	(17122320)
651125.76	4188333.34	91.50078	(17122719)	649125.76	4188383.34	151.08877	(17013008)
649225.76	4188383.34	178.10675	(17013008)	649325.76	4188383.34	216.03372	(17013008)
649425.76	4188383.34	274.73368	(17121807)	649525.76	4188383.34	390.23976	(17121807)
649625.76	4188383.34	591.43491	(17011205)	649725.76	4188383.34	399.82437	(15011009)
649825.76	4188383.34	362.29280	(15011009)	649925.76	4188383.34	344.17919	(17013006)
650025.76	4188383.34	348.55740	(17021308)	650125.76	4188383.34	350.94951	(17021308)
650225.76	4188383.34	329.59139	(17013022)	650325.76	4188383.34	346.77321	(15032607)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 139

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

650425.76	4188383.34	907.11794	(14021408)	650525.76	4188383.34	359.79896	(17122519)
650625.76	4188383.34	257.91712	(17122519)	650725.76	4188383.34	193.70169	(17122621)
650825.76	4188383.34	195.60456	(17011509)	651125.76	4188383.34	97.24183	(17122621)
649125.76	4188433.34	149.97583	(17011505)	649225.76	4188433.34	174.26600	(17011505)
649325.76	4188433.34	208.20685	(17121203)	649425.76	4188433.34	265.00021	(17121203)
649525.76	4188433.34	363.16641	(17013107)	649625.76	4188433.34	556.26236	(17011121)
649725.76	4188433.34	478.51829	(17011121)	649825.76	4188433.34	487.00914	(17011121)
649925.76	4188433.34	501.67107	(17011121)	650025.76	4188433.34	518.05891	(17011121)
650125.76	4188433.34	534.58520	(17011121)	650225.76	4188433.34	545.82864	(17011121)
650325.76	4188433.34	578.10350	(17122608)	650425.76	4188433.34	779.38881	(16022908)
650525.76	4188433.34	600.57777	(14022208)	650625.76	4188433.34	322.51196	(14022208)
650725.76	4188433.34	250.45134	(17011509)	650825.76	4188433.34	170.01445	(17122619)
651125.76	4188433.34	105.12455	(17121319)	649125.76	4188483.34	137.13577	(17013107)
649225.76	4188483.34	157.23828	(17122903)	649325.76	4188483.34	185.68315	(17011121)
649425.76	4188483.34	217.31866	(17121322)	649525.76	4188483.34	248.29210	(17121322)
649625.76	4188483.34	319.24885	(17122608)	649725.76	4188483.34	289.67963	(17021405)
650425.76	4188483.34	407.72103	(17012717)	650525.76	4188483.34	370.66576	(17122318)
650625.76	4188483.34	326.01898	(17011509)	650725.76	4188483.34	286.96186	(17011509)
650825.76	4188483.34	191.28780	(17011303)	651125.76	4188483.34	117.07453	(17122519)
649125.76	4188533.34	128.36280	(17121322)	649225.76	4188533.34	139.15522	(17121322)
649325.76	4188533.34	149.03793	(17022506)	649425.76	4188533.34	168.52010	(17011605)
649525.76	4188533.34	194.70330	(17021308)	649625.76	4188533.34	293.04637	(16022908)
649725.76	4188533.34	268.89059	(17022508)	650425.76	4188533.34	533.86332	(17021308)

650525.76	4188533.34	571.94571	(14121216)	650625.76	4188533.34	585.48557	(17011509)
650725.76	4188533.34	322.23360	(17010504)	650825.76	4188533.34	227.58001	(17122519)
651125.76	4188533.34	116.93517	(17122621)	649125.76	4188583.34	123.52920	(17013008)
649225.76	4188583.34	139.66099	(17013008)	649325.76	4188583.34	169.37146	(17121807)
649425.76	4188583.34	204.93599	(17121807)	649525.76	4188583.34	250.45999	(17022506)
649625.76	4188583.34	343.33433	(15011009)	649725.76	4188583.34	246.60585	(17022508)
650425.76	4188583.34	572.86235	(17121322)	650525.76	4188583.34	670.65152	(17022508)
650625.76	4188583.34	685.89225	(14011317)	650725.76	4188583.34	319.63119	(14021603)
650825.76	4188583.34	213.93963	(14022208)	651125.76	4188583.34	122.31005	(14022208)
649125.76	4188633.34	134.42895	(17011505)	649225.76	4188633.34	157.21594	(17011505)
649325.76	4188633.34	189.74306	(17011505)	649425.76	4188633.34	240.21332	(17011505)
649525.76	4188633.34	330.13303	(17011505)	649625.76	4188633.34	578.36192	(17121420)
649725.76	4188633.34	543.56022	(15011009)	649825.76	4188633.34	517.23586	(15011009)
649925.76	4188633.34	494.15082	(15011009)	650025.76	4188633.34	469.06623	(15011009)
650125.76	4188633.34	439.02302	(15011009)	650225.76	4188633.34	398.95201	(15011009)
650325.76	4188633.34	349.44068	(14012017)	650425.76	4188633.34	409.92885	(16010209)
650525.76	4188633.34	488.77295	(17022508)	650625.76	4188633.34	346.40980	(17122923)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

650725.76	4188633.34	289.62078	(14011317)	650825.76	4188633.34	208.27576	(15122617)
651125.76	4188633.34	118.13500	(14021120)	649125.76	4188683.34	133.82091	(17013107)
649225.76	4188683.34	154.08643	(17013107)	649325.76	4188683.34	181.79710	(17122903)
649425.76	4188683.34	225.07951	(17011121)	649525.76	4188683.34	286.73989	(17121322)
649625.76	4188683.34	322.75045	(17121322)	649725.76	4188683.34	340.63254	(17022508)
649825.76	4188683.34	334.96749	(17121322)	649925.76	4188683.34	345.61210	(17122608)
650025.76	4188683.34	368.61847	(17122608)	650125.76	4188683.34	385.47972	(17122608)
650225.76	4188683.34	400.20723	(17011201)	650325.76	4188683.34	429.50947	(17121402)
650425.76	4188683.34	465.32624	(17122909)	650525.76	4188683.34	347.52703	(17022508)
650625.76	4188683.34	274.17222	(17022706)	650725.76	4188683.34	232.24978	(17121119)
650825.76	4188683.34	187.45282	(14011317)	651125.76	4188683.34	117.95925	(13120917)
649125.76	4188733.34	130.20958	(17121322)	649225.76	4188733.34	145.61796	(17121322)
649325.76	4188733.34	159.15022	(17121322)	649425.76	4188733.34	171.29653	(17122608)
649525.76	4188733.34	188.61889	(17122608)	649625.76	4188733.34	247.66561	(17012717)
649725.76	4188733.34	255.90350	(17022508)	649825.76	4188733.34	212.88909	(17122608)
649925.76	4188733.34	216.77960	(17122702)	650025.76	4188733.34	231.44985	(17011201)
650125.76	4188733.34	245.44548	(17020404)	650225.76	4188733.34	256.11200	(17121402)
650325.76	4188733.34	245.04072	(17123024)	650425.76	4188733.34	310.17543	(17012717)

650525.76	4188733.34	268.94775	(17121401)	650625.76	4188733.34	228.58301	(17021405)
650725.76	4188733.34	193.73041	(14011617)	650825.76	4188733.34	171.30075	(17121119)
651125.76	4188733.34	112.61321	(13020204)	649125.76	4188783.34	112.06287	(17120702)
649225.76	4188783.34	125.00355	(17122608)	649325.76	4188783.34	137.91870	(17122608)
649425.76	4188783.34	143.54490	(17122608)	649525.76	4188783.34	146.88801	(17020404)
649625.76	4188783.34	204.34409	(17012717)	649725.76	4188783.34	204.70378	(17012905)
649825.76	4188783.34	174.08278	(17022508)	649925.76	4188783.34	166.32363	(17120706)
650025.76	4188783.34	183.01005	(17020404)	650125.76	4188783.34	181.30994	(17121402)
650225.76	4188783.34	175.36761	(14110808)	650325.76	4188783.34	209.48145	(17122909)
650425.76	4188783.34	258.67094	(17012717)	650525.76	4188783.34	228.89541	(17012905)
650625.76	4188783.34	184.10364	(17122223)	650725.76	4188783.34	172.30087	(17012601)
650825.76	4188783.34	148.66290	(17022407)	651125.76	4188783.34	107.84360	(14011317)
649125.76	4188833.34	109.12578	(17122608)	649225.76	4188833.34	114.60370	(17011201)
649325.76	4188833.34	119.67089	(17011201)	649425.76	4188833.34	123.14262	(17020404)
649525.76	4188833.34	122.66476	(17020404)	649625.76	4188833.34	164.50164	(17012717)
649725.76	4188833.34	170.57859	(17012905)	649825.76	4188833.34	156.32606	(17022508)
649925.76	4188833.34	144.21559	(17020404)	650025.76	4188833.34	139.68814	(17122402)
650125.76	4188833.34	134.83309	(14110808)	650225.76	4188833.34	147.43929	(17122909)
650325.76	4188833.34	155.61466	(17122724)	650425.76	4188833.34	207.07531	(17012717)
650525.76	4188833.34	196.23283	(17012905)	650625.76	4188833.34	175.30134	(17022508)
650725.76	4188833.34	156.33692	(17022706)	650825.76	4188833.34	133.91653	(14011617)
651125.76	4188833.34	99.62192	(14011317)	649125.76	4188883.34	101.17634	(17011201)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 141

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE7 \*\*\*

INCLUDING SOURCE(S): L0003722 , L0003723 , L0003724 , L0003725 , L0003726 ,  
L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 ,  
L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 ,  
L0003743 , L0003744 , L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

649225.76	4188883.34	103.76261	(17011201)	649325.76	4188883.34	107.09261	(17020404)
649425.76	4188883.34	106.69180	(17020404)	649525.76	4188883.34	105.66093	(17121402)
649625.76	4188883.34	136.25472	(17120618)	649725.76	4188883.34	136.70040	(17012905)
649825.76	4188883.34	141.25088	(17022508)	649925.76	4188883.34	113.54886	(17122402)
650025.76	4188883.34	108.71914	(14110808)	650125.76	4188883.34	114.64064	(17123024)
650225.76	4188883.34	136.94454	(17122909)	650325.76	4188883.34	135.21317	(17120219)
650425.76	4188883.34	166.13698	(17012717)	650525.76	4188883.34	165.06514	(17012905)
650625.76	4188883.34	163.43300	(17022508)	650725.76	4188883.34	139.26894	(17021405)
650825.76	4188883.34	126.62198	(17122321)	651125.76	4188883.34	90.89320	(13121617)
650125.76	4188933.34	108.66688	(17122909)	650225.76	4188933.34	109.52992	(16111008)
650325.76	4188933.34	124.99661	(17120219)	650425.76	4188933.34	142.94494	(17012924)
650525.76	4188933.34	138.85191	(17012905)	650625.76	4188933.34	146.56555	(17022508)
650725.76	4188933.34	126.34273	(17021405)	650825.76	4188933.34	116.94538	(17012601)

651125.76	4188933.34	88.95052	(17121119)	650425.76	4188983.34	126.59391	(17012924)
650525.76	4188983.34	117.89005	(17012905)	650625.76	4188983.34	127.48238	(17022508)
650725.76	4188983.34	108.16371	(17012921)	650825.76	4188983.34	107.55217	(17022706)
651125.76	4188983.34	82.61322	(17121119)	650525.76	4189033.34	104.55503	(13020121)
650625.76	4189033.34	112.24646	(17121401)	650725.76	4189033.34	102.33689	(17122223)
650825.76	4189033.34	98.40643	(17022706)	651125.76	4189033.34	72.79492	(17013020)
650525.76	4189083.34	95.97113	(17012720)	650625.76	4189083.34	102.87128	(17121401)
650725.76	4189083.34	99.45812	(17022508)	650825.76	4189083.34	94.12856	(17021405)
651125.76	4189083.34	75.64049	(17022407)	650525.76	4189133.34	89.71565	(17012720)
650625.76	4189133.34	92.74867	(17121401)	650725.76	4189133.34	96.72562	(17022508)
650825.76	4189133.34	85.69033	(17021405)	651125.76	4189133.34	68.93548	(14011617)
650781.98	4189510.65	56.32663	(17022508)	650760.33	4189397.50	65.81487	(17022508)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 142

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649676.34	4188314.55	82.89595	(17120203)	649629.66	4188294.84	78.55175	(17120203)
649810.15	4188312.48	96.35285	(17013106)	649364.10	4188360.20	59.14094	(17121823)
649327.80	4188355.01	57.26219	(17121823)	649380.70	4188758.52	55.74238	(17013107)
650495.81	4188841.51	193.14205	(16010309)	650597.47	4188832.17	368.07497	(13011517)
650536.27	4188878.85	220.30745	(16010309)	650577.76	4188877.81	295.14224	(14021408)
650602.66	4188860.18	365.73514	(13011517)	650610.95	4188880.93	379.25916	(13011517)
650638.10	4188858.53	522.40616	(13011517)	650664.10	4188331.03	330.45404	(17122820)
650668.72	4188350.83	351.25257	(17123009)	650677.96	4188379.86	383.13521	(17123009)
650699.74	4188414.84	391.17054	(17123009)	650758.47	4188658.36	431.85349	(17122621)
650765.73	4188678.82	464.87954	(14022208)	650773.65	4188706.54	427.10294	(13032807)
650778.27	4188726.34	402.04400	(14011317)	650805.33	4188805.53	344.69660	(17121119)
650806.65	4188824.01	340.90253	(17121119)	650811.27	4188843.81	326.19774	(17013020)
650814.57	4188862.29	330.73027	(17122923)	650846.24	4188924.98	285.69293	(17122923)
650850.86	4188951.38	279.59146	(17120704)	650854.82	4188976.46	272.37750	(17122321)
650698.00	4188307.32	324.95055	(17123009)	650692.60	4188291.80	320.35941	(17123009)
650724.82	4189245.80	669.73322	(17012717)	650726.07	4189273.37	634.42465	(17012717)
650856.27	4189006.30	273.64008	(17012601)	650857.23	4189022.60	277.21012	(17012601)
650859.15	4189041.29	278.75166	(17022706)	650859.15	4189058.54	287.19922	(17022706)
650860.58	4189076.28	290.33924	(17022706)	650861.54	4189094.49	292.18670	(17022706)
650857.71	4189113.19	298.91612	(17022324)	650847.16	4189118.94	318.85567	(17021405)
650848.12	4189134.76	321.55777	(17021405)	650850.04	4189155.37	322.50406	(17021405)
650851.48	4189171.66	322.64535	(17021405)	650853.87	4189184.12	320.28814	(17021405)
650856.75	4189199.46	317.32964	(17021405)	650857.71	4189213.36	317.08721	(17021405)



650860.58	4189226.30	315.52754	(17012921)	650862.50	4189242.60	317.87579	(17012921)
650865.38	4189258.42	317.36373	(17012921)	650867.77	4189275.19	317.96742	(17012921)
650868.73	4189291.49	324.46041	(17022508)	650872.09	4189309.23	327.29943	(17022508)
650874.00	4189325.04	333.58573	(17022508)	650875.92	4189340.38	338.91851	(17022508)
650878.80	4189355.24	339.74806	(17022508)	650881.19	4189373.45	344.48303	(17022508)
650884.55	4189390.71	344.31931	(17022508)	650888.86	4189407.01	339.69678	(17022508)
650889.82	4189427.14	348.57865	(17022508)	650891.74	4189443.43	351.01443	(17022508)
650895.09	4189461.17	348.74162	(17022508)	650898.45	4189475.55	344.49875	(17022508)
650898.45	4189489.93	350.72933	(17022508)	650902.28	4189504.31	344.62450	(17022508)
650709.41	4188344.56	329.30013	(17123009)	650722.45	4188284.03	279.67627	(17123009)
650745.73	4188280.30	233.95383	(17123009)	650735.49	4188223.50	238.12940	(17123009)
650721.52	4188167.62	242.47171	(17123009)	650525.76	4188133.34	265.34432	(14012501)
651125.76	4188133.34	85.78662	(17122318)	649125.76	4188183.34	52.45668	(17021308)
649225.76	4188183.34	54.11303	(17021308)	649325.76	4188183.34	58.55489	(17120203)
649425.76	4188183.34	63.96123	(17021420)	649525.76	4188183.34	68.96936	(17013106)
649625.76	4188183.34	77.57802	(17121504)	649725.76	4188183.34	84.28413	(17120517)
649825.76	4188183.34	93.09803	(13012121)	649925.76	4188183.34	106.57630	(13022803)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 143

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , . . . ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650025.76	4188183.34	124.51771	(13013108)	650125.76	4188183.34	144.09832	(15122802)
650225.76	4188183.34	173.20777	(13020205)	650325.76	4188183.34	211.83592	(17123007)
650425.76	4188183.34	254.97127	(14021105)	650525.76	4188183.34	287.59081	(15010901)
650625.76	4188183.34	274.53250	(17122820)	650725.76	4188183.34	241.68961	(17123009)
650825.76	4188183.34	168.58932	(17122917)	651125.76	4188183.34	86.44009	(17122318)
649125.76	4188233.34	50.85405	(17021308)	649225.76	4188233.34	56.40583	(17021308)
649325.76	4188233.34	60.39147	(17021308)	649425.76	4188233.34	63.30031	(17120203)
649525.76	4188233.34	70.62714	(17021420)	649625.76	4188233.34	76.72258	(17013106)
649725.76	4188233.34	87.15393	(17121504)	649825.76	4188233.34	94.36225	(17120517)
649925.76	4188233.34	107.44360	(15011205)	650025.76	4188233.34	123.99552	(13010906)
650125.76	4188233.34	147.54040	(17121108)	650225.76	4188233.34	175.29922	(15010507)
650325.76	4188233.34	208.88216	(14021408)	650425.76	4188233.34	269.26227	(17122918)
650525.76	4188233.34	312.19706	(17011302)	650625.76	4188233.34	307.94906	(17011609)
650725.76	4188233.34	256.83462	(17123009)	650825.76	4188233.34	174.71339	(17122917)
651125.76	4188233.34	86.91557	(17122318)	649125.76	4188283.34	51.68002	(14011709)
649225.76	4188283.34	53.77423	(14011709)	649325.76	4188283.34	59.92843	(17021308)
649425.76	4188283.34	66.80724	(17021308)	649525.76	4188283.34	69.86036	(17021308)
649625.76	4188283.34	78.22148	(17021420)	649725.76	4188283.34	86.21508	(17013106)

649825.76	4188283.34	99.39773	(17121504)	649925.76	4188283.34	108.90247	(15010907)
650025.76	4188283.34	126.35716	(13010908)	650125.76	4188283.34	148.90785	(13013108)
650225.76	4188283.34	178.42347	(15122802)	650325.76	4188283.34	219.50216	(13020205)
650425.76	4188283.34	281.71246	(17122918)	650525.76	4188283.34	337.16886	(14120620)
650625.76	4188283.34	353.47592	(17011609)	650725.76	4188283.34	273.52285	(17123009)
650825.76	4188283.34	180.57713	(17122917)	651125.76	4188283.34	87.13533	(17122318)
649125.76	4188333.34	48.19668	(17121207)	649225.76	4188333.34	52.69411	(17121823)
649325.76	4188333.34	57.23492	(17123023)	649425.76	4188333.34	62.72427	(17021308)
649525.76	4188333.34	72.94105	(17021308)	649625.76	4188333.34	80.75036	(17021308)
649725.76	4188333.34	88.08701	(17120203)	649825.76	4188333.34	98.10144	(17123002)
649925.76	4188333.34	115.53415	(17121504)	650025.76	4188333.34	128.11697	(17021403)
650125.76	4188333.34	152.62737	(13022803)	650225.76	4188333.34	184.62274	(17121108)
650325.76	4188333.34	224.11389	(17020905)	650425.76	4188333.34	293.96338	(17123007)
650525.76	4188333.34	365.08096	(16012703)	650625.76	4188333.34	408.46196	(17011609)
650725.76	4188333.34	291.97787	(17123009)	650825.76	4188333.34	186.30008	(17122917)
651125.76	4188333.34	96.46168	(17011509)	649125.76	4188383.34	48.49945	(17011605)
649225.76	4188383.34	51.69823	(17012823)	649325.76	4188383.34	56.55933	(17012823)
649425.76	4188383.34	62.20138	(17121823)	649525.76	4188383.34	69.04970	(17123023)
649625.76	4188383.34	78.15112	(17021308)	649725.76	4188383.34	92.34897	(17021308)
649825.76	4188383.34	99.66540	(17120203)	649925.76	4188383.34	116.24317	(17021420)
650025.76	4188383.34	137.61482	(17121504)	650125.76	4188383.34	155.54763	(13012121)
650225.76	4188383.34	185.98622	(13010906)	650325.76	4188383.34	228.33257	(15122802)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 144

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

650425.76	4188383.34	295.46981	(17123007)	650525.76	4188383.34	395.96194	(13012120)
650625.76	4188383.34	475.59873	(17011609)	650725.76	4188383.34	312.51092	(17123009)
650825.76	4188383.34	192.00764	(17122917)	651125.76	4188383.34	103.09488	(17011509)
649125.76	4188433.34	47.87315	(17011605)	649225.76	4188433.34	52.46056	(17011605)
649325.76	4188433.34	57.22424	(17011605)	649425.76	4188433.34	61.58374	(17013105)
649525.76	4188433.34	68.22613	(17012823)	649625.76	4188433.34	76.30997	(17121207)
649725.76	4188433.34	87.19742	(17123023)	649825.76	4188433.34	103.54203	(17021308)
649925.76	4188433.34	121.65155	(17021308)	650025.76	4188433.34	141.32521	(17021420)
650125.76	4188433.34	169.27367	(17121504)	650225.76	4188433.34	198.48606	(15011205)
650325.76	4188433.34	243.82655	(17121108)	650425.76	4188433.34	301.98549	(14021408)
650525.76	4188433.34	424.54895	(14021105)	650625.76	4188433.34	558.41403	(17011609)
650725.76	4188433.34	335.59506	(17123009)	650825.76	4188433.34	197.83929	(17122917)
651125.76	4188433.34	94.01929	(17011509)	649125.76	4188483.34	48.48210	(17022506)

649225.76	4188483.34	52.28251 (17022506)	649325.76	4188483.34	56.14755 (17022506)
649425.76	4188483.34	60.40559 (17011605)	649525.76	4188483.34	68.40921 (17011605)
649625.76	4188483.34	76.90313 (17011605)	649725.76	4188483.34	85.41982 (17012823)
650425.76	4188483.34	316.05557 (13020205)	650525.76	4188483.34	446.92753 (14012608)
650625.76	4188483.34	660.94744 (17011609)	650725.76	4188483.34	361.96308 (17123009)
650825.76	4188483.34	203.96935 (17122917)	651125.76	4188483.34	89.59663 (17012903)
649125.76	4188533.34	46.86955 (17121807)	649225.76	4188533.34	49.91006 (17121807)
649325.76	4188533.34	54.59650 (17022506)	649425.76	4188533.34	60.84368 (17022506)
649525.76	4188533.34	68.18534 (17022506)	649625.76	4188533.34	76.49584 (17022506)
649725.76	4188533.34	85.15932 (17022506)	650425.76	4188533.34	352.97485 (16010309)
650525.76	4188533.34	473.83507 (13011517)	650625.76	4188533.34	784.37680 (17011609)
650725.76	4188533.34	392.66503 (17123009)	650825.76	4188533.34	220.39107 (17011509)
651125.76	4188533.34	89.68913 (17012903)	649125.76	4188583.34	46.20736 (17121807)
649225.76	4188583.34	50.11804 (17121807)	649325.76	4188583.34	54.74210 (17121807)
649425.76	4188583.34	60.24986 (17121807)	649525.76	4188583.34	66.84775 (17121807)
649625.76	4188583.34	74.76877 (17121807)	649725.76	4188583.34	84.22787 (17121807)
650425.76	4188583.34	429.26775 (14120904)	650525.76	4188583.34	532.96871 (16010309)
650625.76	4188583.34	1018.68110 (15012509)	650725.76	4188583.34	429.06631 (17123009)
650825.76	4188583.34	217.76755 (17122917)	651125.76	4188583.34	99.78035 (17122519)
649125.76	4188633.34	45.44291 (17013008)	649225.76	4188633.34	49.02987 (17013008)
649325.76	4188633.34	53.26609 (17013008)	649425.76	4188633.34	58.33852 (17013008)
649525.76	4188633.34	64.51038 (17013008)	649625.76	4188633.34	72.16282 (17013008)
649725.76	4188633.34	81.86638 (17013008)	649825.76	4188633.34	94.50818 (17013008)
649925.76	4188633.34	111.52847 (17013008)	650025.76	4188633.34	135.38200 (17013008)
650125.76	4188633.34	173.63956 (17121807)	650225.76	4188633.34	245.43697 (17121807)
650325.76	4188633.34	381.31416 (17022506)	650425.76	4188633.34	724.41627 (17011605)
650525.76	4188633.34	798.17739 (17013022)	650625.76	4188633.34	1240.74774 (14021105)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 145

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
-------------	-------------	-----------------	-------------	-------------	-----------------

650725.76	4188633.34	472.72671 (17123009)	650825.76	4188633.34	266.07236 (17122519)
651125.76	4188633.34	105.60524 (17122621)	649125.76	4188683.34	46.17329 (17011505)
649225.76	4188683.34	49.94887 (17011505)	649325.76	4188683.34	54.36837 (17011505)
649425.76	4188683.34	59.60489 (17011505)	649525.76	4188683.34	65.89729 (17011505)
649625.76	4188683.34	73.58357 (17011505)	649725.76	4188683.34	83.15575 (17011505)
649825.76	4188683.34	95.35408 (17011505)	649925.76	4188683.34	111.33307 (17011505)
650025.76	4188683.34	133.62431 (17121203)	650125.76	4188683.34	172.35065 (17013107)
650225.76	4188683.34	235.93813 (17013107)	650325.76	4188683.34	354.97962 (17011121)

650425.76	4188683.34	600.07223	(17122608)	650525.76	4188683.34	632.73501	(17120706)
650625.76	4188683.34	765.49377	(13011517)	650725.76	4188683.34	618.48711	(14021120)
650825.76	4188683.34	325.56465	(14022208)	651125.76	4188683.34	115.90236	(14022208)
649125.76	4188733.34	45.27620	(17011505)	649225.76	4188733.34	48.73848	(17121203)
649325.76	4188733.34	53.12209	(17121203)	649425.76	4188733.34	58.12540	(17121203)
649525.76	4188733.34	64.20195	(17013107)	649625.76	4188733.34	71.70471	(17013107)
649725.76	4188733.34	80.18208	(17013107)	649825.76	4188733.34	90.92152	(17122903)
649925.76	4188733.34	106.95390	(17011121)	650025.76	4188733.34	130.41737	(17121322)
650125.76	4188733.34	156.89321	(17121322)	650225.76	4188733.34	191.90369	(17122608)
650325.76	4188733.34	274.39632	(17011201)	650425.76	4188733.34	300.97062	(17121402)
650525.76	4188733.34	297.26588	(17012717)	650625.76	4188733.34	600.54184	(13011517)
650725.76	4188733.34	583.97919	(17123009)	650825.76	4188733.34	310.05481	(13020204)
651125.76	4188733.34	118.25011	(14022208)	649125.76	4188783.34	45.46015	(17013107)
649225.76	4188783.34	48.56635	(17013107)	649325.76	4188783.34	51.78956	(17013107)
649425.76	4188783.34	56.55535	(17122903)	649525.76	4188783.34	62.23957	(17011121)
649625.76	4188783.34	70.02551	(17011121)	649725.76	4188783.34	79.10244	(17121322)
649825.76	4188783.34	88.41646	(17121322)	649925.76	4188783.34	97.10198	(17120702)
650025.76	4188783.34	110.46034	(17122608)	650125.76	4188783.34	141.54457	(17122608)
650225.76	4188783.34	174.38660	(17011201)	650325.76	4188783.34	200.54154	(17121402)
650425.76	4188783.34	193.01336	(17122909)	650525.76	4188783.34	248.18646	(14021408)
650625.76	4188783.34	530.57619	(13011517)	650725.76	4188783.34	657.47454	(15011209)
650825.76	4188783.34	304.16162	(13020908)	651125.76	4188783.34	120.55969	(14010519)
649125.76	4188833.34	44.20163	(17122903)	649225.76	4188833.34	48.08822	(17011121)
649325.76	4188833.34	52.19877	(17011121)	649425.76	4188833.34	56.97975	(17121322)
649525.76	4188833.34	61.75196	(17121322)	649625.76	4188833.34	65.61396	(17121322)
649725.76	4188833.34	69.80782	(17120702)	649825.76	4188833.34	76.83516	(17122608)
649925.76	4188833.34	94.92403	(17122608)	650025.76	4188833.34	110.80719	(17011201)
650125.76	4188833.34	129.41511	(17121007)	650225.76	4188833.34	146.59165	(17121402)
650325.76	4188833.34	136.07428	(17120208)	650425.76	4188833.34	159.07526	(17122909)
650525.76	4188833.34	223.64411	(14021408)	650625.76	4188833.34	478.92774	(13011517)
650725.76	4188833.34	753.95732	(15011209)	650825.76	4188833.34	314.67519	(17121119)
651125.76	4188833.34	122.06400	(13020204)	649125.76	4188883.34	44.78737	(17121322)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 146

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE8 \*\*\*

INCLUDING SOURCE(S): L0004431 , L0004432 , L0004433 , L0004434 , L0004435 ,  
L0004436 , L0004437 , L0004438 , L0004439 , L0004440 , L0004441 , L0004442 , L0004443 ,  
L0004444 , L0004445 , L0004446 , L0004447 , L0004448 , L0004449 , L0004450 , L0004451 ,  
L0004452 , L0004453 , L0004454 , L0004455 , L0004456 , L0004457 , L0004458 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

649225.76	4188883.34	47.73654	(17121322)	649325.76	4188883.34	50.25960	(17121322)
649425.76	4188883.34	52.18391	(17121322)	649525.76	4188883.34	54.47774	(17120702)
649625.76	4188883.34	58.69496	(17122608)	649725.76	4188883.34	70.58730	(17122608)

649825.76	4188883.34	78.68503	(17122608)	649925.76	4188883.34	92.30070	(17011201)
650025.76	4188883.34	103.99360	(17121007)	650125.76	4188883.34	115.59066	(17020404)
650225.76	4188883.34	110.57413	(17122402)	650325.76	4188883.34	113.64039	(17122909)
650425.76	4188883.34	148.36779	(16010309)	650525.76	4188883.34	209.76352	(16010309)
650625.76	4188883.34	435.46360	(13011517)	650725.76	4188883.34	882.06690	(15011209)
650825.76	4188883.34	316.91401	(17122923)	651125.76	4188883.34	128.51899	(14011317)
650125.76	4188933.34	93.74910	(17122402)	650225.76	4188933.34	93.61965	(17120208)
650325.76	4188933.34	110.91361	(17122909)	650425.76	4188933.34	141.81622	(16010309)
650525.76	4188933.34	201.67281	(16010309)	650625.76	4188933.34	394.90595	(13011517)
650725.76	4188933.34	1066.86577	(15011209)	650825.76	4188933.34	312.05275	(17120704)
651125.76	4188933.34	123.84750	(13020908)	650425.76	4188983.34	131.36883	(16010309)
650525.76	4188983.34	194.35759	(16010309)	650625.76	4188983.34	361.73619	(14021408)
650725.76	4188983.34	1362.27305	(15011209)	650825.76	4188983.34	319.10506	(17022706)
651125.76	4188983.34	125.63247	(13121617)	650525.76	4189033.34	186.76416	(16010309)
650625.76	4189033.34	327.68066	(14021408)	650725.76	4189033.34	2186.55927	(17011609)
650825.76	4189033.34	342.00914	(17022706)	651125.76	4189033.34	132.07542	(17121119)
650525.76	4189083.34	176.24863	(16010309)	650625.76	4189083.34	298.62129	(17012717)
650725.76	4189083.34	1803.61053	(15012509)	650825.76	4189083.34	353.95010	(17021405)
651125.76	4189083.34	125.73768	(17123020)	650525.76	4189133.34	161.79580	(13121509)
650625.76	4189133.34	287.66040	(17012717)	650725.76	4189133.34	1122.65771	(13122919)
650825.76	4189133.34	366.52888	(17021405)	651125.76	4189133.34	124.86715	(17022407)
650781.98	4189510.65	925.63493	(17012720)	650760.33	4189397.50	863.03394	(17012720)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 147

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

649676.34	4188314.55	82.89595	(17120203)	649629.66	4188294.84	78.55175	(17120203)
649810.15	4188312.48	96.35285	(17013106)	649364.10	4188360.20	59.14094	(17121823)
649327.80	4188355.01	57.26219	(17121823)	649380.70	4188758.52	55.74238	(17013107)
650495.81	4188841.51	193.14205	(16010309)	650597.47	4188832.17	368.07497	(13011517)
650536.27	4188878.85	220.30745	(16010309)	650577.76	4188877.81	295.14224	(14021408)
650602.66	4188860.18	365.73514	(13011517)	650610.95	4188880.93	379.25916	(13011517)
650638.10	4188858.53	522.40616	(13011517)	650664.10	4188331.03	330.45404	(17122820)
650668.72	4188350.83	351.25257	(17123009)	650677.96	4188379.86	383.13521	(17123009)
650699.74	4188414.84	391.17054	(17123009)	650758.47	4188658.36	431.85349	(17122621)
650765.73	4188678.82	464.87954	(14022208)	650773.65	4188706.54	427.10294	(13032807)
650778.27	4188726.34	402.04400	(14011317)	650805.33	4188805.53	344.69660	(17121119)
650806.65	4188824.01	340.90253	(17121119)	650811.27	4188843.81	326.19774	(17013020)
650814.57	4188862.29	330.73027	(17122923)	650846.24	4188924.98	285.69293	(17122923)

650850.86	4188951.38	279.59146	(17120704)	650854.82	4188976.46	272.37750	(17122321)
650698.00	4188307.32	324.95055	(17123009)	650692.60	4188291.80	320.35941	(17123009)
650724.82	4189245.80	669.73322	(17012717)	650726.07	4189273.37	634.42465	(17012717)
650856.27	4189006.30	273.64008	(17012601)	650857.23	4189022.60	277.21012	(17012601)
650859.15	4189041.29	278.75166	(17022706)	650859.15	4189058.54	287.19922	(17022706)
650860.58	4189076.28	290.33924	(17022706)	650861.54	4189094.49	292.18670	(17022706)
650857.71	4189113.19	298.91612	(17022324)	650847.16	4189118.94	318.85567	(17021405)
650848.12	4189134.76	321.55777	(17021405)	650850.04	4189155.37	322.50406	(17021405)
650851.48	4189171.66	322.64535	(17021405)	650853.87	4189184.12	320.28814	(17021405)
650856.75	4189199.46	317.32964	(17021405)	650857.71	4189213.36	317.08721	(17021405)
650860.58	4189226.30	315.52754	(17012921)	650862.50	4189242.60	317.87579	(17012921)
650865.38	4189258.42	317.36373	(17012921)	650867.77	4189275.19	317.96742	(17012921)
650868.73	4189291.49	324.46041	(17022508)	650872.09	4189309.23	327.29943	(17022508)
650874.00	4189325.04	333.58573	(17022508)	650875.92	4189340.38	338.91851	(17022508)
650878.80	4189355.24	339.74806	(17022508)	650881.19	4189373.45	344.48303	(17022508)
650884.55	4189390.71	344.31931	(17022508)	650888.86	4189407.01	339.69678	(17022508)
650889.82	4189427.14	348.57865	(17022508)	650891.74	4189443.43	351.01443	(17022508)
650895.09	4189461.17	348.74162	(17022508)	650898.45	4189475.55	344.49875	(17022508)
650898.45	4189489.93	350.72933	(17022508)	650902.28	4189504.31	344.62450	(17022508)
650709.41	4188344.56	329.30013	(17123009)	650722.45	4188284.03	279.67627	(17123009)
650745.73	4188280.30	233.95383	(17123009)	650735.49	4188223.50	238.12940	(17123009)
650721.52	4188167.62	242.47171	(17123009)	650525.76	4188133.34	265.34432	(14012501)
651125.76	4188133.34	85.78662	(17122318)	649125.76	4188183.34	52.45668	(17021308)
649225.76	4188183.34	54.11303	(17021308)	649325.76	4188183.34	58.55489	(17120203)
649425.76	4188183.34	63.96123	(17021420)	649525.76	4188183.34	68.96936	(17013106)
649625.76	4188183.34	77.57802	(17121504)	649725.76	4188183.34	84.28413	(17120517)
649825.76	4188183.34	93.09803	(13012121)	649925.76	4188183.34	106.57630	(13022803)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 148

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650025.76	4188183.34	124.51771	(13013108)	650125.76	4188183.34	144.09832	(15122802)
650225.76	4188183.34	173.20777	(13020205)	650325.76	4188183.34	211.83592	(17123007)
650425.76	4188183.34	254.97127	(14021105)	650525.76	4188183.34	287.59081	(15010901)
650625.76	4188183.34	274.53250	(17122820)	650725.76	4188183.34	241.68961	(17123009)
650825.76	4188183.34	168.58932	(17122917)	651125.76	4188183.34	86.44009	(17122318)
649125.76	4188233.34	50.85405	(17021308)	649225.76	4188233.34	56.40583	(17021308)
649325.76	4188233.34	60.39147	(17021308)	649425.76	4188233.34	63.30031	(17120203)
649525.76	4188233.34	70.62714	(17021420)	649625.76	4188233.34	76.72258	(17013106)

649725.76	4188233.34	87.15393	(17121504)	649825.76	4188233.34	94.36225	(17120517)
649925.76	4188233.34	107.44360	(15011205)	650025.76	4188233.34	123.99552	(13010906)
650125.76	4188233.34	147.54040	(17121108)	650225.76	4188233.34	175.29922	(15010507)
650325.76	4188233.34	208.88216	(14021408)	650425.76	4188233.34	269.26227	(17122918)
650525.76	4188233.34	312.19706	(17011302)	650625.76	4188233.34	307.94906	(17011609)
650725.76	4188233.34	256.83462	(17123009)	650825.76	4188233.34	174.71339	(17122917)
651125.76	4188233.34	86.91557	(17122318)	649125.76	4188283.34	51.68002	(14011709)
649225.76	4188283.34	53.77423	(14011709)	649325.76	4188283.34	59.92843	(17021308)
649425.76	4188283.34	66.80724	(17021308)	649525.76	4188283.34	69.86036	(17021308)
649625.76	4188283.34	78.22148	(17021420)	649725.76	4188283.34	86.21508	(17013106)
649825.76	4188283.34	99.39773	(17121504)	649925.76	4188283.34	108.90247	(15010907)
650025.76	4188283.34	126.35716	(13010908)	650125.76	4188283.34	148.90785	(13013108)
650225.76	4188283.34	178.42347	(15122802)	650325.76	4188283.34	219.50216	(13020205)
650425.76	4188283.34	281.71246	(17122918)	650525.76	4188283.34	337.16886	(14120620)
650625.76	4188283.34	353.47592	(17011609)	650725.76	4188283.34	273.52285	(17123009)
650825.76	4188283.34	180.57713	(17122917)	651125.76	4188283.34	87.13533	(17122318)
649125.76	4188333.34	48.19668	(17121207)	649225.76	4188333.34	52.69411	(17121823)
649325.76	4188333.34	57.23492	(17123023)	649425.76	4188333.34	62.72427	(17021308)
649525.76	4188333.34	72.94105	(17021308)	649625.76	4188333.34	80.75036	(17021308)
649725.76	4188333.34	88.08701	(17120203)	649825.76	4188333.34	98.10144	(17123002)
649925.76	4188333.34	115.53415	(17121504)	650025.76	4188333.34	128.11697	(17021403)
650125.76	4188333.34	152.62737	(13022803)	650225.76	4188333.34	184.62274	(17121108)
650325.76	4188333.34	224.11389	(17020905)	650425.76	4188333.34	293.96338	(17123007)
650525.76	4188333.34	365.08096	(16012703)	650625.76	4188333.34	408.46196	(17011609)
650725.76	4188333.34	291.97787	(17123009)	650825.76	4188333.34	186.30008	(17122917)
651125.76	4188333.34	96.46168	(17011509)	649125.76	4188383.34	48.49945	(17011605)
649225.76	4188383.34	51.69823	(17012823)	649325.76	4188383.34	56.55933	(17012823)
649425.76	4188383.34	62.20138	(17121823)	649525.76	4188383.34	69.04970	(17123023)
649625.76	4188383.34	78.15112	(17021308)	649725.76	4188383.34	92.34897	(17021308)
649825.76	4188383.34	99.66540	(17120203)	649925.76	4188383.34	116.24317	(17021420)
650025.76	4188383.34	137.61482	(17121504)	650125.76	4188383.34	155.54763	(13012121)
650225.76	4188383.34	185.98622	(13010906)	650325.76	4188383.34	228.33257	(15122802)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 149

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

650425.76	4188383.34	295.46981	(17123007)	650525.76	4188383.34	395.96194	(13012120)
650625.76	4188383.34	475.59873	(17011609)	650725.76	4188383.34	312.51092	(17123009)
650825.76	4188383.34	192.00764	(17122917)	651125.76	4188383.34	103.09488	(17011509)

649125.76	4188433.34	47.87315	(17011605)	649225.76	4188433.34	52.46056	(17011605)
649325.76	4188433.34	57.22424	(17011605)	649425.76	4188433.34	61.58374	(17013105)
649525.76	4188433.34	68.22613	(17012823)	649625.76	4188433.34	76.30997	(17121207)
649725.76	4188433.34	87.19742	(17123023)	649825.76	4188433.34	103.54203	(17021308)
649925.76	4188433.34	121.65155	(17021308)	650025.76	4188433.34	141.32521	(17021420)
650125.76	4188433.34	169.27367	(17121504)	650225.76	4188433.34	198.48606	(15011205)
650325.76	4188433.34	243.82655	(17121108)	650425.76	4188433.34	301.98549	(14021408)
650525.76	4188433.34	424.54895	(14021105)	650625.76	4188433.34	558.41403	(17011609)
650725.76	4188433.34	335.59506	(17123009)	650825.76	4188433.34	197.83929	(17122917)
651125.76	4188433.34	94.01929	(17011509)	649125.76	4188483.34	48.48210	(17022506)
649225.76	4188483.34	52.28251	(17022506)	649325.76	4188483.34	56.14755	(17022506)
649425.76	4188483.34	60.40559	(17011605)	649525.76	4188483.34	68.40921	(17011605)
649625.76	4188483.34	76.90313	(17011605)	649725.76	4188483.34	85.41982	(17012823)
650425.76	4188483.34	316.05557	(13020205)	650525.76	4188483.34	446.92753	(14012608)
650625.76	4188483.34	660.94744	(17011609)	650725.76	4188483.34	361.96308	(17123009)
650825.76	4188483.34	203.96935	(17122917)	651125.76	4188483.34	89.59663	(17012903)
649125.76	4188533.34	46.86955	(17121807)	649225.76	4188533.34	49.91006	(17121807)
649325.76	4188533.34	54.59650	(17022506)	649425.76	4188533.34	60.84368	(17022506)
649525.76	4188533.34	68.18534	(17022506)	649625.76	4188533.34	76.49584	(17022506)
649725.76	4188533.34	85.15932	(17022506)	650425.76	4188533.34	352.97485	(16010309)
650525.76	4188533.34	473.83507	(13011517)	650625.76	4188533.34	784.37680	(17011609)
650725.76	4188533.34	392.66503	(17123009)	650825.76	4188533.34	220.39107	(17011509)
651125.76	4188533.34	89.68913	(17012903)	649125.76	4188583.34	46.20736	(17121807)
649225.76	4188583.34	50.11804	(17121807)	649325.76	4188583.34	54.74210	(17121807)
649425.76	4188583.34	60.24986	(17121807)	649525.76	4188583.34	66.84775	(17121807)
649625.76	4188583.34	74.76877	(17121807)	649725.76	4188583.34	84.22787	(17121807)
650425.76	4188583.34	429.26775	(14120904)	650525.76	4188583.34	532.96871	(16010309)
650625.76	4188583.34	1018.68110	(15012509)	650725.76	4188583.34	429.06631	(17123009)
650825.76	4188583.34	217.76755	(17122917)	651125.76	4188583.34	99.78035	(17122519)
649125.76	4188633.34	45.44291	(17013008)	649225.76	4188633.34	49.02987	(17013008)
649325.76	4188633.34	53.26609	(17013008)	649425.76	4188633.34	58.33852	(17013008)
649525.76	4188633.34	64.51038	(17013008)	649625.76	4188633.34	72.16282	(17013008)
649725.76	4188633.34	81.86638	(17013008)	649825.76	4188633.34	94.50818	(17013008)
649925.76	4188633.34	111.52847	(17013008)	650025.76	4188633.34	135.38200	(17013008)
650125.76	4188633.34	173.63956	(17121807)	650225.76	4188633.34	245.43697	(17121807)
650325.76	4188633.34	381.31416	(17022506)	650425.76	4188633.34	724.41627	(17011605)
650525.76	4188633.34	798.17739	(17013022)	650625.76	4188633.34	1240.74774	(14021105)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*  
 INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
 L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
 L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
 L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC



(YYMMDDHH)

650725.76	4188633.34	472.72671	(17123009)	650825.76	4188633.34	266.07236	(17122519)
651125.76	4188633.34	105.60524	(17122621)	649125.76	4188683.34	46.17329	(17011505)
649225.76	4188683.34	49.94887	(17011505)	649325.76	4188683.34	54.36837	(17011505)
649425.76	4188683.34	59.60489	(17011505)	649525.76	4188683.34	65.89729	(17011505)
649625.76	4188683.34	73.58357	(17011505)	649725.76	4188683.34	83.15575	(17011505)
649825.76	4188683.34	95.35408	(17011505)	649925.76	4188683.34	111.33307	(17011505)
650025.76	4188683.34	133.62431	(17121203)	650125.76	4188683.34	172.35065	(17013107)
650225.76	4188683.34	235.93813	(17013107)	650325.76	4188683.34	354.97962	(17011121)
650425.76	4188683.34	600.07223	(17122608)	650525.76	4188683.34	632.73501	(17120706)
650625.76	4188683.34	765.49377	(13011517)	650725.76	4188683.34	618.48711	(14021120)
650825.76	4188683.34	325.56465	(14022208)	651125.76	4188683.34	115.90236	(14022208)
649125.76	4188733.34	45.27620	(17011505)	649225.76	4188733.34	48.73848	(17121203)
649325.76	4188733.34	53.12209	(17121203)	649425.76	4188733.34	58.12540	(17121203)
649525.76	4188733.34	64.20195	(17013107)	649625.76	4188733.34	71.70471	(17013107)
649725.76	4188733.34	80.18208	(17013107)	649825.76	4188733.34	90.92152	(17122903)
649925.76	4188733.34	106.95390	(17011121)	650025.76	4188733.34	130.41737	(17121322)
650125.76	4188733.34	156.89321	(17121322)	650225.76	4188733.34	191.90369	(17122608)
650325.76	4188733.34	274.39632	(17011201)	650425.76	4188733.34	300.97062	(17121402)
650525.76	4188733.34	297.26588	(17012717)	650625.76	4188733.34	600.54184	(13011517)
650725.76	4188733.34	583.97919	(17123009)	650825.76	4188733.34	310.05481	(13020204)
651125.76	4188733.34	118.25011	(14022208)	649125.76	4188783.34	45.46015	(17013107)
649225.76	4188783.34	48.56635	(17013107)	649325.76	4188783.34	51.78956	(17013107)
649425.76	4188783.34	56.55535	(17122903)	649525.76	4188783.34	62.23957	(17011121)
649625.76	4188783.34	70.02551	(17011121)	649725.76	4188783.34	79.10244	(17121322)
649825.76	4188783.34	88.41646	(17121322)	649925.76	4188783.34	97.10198	(17120702)
650025.76	4188783.34	110.46034	(17122608)	650125.76	4188783.34	141.54457	(17122608)
650225.76	4188783.34	174.38660	(17011201)	650325.76	4188783.34	200.54154	(17121402)
650425.76	4188783.34	193.01336	(17122909)	650525.76	4188783.34	248.18646	(14021408)
650625.76	4188783.34	530.57619	(13011517)	650725.76	4188783.34	657.47454	(15011209)
650825.76	4188783.34	304.16162	(13020908)	651125.76	4188783.34	120.55969	(14010519)
649125.76	4188833.34	44.20163	(17122903)	649225.76	4188833.34	48.08822	(17011121)
649325.76	4188833.34	52.19877	(17011121)	649425.76	4188833.34	56.97975	(17121322)
649525.76	4188833.34	61.75196	(17121322)	649625.76	4188833.34	65.61396	(17121322)
649725.76	4188833.34	69.80782	(17120702)	649825.76	4188833.34	76.83516	(17122608)
649925.76	4188833.34	94.92403	(17122608)	650025.76	4188833.34	110.80719	(17011201)
650125.76	4188833.34	129.41511	(17121007)	650225.76	4188833.34	146.59165	(17121402)
650325.76	4188833.34	136.07428	(17120208)	650425.76	4188833.34	159.07526	(17122909)
650525.76	4188833.34	223.64411	(14021408)	650625.76	4188833.34	478.92774	(13011517)
650725.76	4188833.34	753.95732	(15011209)	650825.76	4188833.34	314.67519	(17121119)
651125.76	4188833.34	122.06400	(13020204)	649125.76	4188883.34	44.78737	(17121322)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 151

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

SLINE9 \*\*\*

INCLUDING SOURCE(S): L0005283 , L0005284 , L0005285 , L0005286 , L0005287 ,  
L0005288 , L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 ,  
L0005296 , L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 ,  
L0005304 , L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , ... ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

Table with 7 columns: X-COORD (M), Y-COORD (M), CONC (YYMMDDHH), X-COORD (M), Y-COORD (M), CONC (YYMMDDHH). Contains 30 rows of data points.

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 152

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

Table with 7 columns: X-COORD (M), Y-COORD (M), CONC (YYMMDDHH), X-COORD (M), Y-COORD (M), CONC (YYMMDDHH). Contains 6 rows of data points.

650638.10	4188858.53	117.12813	(14010518)	650664.10	4188331.03	122.85249	(17121522)
650668.72	4188350.83	122.17938	(17121522)	650677.96	4188379.86	120.92439	(14051320)
650699.74	4188414.84	118.76448	(17091205)	650758.47	4188658.36	113.58202	(14021501)
650765.73	4188678.82	112.26921	(15031407)	650773.65	4188706.54	111.58786	(15031407)
650778.27	4188726.34	112.24809	(13030120)	650805.33	4188805.53	108.32082	(15021922)
650806.65	4188824.01	107.72003	(15021922)	650811.27	4188843.81	106.94280	(14120704)
650814.57	4188862.29	104.16817	(14120704)	650846.24	4188924.98	100.72577	(13121617)
650850.86	4188951.38	102.20789	(13121617)	650854.82	4188976.46	100.51517	(13121617)
650698.00	4188307.32	117.80830	(17122519)	650692.60	4188291.80	119.15393	(17042121)
650724.82	4189245.80	98.27322	(14011617)	650726.07	4189273.37	95.22164	(14012019)
650856.27	4189006.30	97.96322	(13122521)	650857.23	4189022.60	96.74574	(13122521)
650859.15	4189041.29	95.29438	(15120204)	650859.15	4189058.54	96.46522	(17121119)
650860.58	4189076.28	96.72776	(17121119)	650861.54	4189094.49	95.53814	(17121119)
650857.71	4189113.19	93.94238	(17123020)	650847.16	4189118.94	94.76360	(17123020)
650848.12	4189134.76	94.54672	(13020618)	650850.04	4189155.37	93.80498	(13020618)
650851.48	4189171.66	92.49820	(17013020)	650853.87	4189184.12	92.83986	(17013020)
650856.75	4189199.46	92.77264	(17013020)	650857.71	4189213.36	92.30042	(17013020)
650860.58	4189226.30	91.41246	(17013020)	650862.50	4189242.60	91.17237	(17042922)
650865.38	4189258.42	91.23960	(17042922)	650867.77	4189275.19	90.71978	(17042922)
650868.73	4189291.49	90.17105	(17122923)	650872.09	4189309.23	89.63793	(17122923)
650874.00	4189325.04	88.67502	(17122923)	650875.92	4189340.38	87.42111	(14011617)
650878.80	4189355.24	87.64002	(14011617)	650881.19	4189373.45	87.41297	(14011617)
650884.55	4189390.71	86.57456	(14011617)	650888.86	4189407.01	85.36170	(14011617)
650889.82	4189427.14	83.18969	(17122824)	650891.74	4189443.43	82.22469	(17122824)
650895.09	4189461.17	81.52598	(17120704)	650898.45	4189475.55	81.03425	(13121517)
650898.45	4189489.93	80.94226	(13121517)	650902.28	4189504.31	80.40171	(13121517)
650709.41	4188344.56	117.96991	(17121522)	650722.45	4188284.03	116.91959	(17042121)
650745.73	4188280.30	114.85481	(17042121)	650735.49	4188223.50	113.45516	(14021320)
650721.52	4188167.62	113.28298	(15021623)	650525.76	4188133.34	130.62550	(14043004)
651125.76	4188133.34	84.14005	(16010723)	649125.76	4188183.34	134.69970	(17032401)
649225.76	4188183.34	145.25828	(17121220)	649325.76	4188183.34	162.12048	(17021408)
649425.76	4188183.34	173.18451	(16021508)	649525.76	4188183.34	210.45002	(13010809)
649625.76	4188183.34	247.24705	(14010609)	649725.76	4188183.34	272.88651	(17041807)
649825.76	4188183.34	276.18815	(14032718)	649925.76	4188183.34	264.65607	(16121309)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK1 \*\*\*  
 INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
650025.76	4188183.34	222.92667	(17021319)	650125.76	4188183.34	203.49206	(14020517)
650225.76	4188183.34	192.93982	(17021419)	650325.76	4188183.34	172.89382	(17121518)
650425.76	4188183.34	149.72295	(17030921)	650525.76	4188183.34	133.66557	(17122508)
650625.76	4188183.34	121.45615	(13042023)	650725.76	4188183.34	113.59592	(15021623)

650825.76	4188183.34	103.51942	(14021320)	651125.76	4188183.34	89.69931	(14012017)
649125.76	4188233.34	137.49435	(17121824)	649225.76	4188233.34	145.15472	(14012807)
649325.76	4188233.34	160.20011	(17032324)	649425.76	4188233.34	180.20955	(17021408)
649525.76	4188233.34	216.43325	(14120809)	649625.76	4188233.34	226.47257	(13010809)
649725.76	4188233.34	283.42748	(14041207)	649825.76	4188233.34	293.64223	(16040707)
649925.76	4188233.34	305.17061	(16121309)	650025.76	4188233.34	274.83175	(15102117)
650125.76	4188233.34	208.06999	(15100119)	650225.76	4188233.34	196.23556	(17121518)
650325.76	4188233.34	171.45695	(17030921)	650425.76	4188233.34	147.70935	(17102905)
650525.76	4188233.34	135.34571	(17020321)	650625.76	4188233.34	123.59535	(17112222)
650725.76	4188233.34	114.13509	(14021320)	650825.76	4188233.34	106.93261	(17042121)
651125.76	4188233.34	86.84401	(14012017)	649125.76	4188283.34	135.01347	(15021608)
649225.76	4188283.34	153.54797	(17020501)	649325.76	4188283.34	166.66117	(17031301)
649425.76	4188283.34	186.62875	(15010709)	649525.76	4188283.34	194.27778	(15120724)
649625.76	4188283.34	264.14331	(14120809)	649725.76	4188283.34	311.81321	(14010609)
649825.76	4188283.34	369.91267	(14031818)	649925.76	4188283.34	374.67554	(17032005)
650025.76	4188283.34	325.59870	(14020517)	650125.76	4188283.34	233.83996	(14010409)
650225.76	4188283.34	189.97062	(17030921)	650325.76	4188283.34	172.88324	(17021005)
650425.76	4188283.34	154.34194	(17112222)	650525.76	4188283.34	136.21934	(16021224)
650625.76	4188283.34	125.46349	(17042121)	650725.76	4188283.34	116.64532	(17042121)
650825.76	4188283.34	107.31308	(17122519)	651125.76	4188283.34	87.89814	(17122519)
649125.76	4188333.34	138.12205	(17031806)	649225.76	4188333.34	149.69539	(17122606)
649325.76	4188333.34	164.69362	(15021608)	649425.76	4188333.34	181.09865	(15021608)
649525.76	4188333.34	233.23646	(15010709)	649625.76	4188333.34	231.75122	(17020105)
649725.76	4188333.34	332.53002	(16122521)	649825.76	4188333.34	495.85118	(16123109)
649925.76	4188333.34	509.20097	(16022620)	650025.76	4188333.34	365.19158	(15091218)
650125.76	4188333.34	247.41415	(13011309)	650225.76	4188333.34	201.60686	(14091307)
650325.76	4188333.34	176.95772	(14091921)	650425.76	4188333.34	157.04235	(15072004)
650525.76	4188333.34	138.15587	(14021608)	650625.76	4188333.34	126.65606	(17121522)
650725.76	4188333.34	116.90428	(17121522)	650825.76	4188333.34	107.66229	(17122719)
651125.76	4188333.34	87.68220	(17122621)	649125.76	4188383.34	140.77260	(17122404)
649225.76	4188383.34	151.60565	(17122404)	649325.76	4188383.34	165.59245	(15030924)
649425.76	4188383.34	194.25976	(16122709)	649525.76	4188383.34	242.02415	(16122709)
649625.76	4188383.34	307.72745	(16020517)	649725.76	4188383.34	395.24626	(17020119)
649825.76	4188383.34	738.41454	(15091303)	649925.76	4188383.34	759.48570	(14043019)
650025.76	4188383.34	362.96939	(17080402)	650125.76	4188383.34	259.56673	(14091307)
650225.76	4188383.34	202.88920	(17080204)	650325.76	4188383.34	179.70443	(14073004)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 154

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	160.24344	(17021219)	650525.76	4188383.34	142.20391	(17021219)
650625.76	4188383.34	127.54513	(14051320)	650725.76	4188383.34	116.04020	(13021621)

650825.76	4188383.34	109.39816	(17122621)	651125.76	4188383.34	91.23611	(17122621)
649125.76	4188433.34	135.42993	(17120902)	649225.76	4188433.34	149.00608	(17120902)
649325.76	4188433.34	164.38215	(16122909)	649425.76	4188433.34	197.93410	(16122909)
649525.76	4188433.34	237.45574	(16122909)	649625.76	4188433.34	266.05372	(16122909)
649725.76	4188433.34	408.36048	(15022118)	649825.76	4188433.34	1003.41947	(16050119)
649925.76	4188433.34	986.80784	(17061921)	650025.76	4188433.34	373.67767	(15092119)
650125.76	4188433.34	239.76893	(15102617)	650225.76	4188433.34	202.22187	(15043021)
650325.76	4188433.34	175.75728	(17030923)	650425.76	4188433.34	157.02710	(17091205)
650525.76	4188433.34	139.86120	(17091205)	650625.76	4188433.34	125.27780	(15021422)
650725.76	4188433.34	113.93835	(15021422)	650825.76	4188433.34	106.73539	(16010203)
651125.76	4188433.34	88.11936	(16010203)	649125.76	4188483.34	141.35521	(17121123)
649225.76	4188483.34	155.17792	(17121123)	649325.76	4188483.34	169.61293	(17031724)
649425.76	4188483.34	206.56859	(17013109)	649525.76	4188483.34	241.53396	(17013109)
649625.76	4188483.34	293.98748	(16123009)	649725.76	4188483.34	411.31880	(17021504)
650425.76	4188483.34	161.72438	(17021220)	650525.76	4188483.34	144.88674	(17021220)
650625.76	4188483.34	130.71552	(15121617)	650725.76	4188483.34	119.27140	(17020901)
650825.76	4188483.34	111.09010	(17020901)	651125.76	4188483.34	91.43077	(15011123)
649125.76	4188533.34	141.06231	(17021502)	649225.76	4188533.34	155.11705	(17021502)
649325.76	4188533.34	170.51565	(17040504)	649425.76	4188533.34	189.09594	(15013009)
649525.76	4188533.34	222.56202	(17122509)	649625.76	4188533.34	252.30443	(13020309)
649725.76	4188533.34	327.47694	(17122809)	650425.76	4188533.34	163.74970	(14120819)
650525.76	4188533.34	146.46830	(14122318)	650625.76	4188533.34	131.79889	(14122318)
650725.76	4188533.34	118.69171	(14021603)	650825.76	4188533.34	109.73784	(14021603)
651125.76	4188533.34	92.74586	(17020901)	649125.76	4188583.34	137.91957	(17120103)
649225.76	4188583.34	152.89995	(17013004)	649325.76	4188583.34	167.39705	(17011123)
649425.76	4188583.34	194.02935	(17022608)	649525.76	4188583.34	209.15484	(14030818)
649625.76	4188583.34	265.16277	(17122809)	649725.76	4188583.34	303.16319	(17103108)
650425.76	4188583.34	156.24542	(14022323)	650525.76	4188583.34	143.91611	(14011919)
650625.76	4188583.34	129.43363	(14120819)	650725.76	4188583.34	118.19489	(14120819)
650825.76	4188583.34	111.78375	(14021120)	651125.76	4188583.34	91.54458	(14021603)
649125.76	4188633.34	136.85794	(17011123)	649225.76	4188633.34	152.85115	(17011123)
649325.76	4188633.34	165.94873	(17031723)	649425.76	4188633.34	179.44262	(14030818)
649525.76	4188633.34	216.72805	(17040507)	649625.76	4188633.34	241.02725	(13103108)
649725.76	4188633.34	274.27132	(14122709)	649825.76	4188633.34	280.26710	(14103107)
649925.76	4188633.34	305.80331	(15020317)	650025.76	4188633.34	238.61111	(17111508)
650125.76	4188633.34	211.84641	(15022708)	650225.76	4188633.34	193.94954	(15031322)
650325.76	4188633.34	175.12640	(15022308)	650425.76	4188633.34	158.85192	(16041723)
650525.76	4188633.34	142.49448	(15120623)	650625.76	4188633.34	128.42609	(13121417)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 155

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

-----

650725.76	4188633.34	115.81095	(14011919)	650825.76	4188633.34	109.24280	(14010519)
651125.76	4188633.34	92.52891	(14021120)	649125.76	4188683.34	139.31975	(17020508)
649225.76	4188683.34	144.54073	(17121121)	649325.76	4188683.34	158.87002	(17020721)
649425.76	4188683.34	181.01063	(17040507)	649525.76	4188683.34	190.29173	(13091907)
649625.76	4188683.34	204.95943	(16022308)	649725.76	4188683.34	239.37147	(14032818)
649825.76	4188683.34	251.44521	(15103117)	649925.76	4188683.34	280.01949	(14122609)
650025.76	4188683.34	249.62685	(17102317)	650125.76	4188683.34	195.36458	(13100518)
650225.76	4188683.34	187.72006	(17061906)	650325.76	4188683.34	171.67004	(15031322)
650425.76	4188683.34	151.11301	(14022020)	650525.76	4188683.34	140.12078	(16041723)
650625.76	4188683.34	125.12724	(15021222)	650725.76	4188683.34	115.95284	(15031407)
650825.76	4188683.34	108.61943	(14021501)	651125.76	4188683.34	90.01037	(14010519)
649125.76	4188733.34	134.58207	(17121121)	649225.76	4188733.34	142.51584	(17020721)
649325.76	4188733.34	153.07132	(17030206)	649425.76	4188733.34	167.79331	(13091907)
649525.76	4188733.34	184.54837	(15091220)	649625.76	4188733.34	190.27275	(14122019)
649725.76	4188733.34	225.83642	(16121409)	649825.76	4188733.34	214.46976	(16092802)
649925.76	4188733.34	259.37511	(14122609)	650025.76	4188733.34	204.60744	(13092819)
650125.76	4188733.34	209.49292	(17040807)	650225.76	4188733.34	177.06588	(17042923)
650325.76	4188733.34	163.27457	(16092620)	650425.76	4188733.34	150.05547	(14021304)
650525.76	4188733.34	134.89972	(14022020)	650625.76	4188733.34	122.82811	(13011820)
650725.76	4188733.34	114.73545	(14012318)	650825.76	4188733.34	107.93398	(13030120)
651125.76	4188733.34	89.67481	(14021501)	649125.76	4188783.34	128.30771	(17122524)
649225.76	4188783.34	137.11948	(17030206)	649325.76	4188783.34	146.33279	(15100104)
649425.76	4188783.34	155.32724	(15102307)	649525.76	4188783.34	172.35205	(14120419)
649625.76	4188783.34	197.58269	(16110408)	649725.76	4188783.34	219.34604	(14120909)
649825.76	4188783.34	197.58198	(14122220)	649925.76	4188783.34	224.80624	(14122609)
650025.76	4188783.34	190.25457	(16053106)	650125.76	4188783.34	186.30731	(16092007)
650225.76	4188783.34	171.71067	(17011918)	650325.76	4188783.34	158.03959	(17012922)
650425.76	4188783.34	146.18037	(17122322)	650525.76	4188783.34	133.02837	(14021304)
650625.76	4188783.34	120.19077	(14010718)	650725.76	4188783.34	113.99923	(15021922)
650825.76	4188783.34	108.27315	(14012318)	651125.76	4188783.34	89.89629	(15120117)
649125.76	4188833.34	122.25755	(17030206)	649225.76	4188833.34	129.01131	(15100104)
649325.76	4188833.34	136.46207	(14122717)	649425.76	4188833.34	160.98956	(15091220)
649525.76	4188833.34	160.09276	(16103120)	649625.76	4188833.34	181.50689	(13081824)
649725.76	4188833.34	191.91214	(14120909)	649825.76	4188833.34	184.11288	(16031106)
649925.76	4188833.34	190.36505	(17120719)	650025.76	4188833.34	186.10597	(13022508)
650125.76	4188833.34	173.65823	(15092122)	650225.76	4188833.34	163.87018	(13121017)
650325.76	4188833.34	150.53273	(15030420)	650425.76	4188833.34	141.83339	(13120224)
650525.76	4188833.34	130.65696	(13020120)	650625.76	4188833.34	119.79409	(14010518)
650725.76	4188833.34	109.47467	(14021423)	650825.76	4188833.34	106.31784	(14120704)
651125.76	4188833.34	87.67753	(15010823)	649125.76	4188883.34	115.72926	(14102501)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 156

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK1 \*\*\*

INCLUDING SOURCE(S): STCK1 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

(YYMMDDHH)

649225.76	4188883.34	127.18355	(13081903)	649325.76	4188883.34	135.85344	(15102307)
649425.76	4188883.34	148.64027	(14120419)	649525.76	4188883.34	167.10897	(15091121)
649625.76	4188883.34	165.99202	(15011809)	649725.76	4188883.34	173.34600	(15020721)
649825.76	4188883.34	173.32518	(16022401)	649925.76	4188883.34	178.75694	(17120719)
650025.76	4188883.34	175.59265	(13022508)	650125.76	4188883.34	169.61460	(17121820)
650225.76	4188883.34	164.27440	(15020318)	650325.76	4188883.34	150.78425	(17011918)
650425.76	4188883.34	137.47419	(16011924)	650525.76	4188883.34	126.53144	(17122322)
650625.76	4188883.34	116.38651	(13020120)	650725.76	4188883.34	111.42000	(13121617)
650825.76	4188883.34	102.29676	(13121319)	651125.76	4188883.34	88.65577	(14012318)
650125.76	4188933.34	156.76519	(17031007)	650225.76	4188933.34	152.71560	(17031107)
650325.76	4188933.34	141.81415	(13121017)	650425.76	4188933.34	130.00128	(13040320)
650525.76	4188933.34	120.83847	(17122308)	650625.76	4188933.34	117.29395	(17122322)
650725.76	4188933.34	107.39888	(15012906)	650825.76	4188933.34	103.93127	(13121617)
651125.76	4188933.34	89.67730	(14011317)	650425.76	4188983.34	130.25939	(17011918)
650525.76	4188983.34	119.37113	(17042922)	650625.76	4188983.34	113.53813	(13020618)
650725.76	4188983.34	106.78979	(17121119)	650825.76	4188983.34	100.25479	(15012906)
651125.76	4188983.34	85.80590	(14120704)	650525.76	4189033.34	115.99172	(14011617)
650625.76	4189033.34	110.21829	(13030119)	650725.76	4189033.34	104.55330	(17123020)
650825.76	4189033.34	98.54495	(17121119)	651125.76	4189033.34	83.05367	(13121319)
650525.76	4189083.34	113.38124	(17022603)	650625.76	4189083.34	109.44901	(17042922)
650725.76	4189083.34	101.53741	(13020618)	650825.76	4189083.34	96.35756	(17121119)
651125.76	4189083.34	84.00131	(13121617)	650525.76	4189133.34	110.98734	(17120124)
650625.76	4189133.34	107.66777	(14011617)	650725.76	4189133.34	102.01235	(17042922)
650825.76	4189133.34	95.98627	(13020618)	651125.76	4189133.34	82.03655	(13121617)
650781.98	4189510.65	80.81323	(16122921)	650760.33	4189397.50	88.77148	(17122321)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 157

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK10 \*\*\*  
INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649676.34	4188314.55	178.76069	(15041802)	649629.66	4188294.84	174.19640	(15120820)
649810.15	4188312.48	202.94504	(17022208)	649364.10	4188360.20	142.61564	(17121220)
649327.80	4188355.01	137.43747	(17121220)	649380.70	4188758.52	151.22960	(17120103)
650495.81	4188841.51	169.02262	(14012520)	650597.47	4188832.17	157.60946	(16041723)
650536.27	4188878.85	163.65916	(15011517)	650577.76	4188877.81	152.37446	(14022020)
650602.66	4188860.18	152.15272	(15022308)	650610.95	4188880.93	148.46908	(13020422)
650638.10	4188858.53	149.08339	(16041723)	650664.10	4188331.03	133.59118	(14043004)
650668.72	4188350.83	136.22198	(17030921)	650677.96	4188379.86	134.67486	(17122508)
650699.74	4188414.84	134.02127	(17020321)	650758.47	4188658.36	135.88529	(14012317)
650765.73	4188678.82	133.49111	(15121617)	650773.65	4188706.54	133.21023	(17021220)
650778.27	4188726.34	133.29630	(14122318)	650805.33	4188805.53	126.82464	(14011919)

650806.65	4188824.01	127.23293	(13121417)	650811.27	4188843.81	123.65499	(14012623)
650814.57	4188862.29	124.26489	(15120623)	650846.24	4188924.98	118.47717	(14012318)
650850.86	4188951.38	116.58474	(15021922)	650854.82	4188976.46	116.36756	(14120704)
650698.00	4188307.32	128.13416	(15062502)	650692.60	4188291.80	130.21512	(17121819)
650724.82	4189245.80	112.31139	(14040724)	650726.07	4189273.37	113.01116	(14011617)
650856.27	4189006.30	112.93033	(16100822)	650857.23	4189022.60	113.75099	(14010718)
650859.15	4189041.29	112.83137	(14010718)	650859.15	4189058.54	113.72325	(14010518)
650860.58	4189076.28	113.35677	(14010518)	650861.54	4189094.49	110.50763	(13121617)
650857.71	4189113.19	109.55761	(15012906)	650847.16	4189118.94	110.02675	(13011920)
650848.12	4189134.76	108.99310	(17122322)	650850.04	4189155.37	110.63648	(17122322)
650851.48	4189171.66	109.17324	(17122322)	650853.87	4189184.12	107.08324	(17121119)
650856.75	4189199.46	107.42885	(17123020)	650857.71	4189213.36	107.29371	(13020618)
650860.58	4189226.30	107.22867	(13020618)	650862.50	4189242.60	106.13992	(13020618)
650865.38	4189258.42	103.92277	(13020618)	650867.77	4189275.19	102.84000	(17013020)
650868.73	4189291.49	102.18352	(13030119)	650872.09	4189309.23	103.25295	(17042922)
650874.00	4189325.04	103.56802	(17042922)	650875.92	4189340.38	102.99246	(17042922)
650878.80	4189355.24	101.67818	(17042922)	650881.19	4189373.45	99.92456	(17122923)
650884.55	4189390.71	98.90699	(14011617)	650888.86	4189407.01	99.28802	(14011617)
650889.82	4189427.14	99.14982	(14011617)	650891.74	4189443.43	98.03899	(14011617)
650895.09	4189461.17	96.08552	(14011617)	650898.45	4189475.55	94.57557	(14012019)
650898.45	4189489.93	93.14958	(14012019)	650902.28	4189504.31	92.81865	(13121517)
650709.41	4188344.56	128.96190	(15091223)	650722.45	4188284.03	124.24268	(17121819)
650745.73	4188280.30	122.46551	(15062502)	650735.49	4188223.50	125.56677	(17011307)
650721.52	4188167.62	121.73662	(15021221)	650525.76	4188133.34	147.55368	(17120117)
651125.76	4188133.34	92.93125	(17122619)	649125.76	4188183.34	108.97150	(15021821)
649225.76	4188183.34	115.31618	(15022202)	649325.76	4188183.34	126.78449	(15021806)
649425.76	4188183.34	140.51936	(14021403)	649525.76	4188183.34	145.97230	(17020104)
649625.76	4188183.34	160.16740	(13010518)	649725.76	4188183.34	172.48158	(17122817)
649825.76	4188183.34	179.30760	(14041420)	649925.76	4188183.34	184.43746	(15032204)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 158

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
650025.76	4188183.34	186.48607	(16020518)	650125.76	4188183.34	195.10433	(14121116)
650225.76	4188183.34	177.04314	(14022602)	650325.76	4188183.34	169.13787	(17011805)
650425.76	4188183.34	156.75173	(17122517)	650525.76	4188183.34	149.28656	(17013019)
650625.76	4188183.34	140.01208	(17031320)	650725.76	4188183.34	124.92964	(15021221)
650825.76	4188183.34	113.80097	(17011307)	651125.76	4188183.34	94.01558	(17121906)
649125.76	4188233.34	113.89633	(17021420)	649225.76	4188233.34	118.14454	(17021408)
649325.76	4188233.34	127.18473	(15022202)	649425.76	4188233.34	139.59224	(17020108)
649525.76	4188233.34	158.04424	(17020902)	649625.76	4188233.34	163.53692	(15120519)
649725.76	4188233.34	178.48088	(13022418)	649825.76	4188233.34	187.35496	(17041807)



649925.76	4188233.34	196.91394	(15040407)	650025.76	4188233.34	194.48707	(13032321)
650125.76	4188233.34	202.89617	(14121116)	650225.76	4188233.34	188.72111	(14021520)
650325.76	4188233.34	174.10265	(17041904)	650425.76	4188233.34	172.92690	(17120117)
650525.76	4188233.34	151.34038	(16021119)	650625.76	4188233.34	136.35992	(15021221)
650725.76	4188233.34	125.89537	(17041504)	650825.76	4188233.34	112.86451	(15062502)
651125.76	4188233.34	94.33740	(17020824)	649125.76	4188283.34	113.01046	(17121220)
649225.76	4188283.34	121.60369	(17040104)	649325.76	4188283.34	133.51103	(17021408)
649425.76	4188283.34	143.64182	(16021508)	649525.76	4188283.34	156.44735	(17020108)
649625.76	4188283.34	168.91706	(15120820)	649725.76	4188283.34	192.10422	(14010609)
649825.76	4188283.34	191.21098	(17041924)	649925.76	4188283.34	209.16705	(13090907)
650025.76	4188283.34	207.87533	(16040207)	650125.76	4188283.34	205.98672	(17021418)
650225.76	4188283.34	196.55059	(17010419)	650325.76	4188283.34	189.87453	(17122517)
650425.76	4188283.34	168.55193	(17012607)	650525.76	4188283.34	158.58389	(17031320)
650625.76	4188283.34	142.01427	(16021201)	650725.76	4188283.34	123.69023	(15062502)
650825.76	4188283.34	117.40964	(17122619)	651125.76	4188283.34	94.63391	(14120721)
649125.76	4188333.34	117.00405	(17122522)	649225.76	4188333.34	121.68520	(17032401)
649325.76	4188333.34	135.82348	(17121220)	649425.76	4188333.34	151.58062	(17021408)
649525.76	4188333.34	161.16518	(13041820)	649625.76	4188333.34	180.33452	(13010809)
649725.76	4188333.34	187.72026	(16042106)	649825.76	4188333.34	207.72912	(17022208)
649925.76	4188333.34	217.28975	(16091007)	650025.76	4188333.34	233.92773	(17090907)
650125.76	4188333.34	228.07294	(13030408)	650225.76	4188333.34	204.19642	(15092807)
650325.76	4188333.34	196.54987	(17120117)	650425.76	4188333.34	184.20204	(17011317)
650525.76	4188333.34	161.57229	(14043023)	650625.76	4188333.34	140.73543	(17121819)
650725.76	4188333.34	127.19284	(15091223)	650825.76	4188333.34	118.85502	(17020824)
651125.76	4188333.34	93.98595	(14022504)	649125.76	4188383.34	117.44558	(17121824)
649225.76	4188383.34	126.46129	(17021006)	649325.76	4188383.34	139.49317	(17032401)
649425.76	4188383.34	150.50439	(17121501)	649525.76	4188383.34	172.03596	(17021408)
649625.76	4188383.34	177.25646	(16020801)	649725.76	4188383.34	206.26321	(13010809)
649825.76	4188383.34	245.56156	(14010609)	649925.76	4188383.34	259.56189	(17041807)
650025.76	4188383.34	266.93631	(17090907)	650125.76	4188383.34	270.35363	(13030408)
650225.76	4188383.34	223.35665	(15102117)	650325.76	4188383.34	196.73949	(14100518)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 159

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	182.17046	(16021519)	650525.76	4188383.34	160.23269	(17121819)
650625.76	4188383.34	142.87368	(17030921)	650725.76	4188383.34	129.68189	(17020824)
650825.76	4188383.34	119.05343	(14060905)	651125.76	4188383.34	95.57968	(16012901)
649125.76	4188433.34	114.21065	(17012803)	649225.76	4188433.34	131.77605	(17020501)
649325.76	4188433.34	141.29022	(17121824)	649425.76	4188433.34	153.33335	(17032401)
649525.76	4188433.34	168.89003	(17041124)	649625.76	4188433.34	192.47669	(17021408)
649725.76	4188433.34	218.84824	(13122309)	649825.76	4188433.34	244.67964	(14010609)

649925.76	4188433.34	326.74505	(17041807)	650025.76	4188433.34	303.90740	(14041222)
650125.76	4188433.34	289.25341	(15032620)	650225.76	4188433.34	286.31215	(14020517)
650325.76	4188433.34	207.70939	(16052906)	650425.76	4188433.34	179.45582	(17121819)
650525.76	4188433.34	160.77669	(14041424)	650625.76	4188433.34	145.35414	(13021319)
650725.76	4188433.34	130.42962	(17112222)	650825.76	4188433.34	120.71319	(14021320)
651125.76	4188433.34	98.90568	(14012017)	649125.76	4188483.34	115.32919	(13033006)
649225.76	4188483.34	128.37298	(17012803)	649325.76	4188483.34	140.61340	(15021608)
649425.76	4188483.34	159.34654	(17020501)	649525.76	4188483.34	171.97044	(17031301)
649625.76	4188483.34	194.83810	(15010709)	649725.76	4188483.34	223.06682	(14120809)
650425.76	4188483.34	182.45045	(13081801)	650525.76	4188483.34	165.93690	(17021401)
650625.76	4188483.34	148.26375	(17112222)	650725.76	4188483.34	130.81648	(16021224)
650825.76	4188483.34	122.83295	(17042121)	651125.76	4188483.34	99.81290	(17122519)
649125.76	4188533.34	115.96756	(13012303)	649225.76	4188533.34	127.83010	(17031806)
649325.76	4188533.34	142.73529	(17031806)	649425.76	4188533.34	155.52839	(17122606)
649525.76	4188533.34	171.73868	(15021608)	649625.76	4188533.34	189.04563	(17011802)
649725.76	4188533.34	255.05822	(15010709)	650425.76	4188533.34	195.93027	(14091307)
650525.76	4188533.34	168.87201	(15072004)	650625.76	4188533.34	150.55589	(14021608)
650725.76	4188533.34	133.08836	(17121522)	650825.76	4188533.34	123.96415	(17121522)
651125.76	4188533.34	96.61626	(17122719)	649125.76	4188583.34	119.60630	(17122404)
649225.76	4188583.34	132.30064	(17122404)	649325.76	4188583.34	145.26408	(17122404)
649425.76	4188583.34	156.66171	(17122404)	649525.76	4188583.34	172.27151	(14122109)
649625.76	4188583.34	209.33834	(16122709)	649725.76	4188583.34	260.06192	(16122709)
650425.76	4188583.34	194.43582	(17080204)	650525.76	4188583.34	172.58109	(17021219)
650625.76	4188583.34	153.98113	(17021219)	650725.76	4188583.34	136.23698	(14051320)
650825.76	4188583.34	122.73128	(14051320)	651125.76	4188583.34	100.91130	(17122621)
649125.76	4188633.34	118.08281	(17123022)	649225.76	4188633.34	129.24647	(17120902)
649325.76	4188633.34	142.65390	(17120902)	649425.76	4188633.34	156.89993	(17120902)
649525.76	4188633.34	181.17947	(17012309)	649625.76	4188633.34	216.91449	(17012309)
649725.76	4188633.34	254.77416	(17012309)	649825.76	4188633.34	298.30853	(17010702)
649925.76	4188633.34	531.80111	(15022118)	650025.76	4188633.34	118.63302	(13020110)
650125.76	4188633.34	660.16181	(16031718)	650225.76	4188633.34	302.98276	(16092518)
650325.76	4188633.34	221.23942	(15090821)	650425.76	4188633.34	193.05124	(13031019)
650525.76	4188633.34	169.64172	(13031019)	650625.76	4188633.34	150.56494	(17013023)

\*\*\* AERMOD - VERSION 1919 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\* 15:03:05

PAGE 160

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK10 \*\*\*  
 INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
650725.76	4188633.34	133.80937	(14012317)	650825.76	4188633.34	121.20671	(15021422)
651125.76	4188633.34	98.74180	(16010203)	649125.76	4188683.34	120.39216	(17121123)
649225.76	4188683.34	133.36485	(17121123)	649325.76	4188683.34	146.57744	(17121123)
649425.76	4188683.34	159.31762	(17012801)	649525.76	4188683.34	185.12529	(17013109)
649625.76	4188683.34	221.85860	(17013109)	649725.76	4188683.34	245.57900	(15013009)

649825.76	4188683.34	311.34596	(16123009)	649925.76	4188683.34	492.10688	(17041619)
650025.76	4188683.34	943.34747	(15031420)	650125.76	4188683.34	561.92857	(17022702)
650225.76	4188683.34	364.06876	(15120709)	650325.76	4188683.34	269.76219	(13040507)
650425.76	4188683.34	194.87648	(16053006)	650525.76	4188683.34	174.27063	(17022708)
650625.76	4188683.34	156.40685	(17021220)	650725.76	4188683.34	140.32907	(17021220)
650825.76	4188683.34	125.63997	(15121617)	651125.76	4188683.34	101.28657	(17020901)
649125.76	4188733.34	119.14384	(17120904)	649225.76	4188733.34	131.89215	(17021502)
649325.76	4188733.34	146.89575	(17021502)	649425.76	4188733.34	159.22344	(17040504)
649525.76	4188733.34	172.09447	(17040504)	649625.76	4188733.34	198.61932	(15122909)
649725.76	4188733.34	233.71530	(17122509)	649825.76	4188733.34	298.32049	(13020309)
649925.76	4188733.34	388.38967	(17020402)	650025.76	4188733.34	576.58768	(17020924)
650125.76	4188733.34	432.89271	(17010119)	650225.76	4188733.34	338.95805	(17122709)
650325.76	4188733.34	231.23284	(16012717)	650425.76	4188733.34	186.64529	(14012521)
650525.76	4188733.34	169.09960	(13010317)	650625.76	4188733.34	157.64373	(14120819)
650725.76	4188733.34	141.29049	(14122318)	650825.76	4188733.34	127.15721	(14122318)
651125.76	4188733.34	101.03651	(17020901)	649125.76	4188783.34	120.43507	(17010624)
649225.76	4188783.34	132.04769	(17120103)	649325.76	4188783.34	141.90520	(17013004)
649425.76	4188783.34	155.27872	(17013004)	649525.76	4188783.34	174.99714	(17022608)
649625.76	4188783.34	187.32264	(17031723)	649725.76	4188783.34	228.25624	(13020309)
649825.76	4188783.34	264.22967	(16030608)	649925.76	4188783.34	338.07521	(14122709)
650025.76	4188783.34	391.63009	(16092419)	650125.76	4188783.34	337.91712	(17010123)
650225.76	4188783.34	266.85023	(15022708)	650325.76	4188783.34	233.61616	(17122709)
650425.76	4188783.34	205.22846	(16012717)	650525.76	4188783.34	168.13061	(15120623)
650625.76	4188783.34	152.11667	(14022323)	650725.76	4188783.34	137.95429	(14011919)
650825.76	4188783.34	124.94369	(14120819)	651125.76	4188783.34	101.31389	(14021120)
649125.76	4188833.34	119.24475	(17121720)	649225.76	4188833.34	128.60939	(17013004)
649325.76	4188833.34	145.94512	(17011123)	649425.76	4188833.34	160.21899	(17020508)
649525.76	4188833.34	170.51010	(17032420)	649625.76	4188833.34	193.57251	(17020721)
649725.76	4188833.34	216.32473	(15010309)	649825.76	4188833.34	239.60614	(14040707)
649925.76	4188833.34	316.97160	(14032818)	650025.76	4188833.34	283.01233	(16092419)
650125.76	4188833.34	250.35029	(17010917)	650225.76	4188833.34	237.05558	(17040807)
650325.76	4188833.34	211.32562	(17091207)	650425.76	4188833.34	182.29635	(15031322)
650525.76	4188833.34	170.43225	(15022308)	650625.76	4188833.34	150.66680	(16041723)
650725.76	4188833.34	136.40480	(15120623)	650825.76	4188833.34	124.47724	(13121417)
651125.76	4188833.34	100.20365	(14010519)	649125.76	4188883.34	119.15250	(17011123)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 161

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK10 \*\*\*

INCLUDING SOURCE(S): STCK10 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649225.76	4188883.34	129.42063	(17020508)	649325.76	4188883.34	138.11436	(17020508)
649425.76	4188883.34	153.32099	(17122118)	649525.76	4188883.34	173.21301	(17020721)
649625.76	4188883.34	175.77292	(15020908)	649725.76	4188883.34	199.07239	(15012017)

649825.76	4188883.34	204.05524	(15021523)	649925.76	4188883.34	276.89721	(14120909)
650025.76	4188883.34	242.52591	(15091607)	650125.76	4188883.34	233.29626	(14010309)
650225.76	4188883.34	213.56075	(17102317)	650325.76	4188883.34	198.28214	(14011517)
650425.76	4188883.34	180.00588	(13122709)	650525.76	4188883.34	162.13210	(16021207)
650625.76	4188883.34	146.50895	(13020422)	650725.76	4188883.34	135.55109	(16041723)
650825.76	4188883.34	122.00180	(13030120)	651125.76	4188883.34	99.55817	(15021205)
650125.76	4188933.34	231.81283	(14010309)	650225.76	4188933.34	215.10157	(17102317)
650325.76	4188933.34	185.40981	(14021523)	650425.76	4188933.34	172.54606	(17012922)
650525.76	4188933.34	157.86753	(13020120)	650625.76	4188933.34	144.90478	(16021207)
650725.76	4188933.34	130.22458	(14022020)	650825.76	4188933.34	118.85391	(17122323)
651125.76	4188933.34	99.56279	(15120117)	650425.76	4188983.34	165.47657	(15030420)
650525.76	4188983.34	154.37916	(13120224)	650625.76	4188983.34	141.78991	(13020120)
650725.76	4188983.34	128.82559	(16021207)	650825.76	4188983.34	116.68972	(16100822)
651125.76	4188983.34	98.04731	(13030120)	650525.76	4189033.34	148.35604	(16011924)
650625.76	4189033.34	136.75026	(17122322)	650725.76	4189033.34	125.13998	(13020120)
650825.76	4189033.34	115.69945	(14010518)	651125.76	4189033.34	98.74400	(14012318)
650525.76	4189083.34	143.43770	(17011918)	650625.76	4189083.34	131.84112	(17122308)
650725.76	4189083.34	126.42960	(17122322)	650825.76	4189083.34	112.44874	(15012906)
651125.76	4189083.34	97.03703	(15021922)	650525.76	4189133.34	140.91365	(17121323)
650625.76	4189133.34	127.03754	(13012505)	650725.76	4189133.34	119.36874	(13020618)
650825.76	4189133.34	113.41051	(17122322)	651125.76	4189133.34	92.59077	(17011506)
650781.98	4189510.65	95.41392	(16122921)	650760.33	4189397.50	103.41430	(14011519)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 162

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK11 \*\*\*  
INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
649676.34	4188314.55	171.64587	(14021403)	649629.66	4188294.84	159.51763	(16032106)
649810.15	4188312.48	197.49834	(14010609)	649364.10	4188360.20	130.88938	(17032401)
649327.80	4188355.01	127.40930	(17032401)	649380.70	4188758.52	141.22156	(17120103)
650495.81	4188841.51	190.00637	(15031322)	650597.47	4188832.17	173.24760	(15022308)
650536.27	4188878.85	175.53603	(15101222)	650577.76	4188877.81	171.75567	(15031322)
650602.66	4188860.18	168.00072	(15011517)	650610.95	4188880.93	163.55192	(15011517)
650638.10	4188858.53	158.50347	(13020422)	650664.10	4188331.03	153.32519	(17121518)
650668.72	4188350.83	150.72090	(17121819)	650677.96	4188379.86	149.88756	(17030921)
650699.74	4188414.84	143.49584	(17122508)	650758.47	4188658.36	147.69441	(14012317)
650765.73	4188678.82	146.92058	(17021220)	650773.65	4188706.54	143.98247	(13020101)
650778.27	4188726.34	146.86154	(14122318)	650805.33	4188805.53	139.14351	(13121417)
650806.65	4188824.01	136.42428	(14012623)	650811.27	4188843.81	137.51860	(15120623)
650814.57	4188862.29	134.15991	(15021222)	650846.24	4188924.98	127.19977	(13011820)
650850.86	4188951.38	125.10074	(14022020)	650854.82	4188976.46	125.06759	(14010718)
650698.00	4188307.32	146.48752	(17121518)	650692.60	4188291.80	145.48677	(16021201)
650724.82	4189245.80	120.59656	(17121323)	650726.07	4189273.37	118.65913	(17120124)

650856.27	4189006.30	122.63609	(16021207)	650857.23	4189022.60	121.53791	(14010518)
650859.15	4189041.29	118.96793	(14010518)	650859.15	4189058.54	118.38628	(13020120)
650860.58	4189076.28	118.66058	(13020120)	650861.54	4189094.49	119.48922	(17122322)
650857.71	4189113.19	120.40917	(17122322)	650847.16	4189118.94	119.25410	(17122322)
650848.12	4189134.76	115.86790	(17123020)	650850.04	4189155.37	116.25200	(13020618)
650851.48	4189171.66	115.04483	(13020618)	650853.87	4189184.12	113.02991	(13020618)
650856.75	4189199.46	111.62827	(13030119)	650857.71	4189213.36	112.48597	(13030119)
650860.58	4189226.30	112.11561	(13030119)	650862.50	4189242.60	112.19196	(17042922)
650865.38	4189258.42	111.53715	(17042922)	650867.77	4189275.19	109.72886	(17042922)
650868.73	4189291.49	106.89559	(17022407)	650872.09	4189309.23	107.90702	(14011617)
650874.00	4189325.04	108.06899	(14011617)	650875.92	4189340.38	107.28171	(14011617)
650878.80	4189355.24	105.74631	(14011617)	650881.19	4189373.45	104.10949	(14012019)
650884.55	4189390.71	102.15988	(14012019)	650888.86	4189407.01	101.36087	(13121517)
650889.82	4189427.14	100.87575	(13121517)	650891.74	4189443.43	99.67352	(13121517)
650895.09	4189461.17	98.87973	(17122321)	650898.45	4189475.55	98.94188	(17122321)
650898.45	4189489.93	98.74671	(17122321)	650902.28	4189504.31	97.80030	(17122321)
650709.41	4188344.56	139.39473	(15120701)	650722.45	4188284.03	140.63083	(17121518)
650745.73	4188280.30	136.88406	(17121518)	650735.49	4188223.50	134.13710	(15021221)
650721.52	4188167.62	135.47043	(17031320)	650525.76	4188133.34	157.67581	(17122517)
651125.76	4188133.34	95.92968	(14120805)	649125.76	4188183.34	108.47149	(17021420)
649225.76	4188183.34	109.16954	(15021821)	649325.76	4188183.34	116.74128	(17031004)
649425.76	4188183.34	126.65030	(15021806)	649525.76	4188183.34	140.00237	(14021403)
649625.76	4188183.34	148.27531	(17020104)	649725.76	4188183.34	161.51222	(13010518)
649825.76	4188183.34	168.94993	(17122817)	649925.76	4188183.34	177.91599	(14041420)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 163

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
650025.76	4188183.34	185.28931	(14120724)	650125.76	4188183.34	184.99548	(13040501)
650225.76	4188183.34	189.20271	(14121116)	650325.76	4188183.34	176.80828	(14021520)
650425.76	4188183.34	162.08932	(17011805)	650525.76	4188183.34	153.25080	(16031023)
650625.76	4188183.34	148.15760	(17012607)	650725.76	4188183.34	138.70109	(17031320)
650825.76	4188183.34	123.61393	(15021221)	651125.76	4188183.34	100.12487	(17122619)
649125.76	4188233.34	106.23778	(17121220)	649225.76	4188233.34	114.65418	(17021420)
649325.76	4188233.34	118.85785	(15011006)	649425.76	4188233.34	129.06398	(16021508)
649525.76	4188233.34	142.42219	(17020108)	649625.76	4188233.34	158.29902	(17020902)
649725.76	4188233.34	166.74679	(15120519)	649825.76	4188233.34	182.07617	(13022418)
649925.76	4188233.34	186.51263	(14041420)	650025.76	4188233.34	196.12378	(15040407)
650125.76	4188233.34	195.35256	(13040502)	650225.76	4188233.34	200.84810	(17021418)
650325.76	4188233.34	186.27766	(17011220)	650425.76	4188233.34	171.11605	(17041904)
650525.76	4188233.34	168.81173	(17120117)	650625.76	4188233.34	151.97411	(16021119)
650725.76	4188233.34	136.57574	(15021221)	650825.76	4188233.34	124.46796	(17041504)

651125.76	4188233.34	100.14160	(17121906)	649125.76	4188283.34	106.86004	(14030821)
649225.76	4188283.34	115.30026	(17121220)	649325.76	4188283.34	122.56112	(17022504)
649425.76	4188283.34	134.15644	(17021408)	649525.76	4188283.34	146.16759	(13041820)
649625.76	4188283.34	160.73314	(14021403)	649725.76	4188283.34	168.45029	(15041802)
649825.76	4188283.34	183.97502	(14010609)	649925.76	4188283.34	205.00905	(17041807)
650025.76	4188283.34	214.68044	(13090907)	650125.76	4188283.34	205.43543	(13040502)
650225.76	4188283.34	210.65148	(15021418)	650325.76	4188283.34	194.32151	(17010419)
650425.76	4188283.34	182.64445	(17122517)	650525.76	4188283.34	169.55562	(17012607)
650625.76	4188283.34	152.62385	(17031320)	650725.76	4188283.34	140.20056	(17121518)
650825.76	4188283.34	123.13438	(15062502)	651125.76	4188283.34	100.89323	(17020824)
649125.76	4188333.34	110.14037	(17021006)	649225.76	4188333.34	117.56423	(17122522)
649325.76	4188333.34	123.04036	(17121220)	649425.76	4188333.34	136.91502	(17040104)
649525.76	4188333.34	152.37858	(17021408)	649625.76	4188333.34	163.61715	(13041820)
649725.76	4188333.34	181.45162	(13010809)	649825.76	4188333.34	204.57254	(14010609)
649925.76	4188333.34	207.16054	(14040902)	650025.76	4188333.34	223.34938	(13090907)
650125.76	4188333.34	233.80040	(17090907)	650225.76	4188333.34	244.36151	(16041107)
650325.76	4188333.34	199.60861	(13051306)	650425.76	4188333.34	192.70207	(17120117)
650525.76	4188333.34	183.12236	(17011317)	650625.76	4188333.34	159.91745	(14043023)
650725.76	4188333.34	137.30472	(17121819)	650825.76	4188333.34	125.45175	(15091223)
651125.76	4188333.34	101.61602	(15021623)	649125.76	4188383.34	110.12598	(17020501)
649225.76	4188383.34	118.06954	(17121824)	649325.76	4188383.34	127.63636	(17122522)
649425.76	4188383.34	140.06449	(17032401)	649525.76	4188383.34	152.16280	(17040104)
649625.76	4188383.34	172.94107	(17021408)	649725.76	4188383.34	180.41502	(16020801)
649825.76	4188383.34	195.53486	(17020421)	649925.76	4188383.34	217.48637	(15032207)
650025.76	4188383.34	246.37429	(16091007)	650125.76	4188383.34	268.88315	(17090907)
650225.76	4188383.34	253.90384	(16041107)	650325.76	4188383.34	224.83206	(14020517)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 164

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	194.32261	(17032505)	650525.76	4188383.34	180.75076	(16021519)
650625.76	4188383.34	156.25710	(17121819)	650725.76	4188383.34	140.05198	(15030719)
650825.76	4188383.34	128.54069	(17020824)	651125.76	4188383.34	100.93145	(14021320)
649125.76	4188433.34	109.86947	(17012803)	649225.76	4188433.34	116.21084	(17020501)
649325.76	4188433.34	133.24388	(17020501)	649425.76	4188433.34	142.90326	(17031301)
649525.76	4188433.34	156.50724	(17032401)	649625.76	4188433.34	172.16431	(17041124)
649725.76	4188433.34	193.22563	(17021408)	649825.76	4188433.34	227.06027	(13010809)
649925.76	4188433.34	278.11649	(14010609)	650025.76	4188433.34	327.54403	(17041807)
650125.76	4188433.34	305.98375	(17032006)	650225.76	4188433.34	278.86644	(15032620)
650325.76	4188433.34	260.94534	(14020517)	650425.76	4188433.34	204.77672	(16052906)
650525.76	4188433.34	175.57440	(16021018)	650625.76	4188433.34	158.64116	(13012507)
650725.76	4188433.34	143.99029	(17020321)	650825.76	4188433.34	129.35664	(17112222)

651125.76	4188433.34	104.81839	(17042121)	649125.76	4188483.34	109.39613	(17122603)
649225.76	4188483.34	116.68046	(17041004)	649325.76	4188483.34	130.07772	(17012803)
649425.76	4188483.34	142.32029	(15021608)	649525.76	4188483.34	161.09629	(17020501)
649625.76	4188483.34	172.30105	(17031301)	649725.76	4188483.34	192.23645	(15010709)
650425.76	4188483.34	225.69772	(14010409)	650525.76	4188483.34	180.54359	(17021005)
650625.76	4188483.34	163.45139	(17021401)	650725.76	4188483.34	145.99509	(17112222)
650825.76	4188483.34	129.19473	(15072004)	651125.76	4188483.34	105.64346	(17122519)
649125.76	4188533.34	109.76536	(17121908)	649225.76	4188533.34	116.98725	(13012303)
649325.76	4188533.34	129.94688	(17031806)	649425.76	4188533.34	144.13160	(17031806)
649525.76	4188533.34	156.84662	(17122606)	649625.76	4188533.34	175.10951	(15021608)
649725.76	4188533.34	191.77216	(17011802)	650425.76	4188533.34	214.30186	(14011817)
650525.76	4188533.34	191.19543	(14091307)	650625.76	4188533.34	166.91956	(15072004)
650725.76	4188533.34	148.41567	(14021608)	650825.76	4188533.34	131.87949	(17121522)
651125.76	4188533.34	104.01736	(17122719)	649125.76	4188583.34	109.54138	(17122404)
649225.76	4188583.34	121.31611	(17122404)	649325.76	4188583.34	133.96901	(17122404)
649425.76	4188583.34	146.64531	(17122404)	649525.76	4188583.34	157.60869	(17122407)
649625.76	4188583.34	173.32549	(15030924)	649725.76	4188583.34	216.35228	(16122709)
650425.76	4188583.34	222.31471	(17061306)	650525.76	4188583.34	191.58656	(17080204)
650625.76	4188583.34	170.31870	(17021219)	650725.76	4188583.34	151.87711	(17021219)
650825.76	4188583.34	134.66687	(14051320)	651125.76	4188583.34	106.55839	(17122621)
649125.76	4188633.34	112.45336	(17031802)	649225.76	4188633.34	119.47224	(17123022)
649325.76	4188633.34	130.25770	(17120902)	649425.76	4188633.34	143.72044	(17120902)
649525.76	4188633.34	157.89347	(17120902)	649625.76	4188633.34	183.29510	(17012309)
649725.76	4188633.34	219.13669	(17012309)	649825.76	4188633.34	255.40391	(17012309)
649925.76	4188633.34	313.11794	(17010702)	650025.76	4188633.34	581.32777	(15022118)
650125.76	4188633.34	0.00000	(00000000)	650225.76	4188633.34	577.80485	(16031718)
650325.76	4188633.34	284.59193	(17022302)	650425.76	4188633.34	216.25877	(15090821)
650525.76	4188633.34	189.92773	(13031019)	650625.76	4188633.34	166.90693	(17013023)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 165

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK11 \*\*\*

INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650725.76	4188633.34	148.57980	(17013023)	650825.76	4188633.34	131.84809	(15021422)
651125.76	4188633.34	104.34043	(16010203)	649125.76	4188683.34	111.84719	(17122119)
649225.76	4188683.34	121.50182	(17121123)	649325.76	4188683.34	134.69099	(17121123)
649425.76	4188683.34	148.09715	(17121123)	649525.76	4188683.34	160.91165	(17012801)
649625.76	4188683.34	188.48179	(17013109)	649725.76	4188683.34	225.61273	(17013109)
649825.76	4188683.34	251.33425	(15013009)	649925.76	4188683.34	315.73398	(13010409)
650025.76	4188683.34	519.90615	(14030520)	650125.76	4188683.34	947.52689	(16031118)
650225.76	4188683.34	522.02179	(16091818)	650325.76	4188683.34	347.59659	(15120709)
650425.76	4188683.34	261.06042	(13040507)	650525.76	4188683.34	192.17118	(17022708)
650625.76	4188683.34	172.18648	(17022708)	650725.76	4188683.34	154.60580	(17021220)

650825.76	4188683.34	138.15505	(17021220)	651125.76	4188683.34	108.02120	(17020901)
649125.76	4188733.34	112.05940	(17021301)	649225.76	4188733.34	120.18986	(17120904)
649325.76	4188733.34	133.37317	(17021502)	649425.76	4188733.34	148.40653	(17021502)
649525.76	4188733.34	161.23011	(17040504)	649625.76	4188733.34	173.10050	(15013009)
649725.76	4188733.34	202.93858	(15122909)	649825.76	4188733.34	233.60115	(17122509)
649925.76	4188733.34	297.95719	(13020309)	650025.76	4188733.34	416.34374	(17020723)
650125.76	4188733.34	583.55507	(17020117)	650225.76	4188733.34	404.52682	(16120901)
650325.76	4188733.34	315.45589	(17122709)	650425.76	4188733.34	220.34391	(16012717)
650525.76	4188733.34	185.61457	(15091922)	650625.76	4188733.34	168.41036	(14120819)
650725.76	4188733.34	155.34299	(14120819)	650825.76	4188733.34	139.97111	(14122318)
651125.76	4188733.34	106.19047	(14021603)	649125.76	4188783.34	111.38210	(17021502)
649225.76	4188783.34	121.79526	(17120103)	649325.76	4188783.34	133.25377	(17120103)
649425.76	4188783.34	143.86319	(17013004)	649525.76	4188783.34	155.96485	(17013004)
649625.76	4188783.34	179.02434	(17022608)	649725.76	4188783.34	189.43840	(17010618)
649825.76	4188783.34	231.59255	(13020309)	649925.76	4188783.34	274.74729	(16030608)
650025.76	4188783.34	334.85769	(14032818)	650125.76	4188783.34	384.19885	(16121018)
650225.76	4188783.34	326.77092	(17041304)	650325.76	4188783.34	252.13457	(15022708)
650425.76	4188783.34	219.62007	(14012517)	650525.76	4188783.34	201.73648	(16012717)
650625.76	4188783.34	166.52930	(15120623)	650725.76	4188783.34	150.92827	(14022323)
650825.76	4188783.34	135.47231	(14011919)	651125.76	4188783.34	108.42311	(14021120)
649125.76	4188833.34	107.84451	(17010624)	649225.76	4188833.34	120.50788	(17121720)
649325.76	4188833.34	129.40182	(17013004)	649425.76	4188833.34	147.61444	(17011123)
649525.76	4188833.34	161.83779	(17022608)	649625.76	4188833.34	172.93221	(17032420)
649725.76	4188833.34	194.34646	(17020721)	649825.76	4188833.34	216.56952	(15010309)
649925.76	4188833.34	231.53654	(14040707)	650025.76	4188833.34	312.37268	(14032818)
650125.76	4188833.34	284.09919	(16121018)	650225.76	4188833.34	253.34052	(15070204)
650325.76	4188833.34	228.77708	(16090707)	650425.76	4188833.34	215.82161	(13122709)
650525.76	4188833.34	180.54168	(15011517)	650625.76	4188833.34	168.24991	(15022308)
650725.76	4188833.34	146.62278	(16041723)	650825.76	4188833.34	133.95434	(14012623)
651125.76	4188833.34	106.40086	(14010519)	649125.76	4188883.34	109.42569	(17122523)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 166

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK11 \*\*\*  
 INCLUDING SOURCE(S): STCK11 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
649225.76	4188883.34	120.72126 (17011123)	649325.76	4188883.34	131.42723 (17020508)
649425.76	4188883.34	139.06392 (17031723)	649525.76	4188883.34	155.51853 (17122118)
649625.76	4188883.34	174.37384 (17020721)	649725.76	4188883.34	178.55931 (15020908)
649825.76	4188883.34	200.39476 (15012017)	649925.76	4188883.34	223.49225 (16110408)
650025.76	4188883.34	289.34647 (14120909)	650125.76	4188883.34	238.28495 (17121917)
650225.76	4188883.34	237.83167 (16053106)	650325.76	4188883.34	222.72437 (17040807)
650425.76	4188883.34	195.35205 (17042923)	650525.76	4188883.34	178.29610 (13122709)
650625.76	4188883.34	162.79020 (15011517)	650725.76	4188883.34	144.66315 (13020422)



650825.76	4188883.34	133.80668	(16041723)	651125.76	4188883.34	105.88581	(14021501)
650125.76	4188933.34	215.57909	(14032807)	650225.76	4188933.34	227.81041	(14010309)
650325.76	4188933.34	213.15466	(17102317)	650425.76	4188933.34	182.54000	(14021523)
650525.76	4188933.34	171.40389	(15042724)	650625.76	4188933.34	157.37372	(13020120)
650725.76	4188933.34	144.23537	(15011517)	650825.76	4188933.34	128.22214	(13020422)
651125.76	4188933.34	104.47658	(15120117)	650425.76	4188983.34	184.63091	(17040807)
650525.76	4188983.34	162.86268	(15030420)	650625.76	4188983.34	151.07666	(13120224)
650725.76	4188983.34	139.39845	(13020120)	650825.76	4188983.34	128.58621	(14010718)
651125.76	4188983.34	104.59675	(14012318)	650525.76	4189033.34	160.70863	(14021523)
650625.76	4189033.34	147.25909	(16011924)	650725.76	4189033.34	138.19868	(17122322)
650825.76	4189033.34	122.09098	(13020120)	651125.76	4189033.34	103.68339	(15021922)
650525.76	4189083.34	152.61644	(13121017)	650625.76	4189083.34	139.99115	(15020301)
650725.76	4189083.34	130.29667	(13120224)	650825.76	4189083.34	125.35175	(17122322)
651125.76	4189083.34	100.22073	(14120704)	650525.76	4189133.34	150.73280	(15020318)
650625.76	4189133.34	138.74979	(17011918)	650725.76	4189133.34	126.74172	(16011924)
650825.76	4189133.34	118.43151	(13020618)	651125.76	4189133.34	98.70559	(13121319)
650781.98	4189510.65	100.75503	(15120420)	650760.33	4189397.50	104.50015	(17012601)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 167

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649676.34	4188314.55	156.03321	(13041820)	649629.66	4188294.84	147.54649	(16021508)
649810.15	4188312.48	180.81022	(17020902)	649364.10	4188360.20	122.61596	(17122522)
649327.80	4188355.01	119.16925	(17021006)	649380.70	4188758.52	129.39600	(17021502)
650495.81	4188841.51	206.32249	(17091207)	650597.47	4188832.17	186.80060	(15031322)
650536.27	4188878.85	187.04042	(14030422)	650577.76	4188877.81	186.95576	(16092620)
650602.66	4188860.18	184.20641	(13122709)	650610.95	4188880.93	180.56021	(13122709)
650638.10	4188858.53	179.27237	(15031322)	650664.10	4188331.03	163.86198	(17013121)
650668.72	4188350.83	168.44670	(14043023)	650677.96	4188379.86	169.53019	(17121518)
650699.74	4188414.84	165.45027	(17030921)	650758.47	4188658.36	160.08605	(15121617)
650765.73	4188678.82	162.68027	(17021220)	650773.65	4188706.54	161.11002	(14122318)
650778.27	4188726.34	162.33368	(14120819)	650805.33	4188805.53	152.61512	(15120623)
650806.65	4188824.01	149.72247	(15120623)	650811.27	4188843.81	151.85815	(16041723)
650814.57	4188862.29	147.96392	(16041723)	650846.24	4188924.98	139.47843	(15011517)
650850.86	4188951.38	137.87045	(16021207)	650854.82	4188976.46	134.94840	(14021304)
650698.00	4188307.32	156.21615	(13040506)	650692.60	4188291.80	162.77330	(17031320)
650724.82	4189245.80	124.93872	(15022703)	650726.07	4189273.37	124.95410	(14021218)
650856.27	4189006.30	133.44875	(13020120)	650857.23	4189022.60	132.46923	(13020120)
650859.15	4189041.29	133.91336	(17122322)	650859.15	4189058.54	132.17226	(17122322)
650860.58	4189076.28	125.56988	(17122322)	650861.54	4189094.49	125.85298	(13120224)
650857.71	4189113.19	123.09958	(13120224)	650847.16	4189118.94	125.18699	(17122308)
650848.12	4189134.76	124.59190	(16011924)	650850.04	4189155.37	122.34960	(13030119)

650851.48	4189171.66	120.36385	(17042922)	650853.87	4189184.12	118.66524	(17042922)
650856.75	4189199.46	118.30024	(13040320)	650857.71	4189213.36	117.39630	(14040724)
650860.58	4189226.30	117.02537	(14011617)	650862.50	4189242.60	116.74454	(17011918)
650865.38	4189258.42	115.76521	(17011918)	650867.77	4189275.19	113.90661	(17022603)
650868.73	4189291.49	112.51438	(17022603)	650872.09	4189309.23	111.43304	(17121323)
650874.00	4189325.04	110.79220	(17120124)	650875.92	4189340.38	109.88172	(17120124)
650878.80	4189355.24	109.79762	(17122321)	650881.19	4189373.45	108.97095	(17122321)
650884.55	4189390.71	107.16136	(17122321)	650888.86	4189407.01	104.86065	(17122321)
650889.82	4189427.14	102.40674	(16122921)	650891.74	4189443.43	100.81603	(17012601)
650895.09	4189461.17	101.95320	(17012601)	650898.45	4189475.55	102.25946	(17012601)
650898.45	4189489.93	102.51709	(17012601)	650902.28	4189504.31	101.90649	(17012601)
650709.41	4188344.56	163.72568	(17121518)	650722.45	4188284.03	149.93258	(13040506)
650745.73	4188280.30	147.99639	(15021221)	650735.49	4188223.50	149.57826	(16021119)
650721.52	4188167.62	147.10259	(17013019)	650525.76	4188133.34	161.49504	(17011805)
651125.76	4188133.34	100.96780	(15041904)	649125.76	4188183.34	100.91252	(17011204)
649225.76	4188183.34	108.76061	(17021420)	649325.76	4188183.34	109.39491	(15021821)
649425.76	4188183.34	117.73056	(17031004)	649525.76	4188183.34	126.63414	(15021806)
649625.76	4188183.34	140.66861	(15020520)	649725.76	4188183.34	148.82433	(17020104)
649825.76	4188183.34	161.07553	(13010518)	649925.76	4188183.34	167.41117	(14032102)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 168

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650025.76	4188183.34	182.85759	(15022508)	650125.76	4188183.34	183.60589	(14030907)
650225.76	4188183.34	187.01654	(17121817)	650325.76	4188183.34	191.92550	(17021418)
650425.76	4188183.34	178.90915	(14021520)	650525.76	4188183.34	160.28720	(16021821)
650625.76	4188183.34	155.73954	(17120117)	650725.76	4188183.34	149.42542	(17012607)
650825.76	4188183.34	137.36683	(17031320)	651125.76	4188183.34	102.89796	(14120805)
649125.76	4188233.34	100.42138	(17021308)	649225.76	4188233.34	106.90673	(17121220)
649325.76	4188233.34	115.01486	(17021420)	649425.76	4188233.34	119.84664	(15011006)
649525.76	4188233.34	130.44868	(13041820)	649625.76	4188233.34	143.52355	(17020108)
649725.76	4188233.34	158.05204	(17020902)	649825.76	4188233.34	167.26713	(15120519)
649925.76	4188233.34	181.90886	(13022418)	650025.76	4188233.34	191.61349	(14041420)
650125.76	4188233.34	195.01289	(14040903)	650225.76	4188233.34	199.48537	(17121817)
650325.76	4188233.34	197.73582	(17021418)	650425.76	4188233.34	185.89371	(17011220)
650525.76	4188233.34	177.17307	(17122517)	650625.76	4188233.34	164.05444	(17120117)
650725.76	4188233.34	152.65110	(17031320)	650825.76	4188233.34	136.67477	(15021221)
651125.76	4188233.34	107.65709	(17122619)	649125.76	4188283.34	101.71796	(17123023)
649225.76	4188283.34	107.27009	(14030821)	649325.76	4188283.34	116.27336	(17121220)
649425.76	4188283.34	123.34934	(17022504)	649525.76	4188283.34	134.68563	(17021408)
649625.76	4188283.34	147.73666	(13041820)	649725.76	4188283.34	163.07962	(14021403)
649825.76	4188283.34	169.90715	(14022024)	649925.76	4188283.34	184.31384	(15120208)

650025.76	4188283.34	212.41810	(17041807)	650125.76	4188283.34	214.30305	(15040407)
650225.76	4188283.34	210.26955	(17121817)	650325.76	4188283.34	212.19063	(16041107)
650425.76	4188283.34	191.96958	(17021319)	650525.76	4188283.34	175.72646	(15020524)
650625.76	4188283.34	168.65996	(17012607)	650725.76	4188283.34	149.70042	(13040506)
650825.76	4188283.34	139.38050	(17121518)	651125.76	4188283.34	106.95751	(17020824)
649125.76	4188333.34	101.68725	(17121823)	649225.76	4188333.34	110.75362	(17021006)
649325.76	4188333.34	118.07415	(17122522)	649425.76	4188333.34	124.40088	(17121220)
649525.76	4188333.34	137.68435	(17040104)	649625.76	4188333.34	152.94121	(17021408)
649725.76	4188333.34	164.45227	(13041820)	649825.76	4188333.34	183.49896	(17020902)
649925.76	4188333.34	212.62155	(14010609)	650025.76	4188333.34	205.42259	(14040902)
650125.76	4188333.34	231.70958	(13090907)	650225.76	4188333.34	232.30353	(17011209)
650325.76	4188333.34	250.33924	(16041107)	650425.76	4188333.34	194.71114	(13051306)
650525.76	4188333.34	186.34099	(17120117)	650625.76	4188333.34	180.83183	(17011317)
650725.76	4188333.34	159.46355	(17121518)	650825.76	4188333.34	135.23854	(15120701)
651125.76	4188333.34	107.82084	(14120721)	649125.76	4188383.34	102.72955	(17011605)
649225.76	4188383.34	110.82254	(17020501)	649325.76	4188383.34	118.71812	(17121824)
649425.76	4188383.34	128.52704	(17122522)	649525.76	4188383.34	140.72526	(17032401)
649625.76	4188383.34	153.37117	(17040104)	649725.76	4188383.34	173.41350	(17021408)
649825.76	4188383.34	181.14447	(16020801)	649925.76	4188383.34	195.98658	(15041802)
650025.76	4188383.34	216.05288	(15032207)	650125.76	4188383.34	248.09634	(15091207)
650225.76	4188383.34	269.73312	(17011209)	650325.76	4188383.34	237.98748	(15061806)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 169

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK12 \*\*\*  
INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	236.23433	(14020517)	650525.76	4188383.34	194.99938	(17032505)
650625.76	4188383.34	181.20114	(14043023)	650725.76	4188383.34	154.02416	(14041501)
650825.76	4188383.34	138.76325	(13012507)	651125.76	4188383.34	107.44225	(14022504)
649125.76	4188433.34	104.21789	(17011205)	649225.76	4188433.34	110.49609	(17012803)
649325.76	4188433.34	117.15494	(17020501)	649425.76	4188433.34	134.12957	(17020501)
649525.76	4188433.34	143.93370	(17031301)	649625.76	4188433.34	157.81769	(17032401)
649725.76	4188433.34	173.63599	(17041124)	649825.76	4188433.34	193.21433	(17021408)
649925.76	4188433.34	235.14837	(13010809)	650025.76	4188433.34	289.60109	(14010609)
650125.76	4188433.34	311.10116	(17041807)	650225.76	4188433.34	307.52905	(17032006)
650325.76	4188433.34	276.80501	(17011319)	650425.76	4188433.34	237.55585	(14020517)
650525.76	4188433.34	201.27305	(16052906)	650625.76	4188433.34	174.81900	(14041501)
650725.76	4188433.34	157.02154	(13012507)	650825.76	4188433.34	143.28237	(17020321)
651125.76	4188433.34	110.32165	(16012901)	649125.76	4188483.34	102.94976	(17122603)
649225.76	4188483.34	109.97240	(17122603)	649325.76	4188483.34	117.43481	(17041004)
649425.76	4188483.34	130.84949	(17012803)	649525.76	4188483.34	143.41071	(15021608)
649625.76	4188483.34	162.05428	(17020501)	649725.76	4188483.34	172.90254	(17031301)
650425.76	4188483.34	262.65347	(14040907)	650525.76	4188483.34	217.05254	(14010409)

650625.76	4188483.34	181.54135	(17021005)	650725.76	4188483.34	161.48391	(17021401)
650825.76	4188483.34	143.93196	(17112222)	651125.76	4188483.34	110.20052	(17122519)
649125.76	4188533.34	104.93749	(17121420)	649225.76	4188533.34	110.48009	(17121908)
649325.76	4188533.34	117.79973	(13012303)	649425.76	4188533.34	130.71366	(17031806)
649525.76	4188533.34	145.06318	(17031806)	649625.76	4188533.34	158.03108	(17122606)
649725.76	4188533.34	176.32184	(15021608)	650425.76	4188533.34	290.40093	(14010409)
650525.76	4188533.34	209.83985	(14011817)	650625.76	4188533.34	188.24116	(14091307)
650725.76	4188533.34	165.83832	(15072004)	650825.76	4188533.34	146.70877	(14021608)
651125.76	4188533.34	111.33841	(17122719)	649125.76	4188583.34	104.00611	(15021524)
649225.76	4188583.34	109.95314	(17122404)	649325.76	4188583.34	121.86370	(17122404)
649425.76	4188583.34	134.68306	(17122404)	649525.76	4188583.34	147.54522	(17122404)
649625.76	4188583.34	159.06588	(17122407)	649725.76	4188583.34	175.34751	(14122109)
650425.76	4188583.34	320.94904	(17122309)	650525.76	4188583.34	218.32491	(13110508)
650625.76	4188583.34	188.83030	(14073004)	650725.76	4188583.34	169.50103	(17021219)
650825.76	4188583.34	150.37389	(17021219)	651125.76	4188583.34	112.28314	(17122621)
649125.76	4188633.34	106.98119	(17031802)	649225.76	4188633.34	112.85505	(17031802)
649325.76	4188633.34	119.73880	(17123022)	649425.76	4188633.34	131.60161	(17120902)
649525.76	4188633.34	145.22148	(17120902)	649625.76	4188633.34	159.49393	(17120902)
649725.76	4188633.34	187.21877	(17012309)	649825.76	4188633.34	224.00892	(17012309)
649925.76	4188633.34	260.41135	(17012309)	650025.76	4188633.34	325.21426	(17010702)
650125.76	4188633.34	600.43270	(15022118)	650225.76	4188633.34	43.42079	(15112110)
650325.76	4188633.34	537.46153	(17091620)	650425.76	4188633.34	275.20052	(17022302)
650525.76	4188633.34	214.11906	(15090821)	650625.76	4188633.34	188.94618	(13031019)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 170

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650725.76	4188633.34	165.57395	(17013023)	650825.76	4188633.34	147.30877	(17013023)
651125.76	4188633.34	110.74278	(16010203)	649125.76	4188683.34	104.95154	(17013107)
649225.76	4188683.34	112.12034	(17122119)	649325.76	4188683.34	122.69957	(17121123)
649425.76	4188683.34	135.79746	(17121123)	649525.76	4188683.34	148.89238	(17121123)
649625.76	4188683.34	162.04461	(17012801)	649725.76	4188683.34	192.06667	(17013109)
649825.76	4188683.34	227.36459	(17013109)	649925.76	4188683.34	257.10617	(15013009)
650025.76	4188683.34	322.20950	(13010409)	650125.76	4188683.34	546.79057	(14120401)
650225.76	4188683.34	894.60759	(16012217)	650325.76	4188683.34	499.55279	(16091818)
650425.76	4188683.34	337.33712	(15120709)	650525.76	4188683.34	255.86607	(13040507)
650625.76	4188683.34	189.68579	(17022708)	650725.76	4188683.34	170.09567	(17022708)
650825.76	4188683.34	153.58132	(17021220)	651125.76	4188683.34	115.68749	(17020901)
649125.76	4188733.34	105.72976	(17011121)	649225.76	4188733.34	112.26265	(17021301)
649325.76	4188733.34	120.57975	(17120904)	649425.76	4188733.34	134.86102	(17021502)
649525.76	4188733.34	149.11014	(17021502)	649625.76	4188733.34	162.81757	(17040504)
649725.76	4188733.34	174.75042	(15013009)	649825.76	4188733.34	203.73586	(15122909)

649925.76	4188733.34	230.50661	(13110208)	650025.76	4188733.34	313.17238	(17122809)
650125.76	4188733.34	416.17586	(15100424)	650225.76	4188733.34	582.42288	(17021003)
650325.76	4188733.34	395.86211	(17010121)	650425.76	4188733.34	301.74042	(17122709)
650525.76	4188733.34	216.33725	(16012717)	650625.76	4188733.34	184.24810	(15091922)
650725.76	4188733.34	167.39313	(14120819)	650825.76	4188733.34	154.17722	(14120819)
651125.76	4188733.34	114.65503	(14021603)	649125.76	4188783.34	103.32064	(17121322)
649225.76	4188783.34	112.05721	(17012722)	649325.76	4188783.34	122.91963	(17120103)
649425.76	4188783.34	133.41014	(17120103)	649525.76	4188783.34	145.68462	(17013004)
649625.76	4188783.34	156.27440	(17012402)	649725.76	4188783.34	182.62582	(17022608)
649825.76	4188783.34	191.04532	(17010618)	649925.76	4188783.34	231.92054	(17040507)
650025.76	4188783.34	276.21196	(17040407)	650125.76	4188783.34	375.29635	(14032818)
650225.76	4188783.34	390.97802	(17021003)	650325.76	4188783.34	315.56755	(17041304)
650425.76	4188783.34	240.73390	(15022708)	650525.76	4188783.34	213.99630	(14012517)
650625.76	4188783.34	199.10930	(16012717)	650725.76	4188783.34	165.36354	(15120623)
650825.76	4188783.34	149.90604	(14022323)	651125.76	4188783.34	114.60100	(14021120)
649125.76	4188833.34	103.47593	(17010624)	649225.76	4188833.34	107.74507	(13013118)
649325.76	4188833.34	121.46657	(17013004)	649425.76	4188833.34	130.52891	(17122523)
649525.76	4188833.34	148.41930	(17011123)	649625.76	4188833.34	161.97952	(17022608)
649725.76	4188833.34	173.93938	(17032420)	649825.76	4188833.34	193.60219	(17040507)
649925.76	4188833.34	212.13993	(15010309)	650025.76	4188833.34	232.71414	(17012317)
650125.76	4188833.34	297.32763	(14120909)	650225.76	4188833.34	289.91379	(17032204)
650325.76	4188833.34	253.16957	(16020818)	650425.76	4188833.34	231.36270	(16090707)
650525.76	4188833.34	215.77548	(13122709)	650625.76	4188833.34	180.10138	(15011517)
650725.76	4188833.34	166.58062	(16012717)	650825.76	4188833.34	145.22362	(15021222)
651125.76	4188833.34	111.33108	(13120917)	649125.76	4188883.34	103.60584	(17021224)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 171

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK12 \*\*\*

INCLUDING SOURCE(S): STCK12 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649225.76	4188883.34	110.66969	(17122523)	649325.76	4188883.34	121.83467	(17011123)
649425.76	4188883.34	132.90451	(17020508)	649525.76	4188883.34	138.98331	(17031723)
649625.76	4188883.34	156.68508	(17122118)	649725.76	4188883.34	173.48838	(17020721)
649825.76	4188883.34	180.43556	(13091907)	649925.76	4188883.34	197.75871	(15012017)
650025.76	4188883.34	234.76675	(16110408)	650125.76	4188883.34	283.14376	(14120909)
650225.76	4188883.34	245.84155	(15012717)	650325.76	4188883.34	234.64574	(16053106)
650425.76	4188883.34	227.94611	(17040807)	650525.76	4188883.34	192.82030	(17042923)
650625.76	4188883.34	175.82407	(13122709)	650725.76	4188883.34	162.05803	(15011517)
650825.76	4188883.34	143.31381	(13020422)	651125.76	4188883.34	111.71278	(15031407)
650125.76	4188933.34	208.75412	(17121921)	650225.76	4188933.34	222.51803	(15012717)
650325.76	4188933.34	218.31083	(14010309)	650425.76	4188933.34	207.89260	(17102317)
650525.76	4188933.34	178.85032	(14021523)	650625.76	4188933.34	171.08552	(15042724)
650725.76	4188933.34	156.18448	(13020120)	650825.76	4188933.34	143.50332	(15011517)

651125.76	4188933.34	111.76375	(13030120)	650425.76	4188983.34	189.39172	(15092122)
650525.76	4188983.34	183.08673	(17040807)	650625.76	4188983.34	160.24374	(15030420)
650725.76	4188983.34	148.70713	(13120224)	650825.76	4188983.34	137.73213	(13020120)
651125.76	4188983.34	109.64889	(15021922)	650525.76	4189033.34	175.56054	(15020318)
650625.76	4189033.34	160.42143	(17011918)	650725.76	4189033.34	146.00706	(17122308)
650825.76	4189033.34	137.95214	(17122322)	651125.76	4189033.34	108.24670	(14120704)
650525.76	4189083.34	162.27935	(17120123)	650625.76	4189083.34	152.01614	(13121017)
650725.76	4189083.34	138.80523	(15030420)	650825.76	4189083.34	130.12078	(13120224)
651125.76	4189083.34	105.77564	(13121319)	650525.76	4189133.34	154.58200	(13022108)
650625.76	4189133.34	148.28081	(15020318)	650725.76	4189133.34	139.10821	(17011918)
650825.76	4189133.34	126.62749	(16011924)	651125.76	4189133.34	105.57319	(13121617)
650781.98	4189510.65	103.58058	(17031101)	650760.33	4189397.50	112.51642	(17041522)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 172

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
649676.34	4188314.55	144.75840	(17021408)	649629.66	4188294.84	137.79254	(17021408)
649810.15	4188312.48	160.41208	(14033104)	649364.10	4188360.20	114.22052	(17021006)
649327.80	4188355.01	110.16329	(17021006)	649380.70	4188758.52	120.03592	(17021502)
650495.81	4188841.51	240.05650	(17040807)	650597.47	4188832.17	216.25296	(13122709)
650536.27	4188878.85	216.43669	(17040807)	650577.76	4188877.81	203.46341	(14011517)
650602.66	4188860.18	197.49919	(17091207)	650610.95	4188880.93	192.18839	(17042923)
650638.10	4188858.53	197.61433	(13122709)	650664.10	4188331.03	178.69747	(17030208)
650668.72	4188350.83	187.85352	(17011317)	650677.96	4188379.86	182.23282	(17021419)
650699.74	4188414.84	185.99407	(17121518)	650758.47	4188658.36	178.56923	(17022708)
650765.73	4188678.82	183.85631	(17022708)	650773.65	4188706.54	177.28368	(13011717)
650778.27	4188726.34	174.39166	(14120819)	650805.33	4188805.53	166.60669	(16041723)
650806.65	4188824.01	169.75177	(16012717)	650811.27	4188843.81	165.70233	(15022308)
650814.57	4188862.29	157.87483	(14022020)	650846.24	4188924.98	152.11539	(14021304)
650850.86	4188951.38	148.47252	(13020120)	650854.82	4188976.46	146.04570	(17122322)
650698.00	4188307.32	171.17508	(17030208)	650692.60	4188291.80	170.64153	(17012607)
650724.82	4189245.80	131.67909	(17120123)	650726.07	4189273.37	125.66401	(14120621)
650856.27	4189006.30	144.35153	(17122322)	650857.23	4189022.60	141.30120	(13120224)
650859.15	4189041.29	140.87403	(13120224)	650859.15	4189058.54	137.98737	(17122308)
650860.58	4189076.28	137.08002	(16011924)	650861.54	4189094.49	135.24701	(16011924)
650857.71	4189113.19	130.90210	(13012505)	650847.16	4189118.94	131.63816	(13040320)
650848.12	4189134.76	132.58405	(17011918)	650850.04	4189155.37	134.13479	(17011918)
650851.48	4189171.66	132.07535	(17011918)	650853.87	4189184.12	128.92112	(17011918)
650856.75	4189199.46	128.92090	(17121323)	650857.71	4189213.36	127.55981	(17121323)
650860.58	4189226.30	125.65041	(17120124)	650862.50	4189242.60	123.78809	(17120124)
650865.38	4189258.42	120.43200	(17120124)	650867.77	4189275.19	118.13022	(14022422)
650868.73	4189291.49	115.96267	(15030918)	650872.09	4189309.23	114.63297	(15022703)

650874.00	4189325.04	113.44618	(13040319)	650875.92	4189340.38	114.03118	(13040319)
650878.80	4189355.24	113.74924	(13040319)	650881.19	4189373.45	112.74637	(17012601)
650884.55	4189390.71	111.28432	(17012601)	650888.86	4189407.01	109.38345	(17012601)
650889.82	4189427.14	107.77021	(15120420)	650891.74	4189443.43	106.67202	(16121307)
650895.09	4189461.17	106.19363	(17041522)	650898.45	4189475.55	105.52515	(17041522)
650898.45	4189489.93	104.63341	(17022706)	650902.28	4189504.31	103.54649	(17022706)
650709.41	4188344.56	178.72887	(17011317)	650722.45	4188284.03	165.43106	(17012607)
650745.73	4188280.30	164.48799	(16021119)	650735.49	4188223.50	156.42285	(17013019)
650721.52	4188167.62	149.51880	(16031023)	650525.76	4188133.34	165.89278	(14032503)
651125.76	4188133.34	112.78420	(17011307)	649125.76	4188183.34	95.61825	(17011204)
649225.76	4188183.34	101.47188	(17021420)	649325.76	4188183.34	108.60328	(17021420)
649425.76	4188183.34	111.43048	(17031507)	649525.76	4188183.34	119.24285	(17031004)
649625.76	4188183.34	129.98800	(17020108)	649725.76	4188183.34	143.89798	(15020520)
649825.76	4188183.34	147.48465	(13020305)	649925.76	4188183.34	160.36997	(16020605)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 173

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

650025.76	4188183.34	169.75419	(17041924)	650125.76	4188183.34	187.48429	(15022508)
650225.76	4188183.34	182.36186	(14030907)	650325.76	4188183.34	188.52213	(17121817)
650425.76	4188183.34	189.15224	(17021418)	650525.76	4188183.34	174.77051	(14021520)
650625.76	4188183.34	162.85586	(17041904)	650725.76	4188183.34	159.48232	(17120117)
650825.76	4188183.34	148.46586	(17012607)	651125.76	4188183.34	108.68154	(15041904)
649125.76	4188233.34	96.73162	(17123106)	649225.76	4188233.34	100.70349	(17041705)
649325.76	4188233.34	107.79792	(17121220)	649425.76	4188233.34	115.13064	(17021420)
649525.76	4188233.34	121.19357	(15011006)	649625.76	4188233.34	134.01375	(13041820)
649725.76	4188233.34	144.35260	(14021403)	649825.76	4188233.34	155.28210	(15120820)
649925.76	4188233.34	167.37181	(16030404)	650025.76	4188233.34	182.00700	(17022208)
650125.76	4188233.34	192.16680	(14041420)	650225.76	4188233.34	195.00182	(14030907)
650325.76	4188233.34	199.04385	(17121817)	650425.76	4188233.34	193.84943	(15021418)
650525.76	4188233.34	181.52571	(13122017)	650625.76	4188233.34	180.43329	(17122517)
650725.76	4188233.34	158.02672	(17013019)	650825.76	4188233.34	152.95719	(17031320)
651125.76	4188233.34	110.90627	(15062502)	649125.76	4188283.34	97.89981	(17123023)
649225.76	4188283.34	102.06894	(17122522)	649325.76	4188283.34	108.22814	(17041705)
649425.76	4188283.34	118.39238	(17121220)	649525.76	4188283.34	124.38326	(17022504)
649625.76	4188283.34	134.96746	(15021905)	649725.76	4188283.34	149.79609	(13041820)
649825.76	4188283.34	165.86649	(14021403)	649925.76	4188283.34	172.27304	(16042106)
650025.76	4188283.34	186.48898	(13022418)	650125.76	4188283.34	214.85594	(17041807)
650225.76	4188283.34	207.02950	(14040903)	650325.76	4188283.34	206.64679	(17121817)
650425.76	4188283.34	229.03354	(16041107)	650525.76	4188283.34	187.48399	(17011805)
650625.76	4188283.34	180.67810	(17120117)	650725.76	4188283.34	164.36468	(17030208)
650825.76	4188283.34	148.17342	(13040506)	651125.76	4188283.34	114.05186	(17122619)

649125.76	4188333.34	97.94195	(17012823)	649225.76	4188333.34	102.84707	(17121823)
649325.76	4188333.34	111.85264	(17021006)	649425.76	4188333.34	117.85524	(17122522)
649525.76	4188333.34	128.34398	(17121220)	649625.76	4188333.34	137.48778	(17040104)
649725.76	4188333.34	150.66946	(15021905)	649825.76	4188333.34	164.36274	(16020801)
649925.76	4188333.34	185.99927	(17020902)	650025.76	4188333.34	222.15857	(14010609)
650125.76	4188333.34	225.28262	(17041807)	650225.76	4188333.34	232.41264	(13090907)
650325.76	4188333.34	223.39164	(17021007)	650425.76	4188333.34	239.33675	(16041107)
650525.76	4188333.34	200.95997	(15021218)	650625.76	4188333.34	181.95484	(16110217)
650725.76	4188333.34	174.61156	(17011317)	650825.76	4188333.34	157.53324	(17121518)
651125.76	4188333.34	117.04626	(17020824)	649125.76	4188383.34	99.68808	(17011605)
649225.76	4188383.34	102.57427	(17012823)	649325.76	4188383.34	111.73304	(17020501)
649425.76	4188383.34	118.65159	(17121824)	649525.76	4188383.34	130.53334	(17021404)
649625.76	4188383.34	139.71993	(17032401)	649725.76	4188383.34	154.67939	(17040104)
649825.76	4188383.34	169.46303	(17021408)	649925.76	4188383.34	185.33686	(13122309)
650025.76	4188383.34	203.11392	(17040207)	650125.76	4188383.34	222.65183	(14041207)
650225.76	4188383.34	246.69589	(13090907)	650325.76	4188383.34	258.14134	(17020417)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 174

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK13 \*\*\*  
INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	231.77954	(15090707)	650525.76	4188383.34	238.55443	(14020517)
650625.76	4188383.34	195.88258	(17011317)	650725.76	4188383.34	178.88680	(14043023)
650825.76	4188383.34	152.86171	(14041501)	651125.76	4188383.34	116.47056	(14060905)
649125.76	4188433.34	100.22266	(17011205)	649225.76	4188433.34	104.49625	(17011205)
649325.76	4188433.34	111.03497	(17012803)	649425.76	4188433.34	120.75615	(17020501)
649525.76	4188433.34	135.14746	(17020501)	649625.76	4188433.34	145.12624	(17031301)
649725.76	4188433.34	160.13080	(17032401)	649825.76	4188433.34	174.47528	(17041124)
649925.76	4188433.34	205.22424	(14120809)	650025.76	4188433.34	248.82907	(13010809)
650125.76	4188433.34	292.08621	(14010609)	650225.76	4188433.34	286.65886	(15091207)
650325.76	4188433.34	308.83827	(17020417)	650425.76	4188433.34	272.48194	(16090207)
650525.76	4188433.34	223.32481	(17030919)	650625.76	4188433.34	199.85582	(16021519)
650725.76	4188433.34	173.83264	(14041501)	650825.76	4188433.34	153.92620	(13012507)
651125.76	4188433.34	117.57641	(14021320)	649125.76	4188483.34	98.14874	(17122902)
649225.76	4188483.34	104.05186	(17122603)	649325.76	4188483.34	110.60196	(13033006)
649425.76	4188483.34	119.36244	(17041004)	649525.76	4188483.34	132.58305	(17012803)
649625.76	4188483.34	144.74073	(15021608)	649725.76	4188483.34	162.68400	(17020501)
650425.76	4188483.34	344.89489	(15102117)	650525.76	4188483.34	254.26240	(17031318)
650625.76	4188483.34	203.34210	(14010409)	650725.76	4188483.34	179.38388	(17021005)
650825.76	4188483.34	158.19432	(17021401)	651125.76	4188483.34	119.79842	(17042121)
649125.76	4188533.34	100.95373	(17121420)	649225.76	4188533.34	105.40236	(17121420)
649325.76	4188533.34	110.85780	(17121908)	649425.76	4188533.34	118.78891	(13012303)
649525.76	4188533.34	133.35661	(17031806)	649625.76	4188533.34	146.27002	(17031806)



649725.76	4188533.34	158.56248	(17122606)	650425.76	4188533.34	389.64125	(17121603)
650525.76	4188533.34	273.96094	(13011309)	650625.76	4188533.34	205.90237	(14091307)
650725.76	4188533.34	184.05486	(14091921)	650825.76	4188533.34	163.24554	(15072004)
651125.76	4188533.34	120.42037	(17121522)	649125.76	4188583.34	99.09333	(15021524)
649225.76	4188583.34	104.51114	(15021524)	649325.76	4188583.34	112.23508	(17122404)
649425.76	4188583.34	124.15166	(17122404)	649525.76	4188583.34	136.75705	(17122404)
649625.76	4188583.34	148.95813	(17122404)	649725.76	4188583.34	160.98066	(15030924)
650425.76	4188583.34	442.94970	(17121918)	650525.76	4188583.34	300.71231	(17122309)
650625.76	4188583.34	212.61567	(17061306)	650725.76	4188583.34	186.24567	(14073004)
650825.76	4188583.34	166.48192	(17021219)	651125.76	4188583.34	118.83934	(14051320)
649125.76	4188633.34	101.96006	(17031802)	649225.76	4188633.34	107.78414	(17031802)
649325.76	4188633.34	113.64908	(17031802)	649425.76	4188633.34	121.72334	(17123022)
649525.76	4188633.34	132.45507	(17120902)	649625.76	4188633.34	146.04399	(17120902)
649725.76	4188633.34	160.07383	(17120902)	649825.76	4188633.34	188.42984	(17012309)
649925.76	4188633.34	224.59773	(17012309)	650025.76	4188633.34	259.52549	(16122909)
650125.76	4188633.34	342.46336	(17010702)	650225.76	4188633.34	669.90990	(15103023)
650325.76	4188633.34	820.18412	(15072519)	650425.76	4188633.34	476.21397	(17091620)
650525.76	4188633.34	262.27673	(17021004)	650625.76	4188633.34	208.44093	(15091921)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 175

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
---------------------------	-------------	--------------------	-------------	-------------	--------------------

650725.76	4188633.34	184.50414	(13031019)	650825.76	4188633.34	163.04803	(17013023)
651125.76	4188633.34	117.57953	(15021422)	649125.76	4188683.34	99.97659	(17013107)
649225.76	4188683.34	105.52442	(17013107)	649325.76	4188683.34	113.91903	(17122119)
649425.76	4188683.34	123.84181	(17121123)	649525.76	4188683.34	137.31581	(17121123)
649625.76	4188683.34	150.84504	(17121123)	649725.76	4188683.34	163.91810	(17012801)
649825.76	4188683.34	195.62711	(17013109)	649925.76	4188683.34	232.13080	(17013109)
650025.76	4188683.34	266.34387	(16123009)	650125.76	4188683.34	345.32935	(17021503)
650225.76	4188683.34	617.44859	(16102917)	650325.76	4188683.34	853.68633	(16021724)
650425.76	4188683.34	450.61930	(15091319)	650525.76	4188683.34	306.96310	(15120709)
650625.76	4188683.34	243.27402	(13040507)	650725.76	4188683.34	190.24246	(17022708)
650825.76	4188683.34	167.49189	(17022708)	651125.76	4188683.34	122.43670	(15121617)
649125.76	4188733.34	100.40892	(17031805)	649225.76	4188733.34	106.49415	(17021301)
649325.76	4188733.34	113.69850	(17021301)	649425.76	4188733.34	121.99929	(17120904)
649525.76	4188733.34	136.43704	(17021502)	649625.76	4188733.34	151.05511	(17021502)
649725.76	4188733.34	165.05227	(17040504)	649825.76	4188733.34	179.37632	(15013009)
649925.76	4188733.34	209.36920	(15122909)	650025.76	4188733.34	234.73607	(14110508)
650125.76	4188733.34	334.69693	(17122809)	650225.76	4188733.34	449.37325	(14110117)
650325.76	4188733.34	571.88248	(17010823)	650425.76	4188733.34	377.99377	(17012302)
650525.76	4188733.34	275.94397	(14040407)	650625.76	4188733.34	209.61930	(13011617)
650725.76	4188733.34	184.05201	(13010317)	650825.76	4188733.34	167.73018	(14120819)

651125.76	4188733.34	121.61271	(14122318)	649125.76	4188783.34	100.53130	(17121322)
649225.76	4188783.34	104.50965	(17021502)	649325.76	4188783.34	113.18639	(17012722)
649425.76	4188783.34	124.49529	(17120103)	649525.76	4188783.34	135.10510	(17120103)
649625.76	4188783.34	147.68292	(17013004)	649725.76	4188783.34	158.81338	(17011123)
649825.76	4188783.34	186.30914	(17022608)	649925.76	4188783.34	192.89350	(17010618)
650025.76	4188783.34	241.16091	(17040507)	650125.76	4188783.34	294.47290	(17040407)
650225.76	4188783.34	401.56404	(14032818)	650325.76	4188783.34	380.33503	(17010823)
650425.76	4188783.34	287.79318	(15121023)	650525.76	4188783.34	248.43205	(13122709)
650625.76	4188783.34	207.43728	(17013017)	650725.76	4188783.34	191.06442	(16012717)
650825.76	4188783.34	161.46890	(15120623)	651125.76	4188783.34	122.15416	(14120819)
649125.76	4188833.34	99.13899	(17031703)	649225.76	4188833.34	104.63316	(17010624)
649325.76	4188833.34	108.79935	(13013118)	649425.76	4188833.34	123.07764	(17013004)
649525.76	4188833.34	132.20055	(17122523)	649625.76	4188833.34	150.19516	(17011123)
649725.76	4188833.34	163.64477	(17022608)	649825.76	4188833.34	175.57009	(17032420)
649925.76	4188833.34	202.49945	(17040507)	650025.76	4188833.34	215.41464	(13103108)
650125.76	4188833.34	231.57698	(13110517)	650225.76	4188833.34	320.44504	(14120909)
650325.76	4188833.34	299.73812	(17012024)	650425.76	4188833.34	276.23179	(17102317)
650525.76	4188833.34	233.21121	(16090707)	650625.76	4188833.34	214.56378	(13122709)
650725.76	4188833.34	177.57482	(15011517)	650825.76	4188833.34	164.31818	(16012717)
651125.76	4188833.34	120.73742	(13121417)	649125.76	4188883.34	94.91546	(13013118)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 176

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK13 \*\*\*

INCLUDING SOURCE(S): STCK13 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649225.76	4188883.34	104.70517	(17021224)	649325.76	4188883.34	112.10511	(17122523)
649425.76	4188883.34	123.53879	(17011123)	649525.76	4188883.34	134.96877	(17020508)
649625.76	4188883.34	140.18204	(17031723)	649725.76	4188883.34	158.23262	(17122118)
649825.76	4188883.34	173.00882	(17020721)	649925.76	4188883.34	186.34325	(13091907)
650025.76	4188883.34	203.54892	(14040707)	650125.76	4188883.34	243.49873	(16110408)
650225.76	4188883.34	250.31682	(14120909)	650325.76	4188883.34	256.45583	(15012717)
650425.76	4188883.34	215.36105	(14011618)	650525.76	4188883.34	229.88225	(17040807)
650625.76	4188883.34	186.27771	(14030422)	650725.76	4188883.34	174.14043	(15101222)
650825.76	4188883.34	159.96984	(15011517)	651125.76	4188883.34	118.93835	(15120623)
650125.76	4188933.34	210.94217	(15011809)	650225.76	4188933.34	223.72310	(15103117)
650325.76	4188933.34	236.50365	(15012717)	650425.76	4188933.34	217.88186	(16053106)
650525.76	4188933.34	201.20151	(16092007)	650625.76	4188933.34	178.71128	(13022722)
650725.76	4188933.34	168.87108	(15042724)	650825.76	4188933.34	153.73146	(15031322)
651125.76	4188933.34	117.65479	(14012318)	650425.76	4188983.34	205.15763	(14010309)
650525.76	4188983.34	188.83286	(17102317)	650625.76	4188983.34	175.70488	(17040807)
650725.76	4188983.34	160.14368	(16011924)	650825.76	4188983.34	150.09286	(17122322)
651125.76	4188983.34	116.10938	(14120704)	650525.76	4189033.34	177.79593	(17121820)
650625.76	4189033.34	173.67399	(15020318)	650725.76	4189033.34	159.34829	(17011918)

650825.76	4189033.34	144.21161	(17122308)	651125.76	4189033.34	113.85269	(14010718)
650525.76	4189083.34	163.98648	(15011721)	650625.76	4189083.34	162.22539	(17031107)
650725.76	4189083.34	152.96579	(14021523)	650825.76	4189083.34	136.70122	(13012505)
651125.76	4189083.34	112.87013	(14010518)	650525.76	4189133.34	161.23985	(16020921)
650625.76	4189133.34	149.57909	(16121405)	650725.76	4189133.34	146.05713	(15022703)
650825.76	4189133.34	138.81140	(17011918)	651125.76	4189133.34	108.79429	(13011920)
650781.98	4189510.65	104.75717	(14020118)	650760.33	4189397.50	114.35034	(17021405)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 177

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649676.34	4188314.55	131.27830	(17022504)	649629.66	4188294.84	126.75710	(17022504)
649810.15	4188312.48	148.66746	(16021508)	649364.10	4188360.20	106.45881	(13013018)
649327.80	4188355.01	103.93810	(13013018)	649380.70	4188758.52	111.01477	(17013005)
650495.81	4188841.51	246.00472	(16020818)	650597.47	4188832.17	236.07430	(16090707)
650536.27	4188878.85	248.75445	(17102317)	650577.76	4188877.81	218.69619	(17040807)
650602.66	4188860.18	222.42257	(17040807)	650610.95	4188880.93	227.27483	(17040807)
650638.10	4188858.53	213.47850	(14011517)	650664.10	4188331.03	190.51062	(17120117)
650668.72	4188350.83	196.44369	(17120117)	650677.96	4188379.86	196.74185	(14100518)
650699.74	4188414.84	202.47240	(17021419)	650758.47	4188658.36	207.57597	(17022708)
650765.73	4188678.82	201.53687	(17022708)	650773.65	4188706.54	202.34307	(13040507)
650778.27	4188726.34	189.66565	(15091922)	650805.33	4188805.53	190.60886	(16012717)
650806.65	4188824.01	176.69684	(16022321)	650811.27	4188843.81	177.27170	(15011517)
650814.57	4188862.29	176.87269	(15031322)	650846.24	4188924.98	161.11857	(17122322)
650850.86	4188951.38	159.81928	(16092620)	650854.82	4188976.46	158.07913	(13120224)
650698.00	4188307.32	191.14894	(17120117)	650692.60	4188291.80	177.92664	(15020524)
650724.82	4189245.80	137.16195	(13020219)	650726.07	4189273.37	133.53067	(17031007)
650856.27	4189006.30	153.37525	(17012922)	650857.23	4189022.60	151.21467	(16011924)
650859.15	4189041.29	145.40710	(15030420)	650859.15	4189058.54	146.19798	(15030420)
650860.58	4189076.28	147.69618	(17011918)	650861.54	4189094.49	147.63347	(17011918)
650857.71	4189113.19	144.78262	(14021523)	650847.16	4189118.94	145.20180	(14021523)
650848.12	4189134.76	140.14319	(17120124)	650850.04	4189155.37	138.00524	(13121017)
650851.48	4189171.66	136.00163	(15022703)	650853.87	4189184.12	135.51806	(15022703)
650856.75	4189199.46	133.56568	(15022703)	650857.71	4189213.36	132.46540	(14021218)
650860.58	4189226.30	132.32581	(14021218)	650862.50	4189242.60	131.19528	(14021218)
650865.38	4189258.42	128.66399	(14021218)	650867.77	4189275.19	124.92608	(15021124)
650868.73	4189291.49	122.93759	(17031107)	650872.09	4189309.23	120.72791	(17031107)
650874.00	4189325.04	119.97143	(17041522)	650875.92	4189340.38	118.74463	(17041522)
650878.80	4189355.24	116.95295	(17041522)	650881.19	4189373.45	115.41732	(14120621)
650884.55	4189390.71	113.38005	(14120621)	650888.86	4189407.01	111.86171	(17031101)
650889.82	4189427.14	111.83678	(17031101)	650891.74	4189443.43	110.91096	(17031101)
650895.09	4189461.17	109.32516	(17031101)	650898.45	4189475.55	108.79830	(17021405)

650898.45	4189489.93	108.16109	(17021405)	650902.28	4189504.31	107.13670	(17021405)
650709.41	4188344.56	186.19661	(16110217)	650722.45	4188284.03	185.99261	(17120117)
650745.73	4188280.30	177.52077	(17120117)	650735.49	4188223.50	171.62850	(17122517)
650721.52	4188167.62	159.85850	(17041904)	650525.76	4188133.34	175.82259	(17021418)
651125.76	4188133.34	116.44995	(14012721)	649125.76	4188183.34	93.67391	(17021308)
649225.76	4188183.34	97.12962	(17011204)	649325.76	4188183.34	103.66700	(17021420)
649425.76	4188183.34	108.28560	(17021420)	649525.76	4188183.34	113.32335	(17031507)
649625.76	4188183.34	122.12311	(13041820)	649725.76	4188183.34	132.12179	(17020108)
649825.76	4188183.34	144.75011	(17020902)	649925.76	4188183.34	152.27565	(15120519)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 178

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650025.76	4188183.34	162.54041	(16121304)	650125.76	4188183.34	171.07405	(17041924)
650225.76	4188183.34	179.41325	(13042202)	650325.76	4188183.34	186.55258	(16021118)
650425.76	4188183.34	186.50217	(17121920)	650525.76	4188183.34	182.40975	(16012902)
650625.76	4188183.34	172.60104	(17011220)	650725.76	4188183.34	160.27358	(17122517)
650825.76	4188183.34	159.89025	(17120117)	651125.76	4188183.34	121.23185	(17011307)
649125.76	4188233.34	92.75264	(17123023)	649225.76	4188233.34	97.70862	(17123106)
649325.76	4188233.34	101.25379	(17041705)	649425.76	4188233.34	108.58089	(17121220)
649525.76	4188233.34	114.91226	(17021420)	649625.76	4188233.34	121.96886	(15011006)
649725.76	4188233.34	136.43048	(13041820)	649825.76	4188233.34	150.33767	(14021403)
649925.76	4188233.34	153.67200	(17020104)	650025.76	4188233.34	171.48098	(13010518)
650125.76	4188233.34	179.02009	(15120819)	650225.76	4188233.34	197.75667	(15022508)
650325.76	4188233.34	198.91474	(16021118)	650425.76	4188233.34	194.75096	(17121920)
650525.76	4188233.34	210.57708	(16041107)	650625.76	4188233.34	182.44389	(13122017)
650725.76	4188233.34	174.88419	(17122517)	650825.76	4188233.34	156.84041	(17013019)
651125.76	4188233.34	117.23478	(17012523)	649125.76	4188283.34	93.48053	(17121823)
649225.76	4188283.34	99.04776	(17123023)	649325.76	4188283.34	103.24977	(17122522)
649425.76	4188283.34	109.52552	(17041705)	649525.76	4188283.34	120.16307	(17121220)
649625.76	4188283.34	124.80127	(17022504)	649725.76	4188283.34	135.45231	(15021905)
649825.76	4188283.34	149.91015	(13041820)	649925.76	4188283.34	168.53233	(17020902)
650025.76	4188283.34	175.02205	(15120519)	650125.76	4188283.34	194.20609	(13022418)
650225.76	4188283.34	207.58252	(14041420)	650325.76	4188283.34	215.53358	(14032718)
650425.76	4188283.34	206.53572	(17040523)	650525.76	4188283.34	223.40368	(16041107)
650625.76	4188283.34	182.03439	(14121122)	650725.76	4188283.34	185.65295	(17120117)
650825.76	4188283.34	165.67811	(16021119)	651125.76	4188283.34	119.60859	(15062502)
649125.76	4188333.34	93.31782	(17012823)	649225.76	4188333.34	98.59839	(17012823)
649325.76	4188333.34	103.91428	(17121823)	649425.76	4188333.34	112.96193	(17021006)
649525.76	4188333.34	119.28536	(17032401)	649625.76	4188333.34	131.57067	(17121220)
649725.76	4188333.34	138.17548	(17120623)	649825.76	4188333.34	150.49491	(13120107)
649925.76	4188333.34	166.96541	(14033104)	650025.76	4188333.34	184.33077	(15120820)

650125.76	4188333.34	217.07515	(14010609)	650225.76	4188333.34	250.22382	(17041807)
650325.76	4188333.34	239.33754	(14032718)	650425.76	4188333.34	237.51567	(14091007)
650525.76	4188333.34	221.19276	(15090707)	650625.76	4188333.34	200.01192	(17012919)
650725.76	4188333.34	180.96566	(16110217)	650825.76	4188333.34	164.24484	(17021419)
651125.76	4188333.34	120.80741	(15030721)	649125.76	4188383.34	94.82995	(17011605)
649225.76	4188383.34	100.50132	(17011605)	649325.76	4188383.34	104.06549	(17012823)
649425.76	4188383.34	112.96974	(17020501)	649525.76	4188383.34	120.99087	(17021006)
649625.76	4188383.34	132.25186	(17021404)	649725.76	4188383.34	141.76066	(16120523)
649825.76	4188383.34	156.32389	(17120623)	649925.76	4188383.34	167.04512	(14120809)
650025.76	4188383.34	202.36428	(13010809)	650125.76	4188383.34	217.67835	(14010609)
650225.76	4188383.34	224.21937	(17041807)	650325.76	4188383.34	246.85169	(16040707)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 179

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK14 \*\*\*  
INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

650425.76	4188383.34	265.00139	(14091007)	650525.76	4188383.34	225.11732	(17021319)
650625.76	4188383.34	224.99043	(14020517)	650725.76	4188383.34	196.35343	(17011317)
650825.76	4188383.34	177.00559	(17121518)	651125.76	4188383.34	123.11397	(13021319)
649125.76	4188433.34	96.08736	(17022506)	649225.76	4188433.34	101.14345	(17011205)
649325.76	4188433.34	105.04390	(17011205)	649425.76	4188433.34	112.08573	(17012803)
649525.76	4188433.34	123.90573	(17020501)	649625.76	4188433.34	136.46792	(17020501)
649725.76	4188433.34	146.40358	(17031301)	649825.76	4188433.34	161.61830	(17032401)
649925.76	4188433.34	173.84841	(17120623)	650025.76	4188433.34	216.08219	(14120809)
650125.76	4188433.34	249.37500	(13010809)	650225.76	4188433.34	249.97500	(14010609)
650325.76	4188433.34	292.78467	(16040707)	650425.76	4188433.34	314.28788	(17021318)
650525.76	4188433.34	278.11750	(16090207)	650625.76	4188433.34	216.27246	(17122617)
650725.76	4188433.34	197.43009	(17121518)	650825.76	4188433.34	173.62644	(17030921)
651125.76	4188433.34	125.56969	(17112222)	649125.76	4188483.34	93.95748	(17121807)
649225.76	4188483.34	99.03280	(17122902)	649325.76	4188483.34	105.36257	(17122603)
649425.76	4188483.34	111.91394	(13033006)	649525.76	4188483.34	121.42799	(17041004)
649625.76	4188483.34	134.39437	(17012803)	649725.76	4188483.34	148.99947	(17020501)
650425.76	4188483.34	404.19300	(17022520)	650525.76	4188483.34	359.00590	(14020517)
650625.76	4188483.34	238.35182	(17031318)	650725.76	4188483.34	195.35191	(17102718)
650825.76	4188483.34	176.52134	(17021005)	651125.76	4188483.34	126.75088	(17042121)
649125.76	4188533.34	96.85293	(17121420)	649225.76	4188533.34	101.80079	(17121420)
649325.76	4188533.34	106.14801	(17121420)	649425.76	4188533.34	112.13500	(17121908)
649525.76	4188533.34	120.53533	(13012303)	649625.76	4188533.34	135.88218	(17031806)
649725.76	4188533.34	148.11750	(17031806)	650425.76	4188533.34	557.70479	(17022519)
650525.76	4188533.34	370.28671	(15091218)	650625.76	4188533.34	262.59083	(13011309)
650725.76	4188533.34	207.36184	(14091307)	650825.76	4188533.34	180.44310	(14091921)
651125.76	4188533.34	128.65962	(17121522)	649125.76	4188583.34	94.70856	(15021524)
649225.76	4188583.34	100.10873	(15021524)	649325.76	4188583.34	105.54193	(15021524)

649425.76	4188583.34	114.12465	(17122404)	649525.76	4188583.34	126.25155	(17122404)
649625.76	4188583.34	138.98051	(17122404)	649725.76	4188583.34	151.05632	(17122404)
650425.76	4188583.34	859.35067	(13070320)	650525.76	4188583.34	400.21251	(17080402)
650625.76	4188583.34	270.44354	(17122309)	650725.76	4188583.34	206.29348	(17080204)
650825.76	4188583.34	182.45234	(14073004)	651125.76	4188583.34	129.46359	(14051320)
649125.76	4188633.34	97.33479	(17031802)	649225.76	4188633.34	102.99441	(17031802)
649325.76	4188633.34	108.84240	(17031802)	649425.76	4188633.34	114.68807	(17031802)
649525.76	4188633.34	123.20772	(17123022)	649625.76	4188633.34	135.06707	(17120902)
649725.76	4188633.34	148.87209	(17120902)	649825.76	4188633.34	163.79111	(17012309)
649925.76	4188633.34	195.50828	(17012309)	650025.76	4188633.34	232.64593	(17012309)
650125.76	4188633.34	262.72800	(16122909)	650225.76	4188633.34	372.61540	(17010702)
650325.76	4188633.34	829.47966	(16050120)	650425.76	4188633.34	1144.10557	(15062521)
650525.76	4188633.34	413.07819	(16022222)	650625.76	4188633.34	248.22217	(16062406)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 180

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK14 \*\*\*  
INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650725.76	4188633.34	204.39874	(15091921)	650825.76	4188633.34	180.68494	(13031019)
651125.76	4188633.34	127.13831	(15021422)	649125.76	4188683.34	95.67553	(17121203)
649225.76	4188683.34	101.03983	(17013107)	649325.76	4188683.34	106.84293	(17122119)
649425.76	4188683.34	115.30344	(17122119)	649525.76	4188683.34	126.34943	(17121123)
649625.76	4188683.34	139.84995	(17121123)	649725.76	4188683.34	153.04315	(17121123)
649825.76	4188683.34	166.49290	(17012801)	649925.76	4188683.34	203.10063	(17013109)
650025.76	4188683.34	236.18894	(17013109)	650125.76	4188683.34	285.24583	(16123009)
650225.76	4188683.34	375.37588	(17021504)	650325.76	4188683.34	692.02966	(16011819)
650425.76	4188683.34	811.94586	(15121008)	650525.76	4188683.34	392.82730	(16010317)
650625.76	4188683.34	299.64886	(13040507)	650725.76	4188683.34	228.98155	(13040507)
650825.76	4188683.34	186.25008	(17022708)	651125.76	4188683.34	131.70176	(15121617)
649125.76	4188733.34	96.36461	(17031805)	649225.76	4188733.34	101.35361	(17011121)
649325.76	4188733.34	107.78494	(17021301)	649425.76	4188733.34	114.87771	(17120904)
649525.76	4188733.34	123.49915	(17030907)	649625.76	4188733.34	139.48605	(17021502)
649725.76	4188733.34	152.84280	(17021502)	649825.76	4188733.34	168.15422	(17040504)
649925.76	4188733.34	183.55345	(15013009)	650025.76	4188733.34	217.52896	(17122509)
650125.76	4188733.34	244.42956	(14110508)	650225.76	4188733.34	341.17935	(17122809)
650325.76	4188733.34	495.78449	(17021621)	650425.76	4188733.34	520.94045	(16092521)
650525.76	4188733.34	355.44932	(17011917)	650625.76	4188733.34	264.95197	(17013017)
650725.76	4188733.34	201.11675	(13011617)	650825.76	4188733.34	181.23352	(13010317)
651125.76	4188733.34	134.49576	(14122318)	649125.76	4188783.34	97.40365	(17011121)
649225.76	4188783.34	101.24689	(17121322)	649325.76	4188783.34	106.18957	(17021502)
649425.76	4188783.34	114.91853	(17012722)	649525.76	4188783.34	126.89098	(17120103)
649625.76	4188783.34	135.81445	(17120103)	649725.76	4188783.34	150.94866	(17013004)
649825.76	4188783.34	165.05045	(17011123)	649925.76	4188783.34	191.28097	(17022608)

650025.76	4188783.34	202.81087	(14030818)	650125.76	4188783.34	254.09554	(17122809)
650225.76	4188783.34	289.41817	(17040407)	650325.76	4188783.34	360.63280	(15100418)
650425.76	4188783.34	380.62276	(15020317)	650525.76	4188783.34	283.19713	(15121023)
650625.76	4188783.34	253.12417	(17122709)	650725.76	4188783.34	211.05123	(17013017)
650825.76	4188783.34	180.56344	(16012717)	651125.76	4188783.34	129.14601	(14120819)
649125.76	4188833.34	95.29319	(17031703)	649225.76	4188833.34	99.74728	(17031703)
649325.76	4188833.34	105.60725	(17010624)	649425.76	4188833.34	111.53522	(17121720)
649525.76	4188833.34	125.22627	(17013004)	649625.76	4188833.34	134.89317	(17122523)
649725.76	4188833.34	151.15185	(17011123)	649825.76	4188833.34	163.91925	(17031723)
649925.76	4188833.34	175.42365	(17120823)	650025.76	4188833.34	212.47723	(17040507)
650125.76	4188833.34	233.60177	(13103108)	650225.76	4188833.34	246.27952	(14122709)
650325.76	4188833.34	271.32160	(14120923)	650425.76	4188833.34	309.14467	(14122609)
650525.76	4188833.34	271.14586	(17102317)	650625.76	4188833.34	221.37899	(14011517)
650725.76	4188833.34	203.75757	(13122709)	650825.76	4188833.34	173.00612	(14012520)
651125.76	4188833.34	128.37791	(13121417)	649125.76	4188833.34	90.12034	(14012320)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 181

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK14 \*\*\*

INCLUDING SOURCE(S): STCK14 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649225.76	4188833.34	96.83700	(17021224)	649325.76	4188833.34	105.97493	(17021224)
649425.76	4188833.34	114.48569	(17122523)	649525.76	4188833.34	125.59222	(17011123)
649625.76	4188833.34	137.41816	(17020508)	649725.76	4188833.34	141.68879	(17121121)
649825.76	4188833.34	157.86313	(17122118)	649925.76	4188833.34	175.98638	(17040507)
650025.76	4188833.34	190.08731	(13091907)	650125.76	4188833.34	204.66466	(14040707)
650225.76	4188833.34	226.61743	(16110408)	650325.76	4188833.34	255.85098	(15103117)
650425.76	4188833.34	286.83512	(14122609)	650525.76	4188833.34	228.48148	(17102317)
650625.76	4188833.34	210.04647	(17040807)	650725.76	4188833.34	188.32363	(15042724)
650825.76	4188833.34	173.59192	(15031322)	651125.76	4188833.34	127.97888	(15021222)
650125.76	4188933.34	188.20227	(16021522)	650225.76	4188933.34	220.76667	(15011809)
650325.76	4188933.34	228.19332	(15103117)	650425.76	4188933.34	243.34329	(14122609)
650525.76	4188933.34	201.89574	(16053106)	650625.76	4188933.34	199.70285	(17040807)
650725.76	4188933.34	177.10701	(15030420)	650825.76	4188933.34	166.39927	(16092620)
651125.76	4188933.34	124.81035	(13011820)	650425.76	4188933.34	206.70280	(13012117)
650525.76	4188933.34	196.30000	(16053106)	650625.76	4188933.34	188.39556	(16091807)
650725.76	4188933.34	175.95609	(14021523)	650825.76	4188933.34	159.87093	(17012922)
651125.76	4188933.34	124.01054	(14010718)	650525.76	4189033.34	187.51572	(13022508)
650625.76	4189033.34	178.74146	(15092122)	650725.76	4189033.34	166.34299	(15022703)
650825.76	4189033.34	153.72719	(15020301)	651125.76	4189033.34	120.47140	(14010518)
650525.76	4189033.34	178.01118	(13110617)	650625.76	4189033.34	166.47926	(13020219)
650725.76	4189033.34	163.48620	(15020318)	650825.76	4189033.34	152.17778	(14021523)
651125.76	4189033.34	117.69119	(13020120)	650525.76	4189133.34	167.45681	(17021304)
650625.76	4189133.34	154.95292	(15011721)	650725.76	4189133.34	152.29829	(17120123)

650825.76 4189133.34 142.18107 (13121017) 651125.76 4189133.34 116.30631 (17122322)  
650781.98 4189510.65 108.55548 (17041006) 650760.33 4189397.50 118.41472 (14092520)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 182

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

649676.34	4188314.55	216.60055	(15042719)	649629.66	4188294.84	197.67801	(15021607)
649810.15	4188312.48	296.99587	(15031105)	649364.10	4188360.20	156.91560	(17031806)
649327.80	4188355.01	152.30434	(17031806)	649380.70	4188758.52	147.98641	(17030206)
650495.81	4188841.51	141.89811	(13120224)	650597.47	4188832.17	132.70596	(17122322)
650536.27	4188878.85	134.64767	(17122308)	650577.76	4188877.81	130.62917	(13120224)
650602.66	4188860.18	133.38486	(17122322)	650610.95	4188880.93	127.75983	(17122322)
650638.10	4188858.53	127.09730	(17122322)	650664.10	4188331.03	130.10096	(14030224)
650668.72	4188350.83	133.74699	(17121522)	650677.96	4188379.86	131.88422	(17021219)
650699.74	4188414.84	131.61110	(17091205)	650758.47	4188658.36	121.28592	(14012623)
650765.73	4188678.82	121.14822	(15120623)	650773.65	4188706.54	120.04362	(13030120)
650778.27	4188726.34	118.04512	(15021222)	650805.33	4188805.53	113.97173	(14120704)
650806.65	4188824.01	110.65172	(16100822)	650811.27	4188843.81	110.71152	(13121319)
650814.57	4188862.29	110.07842	(13121319)	650846.24	4188924.98	107.75117	(13121617)
650850.86	4188951.38	104.99619	(15012906)	650854.82	4188976.46	103.16441	(13011920)
650698.00	4188307.32	126.85303	(17042121)	650692.60	4188291.80	127.66904	(17042121)
650724.82	4189245.80	99.97510	(13121517)	650726.07	4189273.37	99.88994	(17122321)
650856.27	4189006.30	103.58968	(17121119)	650857.23	4189022.60	103.48845	(17121119)
650859.15	4189041.29	101.56746	(17121119)	650859.15	4189058.54	101.05698	(17123020)
650860.58	4189076.28	100.74695	(13020618)	650861.54	4189094.49	100.53742	(13020618)
650857.71	4189113.19	98.61599	(13020618)	650847.16	4189118.94	99.31408	(17013020)
650848.12	4189134.76	98.96831	(17013020)	650850.04	4189155.37	98.79617	(17042922)
650851.48	4189171.66	99.32254	(17042922)	650853.87	4189184.12	99.03351	(17042922)
650856.75	4189199.46	98.09873	(17042922)	650857.71	4189213.36	96.90404	(17122923)
650860.58	4189226.30	96.29513	(17122923)	650862.50	4189242.60	94.99468	(17122923)
650865.38	4189258.42	95.24801	(14011617)	650867.77	4189275.19	95.22742	(14011617)
650868.73	4189291.49	94.55612	(14011617)	650872.09	4189309.23	93.04633	(14011617)
650874.00	4189325.04	91.12654	(14011617)	650875.92	4189340.38	89.69284	(14012019)
650878.80	4189355.24	88.73526	(13121517)	650881.19	4189373.45	88.78802	(13121517)
650884.55	4189390.71	88.28986	(13121517)	650888.86	4189407.01	87.44095	(13121517)
650889.82	4189427.14	85.95032	(13121517)	650891.74	4189443.43	85.48025	(17122321)
650895.09	4189461.17	85.37416	(17122321)	650898.45	4189475.55	84.90112	(17122321)
650898.45	4189489.93	84.18913	(17122321)	650902.28	4189504.31	83.11939	(17122321)
650709.41	4188344.56	128.81492	(17121522)	650722.45	4188284.03	124.88017	(17042121)
650745.73	4188280.30	122.97849	(17042121)	650735.49	4188223.50	120.09706	(17112222)
650721.52	4188167.62	123.07863	(17020824)	650525.76	4188133.34	145.79060	(17121819)
651125.76	4188133.34	88.71563	(16010723)	649125.76	4188183.34	124.15076	(17021006)



649225.76 4188183.34 135.87666 (17032401) 649325.76 4188183.34 146.99034 (17121220)  
649425.76 4188183.34 166.19372 (17021408) 649525.76 4188183.34 174.34277 (16021508)  
649625.76 4188183.34 209.46145 (13010809) 649725.76 4188183.34 254.42355 (14010609)  
649825.76 4188183.34 286.50276 (17041807) 649925.76 4188183.34 269.45560 (14032718)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 183

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

-----  
650025.76 4188183.34 263.40361 (16121309) 650125.76 4188183.34 221.04234 (15092807)  
650225.76 4188183.34 198.55383 (15031402) 650325.76 4188183.34 189.59162 (17021419)  
650425.76 4188183.34 169.71175 (17121518) 650525.76 4188183.34 148.37117 (17030921)  
650625.76 4188183.34 132.63976 (17122508) 650725.76 4188183.34 120.44203 (13042023)  
650825.76 4188183.34 112.76568 (15021623) 651125.76 4188183.34 92.30141 (14012017)  
649125.76 4188233.34 128.48876 (17020501) 649225.76 4188233.34 137.74285 (17121824)  
649325.76 4188233.34 148.79668 (17032401) 649425.76 4188233.34 162.51152 (17032324)  
649525.76 4188233.34 186.19389 (17021408) 649625.76 4188233.34 210.50604 (14120809)  
649725.76 4188233.34 219.60307 (17040207) 649825.76 4188233.34 285.17056 (14041207)  
649925.76 4188233.34 304.97694 (14032718) 650025.76 4188233.34 325.99755 (13030408)  
650125.76 4188233.34 269.32666 (15102117) 650225.76 4188233.34 204.98812 (15100119)  
650325.76 4188233.34 194.26879 (17121518) 650425.76 4188233.34 169.74042 (17030921)  
650525.76 4188233.34 146.63841 (13021319) 650625.76 4188233.34 133.72727 (17020321)  
650725.76 4188233.34 122.30244 (17112222) 650825.76 4188233.34 113.21934 (14021320)  
651125.76 4188233.34 94.19397 (14012017) 649125.76 4188283.34 125.95805 (17012803)  
649225.76 4188283.34 136.59714 (15021608) 649325.76 4188283.34 155.67871 (17020501)  
649425.76 4188283.34 168.03210 (17031301) 649525.76 4188283.34 185.86513 (15010709)  
649625.76 4188283.34 202.92241 (15042719) 649725.76 4188283.34 256.24453 (13122309)  
649825.76 4188283.34 304.81989 (14010609) 649925.76 4188283.34 378.11185 (16030301)  
650025.76 4188283.34 367.39979 (17022519) 650125.76 4188283.34 293.54751 (14020517)  
650225.76 4188283.34 234.28091 (14010409) 650325.76 4188283.34 188.16545 (17030921)  
650425.76 4188283.34 170.44651 (17021005) 650525.76 4188283.34 152.80792 (17112222)  
650625.76 4188283.34 134.93310 (16021224) 650725.76 4188283.34 124.59044 (17042121)  
650825.76 4188283.34 115.90151 (17042121) 651125.76 4188283.34 94.76696 (17122519)  
649125.76 4188333.34 125.80064 (17031806) 649225.76 4188333.34 139.19848 (17031806)  
649325.76 4188333.34 150.63946 (17122606) 649425.76 4188333.34 168.31967 (15021608)  
649525.76 4188333.34 183.66816 (17011802) 649625.76 4188333.34 241.23046 (15010709)  
649725.76 4188333.34 240.78869 (14120809) 649825.76 4188333.34 345.31053 (16030302)  
649925.76 4188333.34 541.08385 (14031818) 650025.76 4188333.34 490.88694 (16022620)  
650125.76 4188333.34 353.70054 (15091218) 650225.76 4188333.34 237.46917 (13011309)  
650325.76 4188333.34 197.65610 (14091307) 650425.76 4188333.34 174.66227 (14091921)  
650525.76 4188333.34 155.30946 (15072004) 650625.76 4188333.34 136.76573 (14021608)  
650725.76 4188333.34 125.29448 (17121522) 650825.76 4188333.34 115.87980 (17121522)  
651125.76 4188333.34 91.62626 (17122719) 649125.76 4188383.34 129.91593 (17122404)

649225.76 4188383.34 141.61764 (17122404) 649325.76 4188383.34 151.40081 (17122404)  
649425.76 4188383.34 165.93439 (15030924) 649525.76 4188383.34 200.07548 (16122709)  
649625.76 4188383.34 242.70092 (16122709) 649725.76 4188383.34 332.19301 (16020517)  
649825.76 4188383.34 427.10905 (17020119) 649925.76 4188383.34 652.69532 (14091723)  
650025.76 4188383.34 695.88808 (17043020) 650125.76 4188383.34 340.00157 (17080402)  
650225.76 4188383.34 255.26719 (14091307) 650325.76 4188383.34 200.39255 (17080204)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 184

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

-----  
650425.76 4188383.34 177.78671 (14073004) 650525.76 4188383.34 158.44268 (13070405)  
650625.76 4188383.34 140.63993 (17021219) 650725.76 4188383.34 126.24384 (14051320)  
650825.76 4188383.34 115.36322 (13021621) 651125.76 4188383.34 96.68120 (17122621)  
649125.76 4188433.34 126.82441 (17123022) 649225.76 4188433.34 136.33021 (17123022)  
649325.76 4188433.34 150.27114 (13040606) 649425.76 4188433.34 167.70328 (16122909)  
649525.76 4188433.34 201.95596 (16122909) 649625.76 4188433.34 241.44897 (16122909)  
649725.76 4188433.34 272.78895 (15010909) 649825.76 4188433.34 433.54395 (15022118)  
649925.76 4188433.34 931.31263 (16050119) 650025.76 4188433.34 873.49483 (14073120)  
650125.76 4188433.34 355.68520 (15092119) 650225.76 4188433.34 241.53104 (15102617)  
650325.76 4188433.34 201.06131 (15043021) 650425.76 4188433.34 174.09799 (17091205)  
650525.76 4188433.34 156.60830 (17091205) 650625.76 4188433.34 139.38552 (17091205)  
650725.76 4188433.34 123.98269 (17091205) 650825.76 4188433.34 113.16138 (15032524)  
651125.76 4188433.34 93.01648 (16010203) 649125.76 4188483.34 128.35249 (17122119)  
649225.76 4188483.34 142.20682 (17121123) 649325.76 4188483.34 156.45625 (17121123)  
649425.76 4188483.34 171.92730 (17031724) 649525.76 4188483.34 208.51969 (17013109)  
649625.76 4188483.34 244.83991 (17013109) 649725.76 4188483.34 299.01929 (16123009)  
650425.76 4188483.34 183.51375 (17022708) 650525.76 4188483.34 159.82085 (17021220)  
650625.76 4188483.34 142.36182 (17021220) 650725.76 4188483.34 129.85768 (15121617)  
650825.76 4188483.34 118.07218 (17020901) 651125.76 4188483.34 96.72999 (15011123)  
649125.76 4188533.34 126.03702 (17120904) 649225.76 4188533.34 142.02527 (17021502)  
649325.76 4188533.34 156.62128 (17021502) 649425.76 4188533.34 172.03564 (17040504)  
649525.76 4188533.34 192.96436 (15013009) 649625.76 4188533.34 225.57777 (17122509)  
649725.76 4188533.34 262.11838 (13020309) 650425.76 4188533.34 174.15688 (16012718)  
650525.76 4188533.34 161.68475 (14120819) 650625.76 4188533.34 145.44134 (14122318)  
650725.76 4188533.34 129.70104 (14122318) 650825.76 4188533.34 117.58918 (14021603)  
651125.76 4188533.34 98.08345 (17020901) 649125.76 4188583.34 129.70098 (17120103)  
649225.76 4188583.34 139.38751 (17120103) 649325.76 4188583.34 154.16750 (17013004)  
649425.76 4188583.34 168.83501 (17011123) 649525.76 4188583.34 195.72992 (17022608)  
649625.76 4188583.34 212.96865 (14030818) 649725.76 4188583.34 270.64242 (17122809)  
650425.76 4188583.34 172.06154 (15021208) 650525.76 4188583.34 156.13716 (14022323)  
650625.76 4188583.34 141.70690 (14011919) 650725.76 4188583.34 129.19909 (14120819)  
650825.76 4188583.34 117.62087 (14021120) 651125.76 4188583.34 97.30731 (14021603)

649125.76	4188633.34	128.07938	(17013004)	649225.76	4188633.34	138.25864	(17011123)
649325.76	4188633.34	154.01133	(17011123)	649425.76	4188633.34	167.25562	(17031723)
649525.76	4188633.34	182.31044	(14030818)	649625.76	4188633.34	218.50143	(17040507)
649725.76	4188633.34	243.24031	(13103108)	649825.76	4188633.34	282.96394	(14122709)
649925.76	4188633.34	290.21827	(17120302)	650025.76	4188633.34	291.64844	(17010917)
650125.76	4188633.34	249.10259	(17040807)	650225.76	4188633.34	216.00702	(17091207)
650325.76	4188633.34	191.16623	(15031322)	650425.76	4188633.34	176.23930	(15022308)
650525.76	4188633.34	155.90987	(16041723)	650625.76	4188633.34	140.42166	(15120623)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 185

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

(YYMMDDHH)

650725.76	4188633.34	127.91518	(13121417)	650825.76	4188633.34	114.56506	(14011919)
651125.76	4188633.34	97.62216	(14021120)	649125.76	4188683.34	128.45315	(17011123)
649225.76	4188683.34	140.57936	(17020508)	649325.76	4188683.34	146.30663	(17121121)
649425.76	4188683.34	162.21472	(17020721)	649525.76	4188683.34	183.86958	(17040507)
649625.76	4188683.34	189.15597	(13091907)	649725.76	4188683.34	207.78895	(17012317)
649825.76	4188683.34	252.94679	(14032818)	649925.76	4188683.34	234.34331	(15022808)
650025.76	4188683.34	249.04918	(14122609)	650125.76	4188683.34	249.34874	(17102317)
650225.76	4188683.34	200.25544	(14011517)	650325.76	4188683.34	186.84006	(16092620)
650425.76	4188683.34	167.73964	(15031322)	650525.76	4188683.34	150.49734	(13020422)
650625.76	4188683.34	139.62693	(16041723)	650725.76	4188683.34	125.06118	(15120623)
650825.76	4188683.34	115.28588	(15031407)	651125.76	4188683.34	95.55329	(13120917)
649125.76	4188733.34	121.88548	(17120518)	649225.76	4188733.34	135.88152	(17121121)
649325.76	4188733.34	145.15330	(17020721)	649425.76	4188733.34	154.86840	(17030206)
649525.76	4188733.34	170.30146	(13091907)	649625.76	4188733.34	189.09055	(15091220)
649725.76	4188733.34	198.23182	(16110408)	649825.76	4188733.34	230.99306	(14120909)
649925.76	4188733.34	217.76050	(15091607)	650025.76	4188733.34	250.94638	(14122609)
650125.76	4188733.34	208.80541	(13092819)	650225.76	4188733.34	207.11644	(17040807)
650325.76	4188733.34	174.45098	(17012922)	650425.76	4188733.34	160.77244	(17122322)
650525.76	4188733.34	148.58491	(14021304)	650625.76	4188733.34	134.13285	(14022020)
650725.76	4188733.34	122.04131	(14030421)	650825.76	4188733.34	114.54985	(13030120)
651125.76	4188733.34	95.35059	(14021501)	649125.76	4188783.34	123.26821	(17121121)
649225.76	4188783.34	130.04170	(17122524)	649325.76	4188783.34	139.07293	(17030206)
649425.76	4188783.34	147.35056	(15100104)	649525.76	4188783.34	158.44123	(15102307)
649625.76	4188783.34	170.81301	(17022120)	649725.76	4188783.34	197.03759	(16110408)
649825.76	4188783.34	224.81754	(14120909)	649925.76	4188783.34	197.75640	(16031106)
650025.76	4188783.34	228.59346	(14122609)	650125.76	4188783.34	190.71912	(15011721)
650225.76	4188783.34	187.77198	(15020318)	650325.76	4188783.34	170.88366	(17011918)
650425.76	4188783.34	157.90013	(13120224)	650525.76	4188783.34	145.38170	(13020120)
650625.76	4188783.34	132.13453	(16021207)	650725.76	4188783.34	119.63339	(14022020)
650825.76	4188783.34	113.39424	(15021922)	651125.76	4188783.34	94.84310	(15120117)

649125.76	4188833.34	119.42266	(17122524)	649225.76	4188833.34	124.12787	(17030206)
649325.76	4188833.34	130.67753	(15100104)	649425.76	4188833.34	138.78166	(14122717)
649525.76	4188833.34	163.08117	(15091220)	649625.76	4188833.34	162.13873	(13092407)
649725.76	4188833.34	180.96012	(16040607)	649825.76	4188833.34	188.26472	(17031721)
649925.76	4188833.34	185.47025	(16031106)	650025.76	4188833.34	199.26913	(14122609)
650125.76	4188833.34	183.76696	(17032421)	650225.76	4188833.34	174.59288	(16091807)
650325.76	4188833.34	163.92906	(14021523)	650425.76	4188833.34	148.17252	(16011924)
650525.76	4188833.34	139.13085	(13120224)	650625.76	4188833.34	129.69452	(13020120)
650725.76	4188833.34	118.63521	(14010518)	650825.76	4188833.34	108.94921	(14120704)
651125.76	4188833.34	93.61338	(15010921)	649125.76	4188833.34	111.39383	(17043004)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 186

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK2 \*\*\*

INCLUDING SOURCE(S): STCK2 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

649225.76	4188883.34	116.56868	(14102501)	649325.76	4188883.34	128.12264	(13081903)
649425.76	4188883.34	136.70408	(15102307)	649525.76	4188883.34	147.90827	(14120419)
649625.76	4188883.34	170.10902	(15091121)	649725.76	4188883.34	168.41398	(14102101)
649825.76	4188883.34	177.33594	(15020721)	649925.76	4188883.34	174.46924	(15102306)
650025.76	4188883.34	182.42368	(17120719)	650125.76	4188883.34	177.69822	(13022508)
650225.76	4188883.34	168.75697	(17121820)	650325.76	4188883.34	160.49548	(15020318)
650425.76	4188883.34	150.65118	(17011918)	650525.76	4188883.34	135.85456	(17122308)
650625.76	4188883.34	128.19227	(17122322)	650725.76	4188883.34	114.60981	(13020120)
650825.76	4188883.34	110.32144	(13121617)	651125.76	4188883.34	95.06554	(14011317)
650125.76	4188933.34	165.21801	(13110617)	650225.76	4188933.34	158.06088	(13020219)
650325.76	4188933.34	152.66267	(17031107)	650425.76	4188933.34	142.86345	(14021523)
650525.76	4188933.34	128.61928	(13040320)	650625.76	4188933.34	120.52977	(13020618)
650725.76	4188933.34	116.86871	(17122322)	650825.76	4188933.34	106.93030	(15012906)
651125.76	4188933.34	92.01791	(14120704)	650425.76	4188983.34	136.53574	(15022703)
650525.76	4188983.34	130.44699	(17011918)	650625.76	4188983.34	119.45960	(13030119)
650725.76	4188983.34	112.70236	(13020618)	650825.76	4188983.34	105.67892	(17121119)
651125.76	4188983.34	88.00455	(13121319)	650525.76	4189033.34	124.91186	(17121323)
650625.76	4189033.34	115.19820	(14040724)	650725.76	4189033.34	108.62893	(13030119)
650825.76	4189033.34	103.76086	(17123020)	651125.76	4189033.34	89.11318	(13121617)
650525.76	4189083.34	117.58062	(14022422)	650625.76	4189083.34	113.55318	(14012019)
650725.76	4189083.34	109.57266	(17042922)	650825.76	4189083.34	102.19202	(13020618)
651125.76	4189083.34	87.71561	(13121617)	650525.76	4189133.34	115.16839	(13040319)
650625.76	4189133.34	109.67119	(17120124)	650725.76	4189133.34	106.71470	(14011617)
650825.76	4189133.34	100.57470	(17042922)	651125.76	4189133.34	85.01249	(13122521)
650781.98	4189510.65	87.45648	(17012601)	650760.33	4189397.50	88.89195	(17012601)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
---------------------------	-------------	--------------------	------------	-------------	-------------	--------------------

649676.34	4188314.55	221.81474	(15010709)	649629.66	4188294.84	198.25754 (15010709)
649810.15	4188312.48	293.06547	(14120809)	649364.10	4188360.20	142.45364 (13012303)
649327.80	4188355.01	137.52442	(13012303)	649380.70	4188758.52	141.85418 (17020721)
650495.81	4188841.51	152.51519	(15020301)	650597.47	4188832.17	143.23017 (13120224)
650536.27	4188878.85	143.87010	(15020301)	650577.76	4188877.81	139.42144 (16011924)
650602.66	4188860.18	138.66933	(17122308)	650610.95	4188880.93	136.38639 (16011924)
650638.10	4188858.53	135.71698	(13120224)	650664.10	4188331.03	146.62300 (14021608)
650668.72	4188350.83	144.35166	(14030224)	650677.96	4188379.86	146.87620 (17021219)
650699.74	4188414.84	145.46763	(17091205)	650758.47	4188658.36	134.12481 (15120623)
650765.73	4188678.82	131.19625	(15021222)	650773.65	4188706.54	129.89731 (16041723)
650778.27	4188726.34	126.46162	(13011820)	650805.33	4188805.53	122.38442 (14010718)
650806.65	4188824.01	119.22576	(16021207)	650811.27	4188843.81	119.13375 (14010518)
650814.57	4188862.29	116.51890	(14010518)	650846.24	4188924.98	110.67250 (13011920)
650850.86	4188951.38	112.36917	(17122322)	650854.82	4188976.46	109.34364 (17122322)
650698.00	4188307.32	139.85490	(15072004)	650692.60	4188291.80	138.13382 (16021224)
650724.82	4189245.80	100.65253	(16122921)	650726.07	4189273.37	102.77319 (17012601)
650856.27	4189006.30	108.67371	(13020618)	650857.23	4189022.60	108.78132 (13020618)
650859.15	4189041.29	107.01701	(13020618)	650859.15	4189058.54	104.38410 (17013020)
650860.58	4189076.28	104.40176	(13030119)	650861.54	4189094.49	105.40471 (17042922)
650857.71	4189113.19	106.09122	(17042922)	650847.16	4189118.94	105.94371 (17042922)
650848.12	4189134.76	103.75879	(17042922)	650850.04	4189155.37	103.20805 (14011617)
650851.48	4189171.66	103.75172	(14011617)	650853.87	4189184.12	103.43092 (14011617)
650856.75	4189199.46	102.42679	(14011617)	650857.71	4189213.36	100.90030 (14011617)
650860.58	4189226.30	99.52210	(14012019)	650862.50	4189242.60	97.97397 (14012019)
650865.38	4189258.42	97.05404	(13121517)	650867.77	4189275.19	96.85394 (13121517)
650868.73	4189291.49	96.14353	(13121517)	650872.09	4189309.23	94.73483 (13121517)
650874.00	4189325.04	94.25202	(17122321)	650875.92	4189340.38	94.34718 (17122321)
650878.80	4189355.24	93.84540	(17122321)	650881.19	4189373.45	92.64546 (17122321)
650884.55	4189390.71	90.93184	(17122321)	650888.86	4189407.01	88.99389 (17122321)
650889.82	4189427.14	86.77251	(16122921)	650891.74	4189443.43	85.03550 (16122921)
650895.09	4189461.17	85.82876	(17012601)	650898.45	4189475.55	86.27015 (17012601)
650898.45	4189489.93	86.88120	(17012601)	650902.28	4189504.31	86.70980 (17012601)
650709.41	4188344.56	137.90353	(14030224)	650722.45	4188284.03	134.09757 (16021224)
650745.73	4188280.30	131.00563	(16021224)	650735.49	4188223.50	130.68022 (17020321)
650721.52	4188167.62	129.35494	(17122508)	650525.76	4188133.34	161.29663 (17013121)
651125.76	4188133.34	95.34081	(14022504)	649125.76	4188183.34	115.52945 (17121824)
649225.76	4188183.34	125.04149	(17021006)	649325.76	4188183.34	137.14800 (17032401)
649425.76	4188183.34	148.19101	(17121220)	649525.76	4188183.34	168.89786 (17021408)
649625.76	4188183.34	175.06908	(13041820)	649725.76	4188183.34	206.95520 (13010809)
649825.76	4188183.34	253.04922	(14010609)	649925.76	4188183.34	283.82251 (17041807)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

650025.76	4188183.34	237.98924	(14032718)	650125.76	4188183.34	266.91255 (13030408)
650225.76	4188183.34	215.24361	(17121520)	650325.76	4188183.34	199.62653 (14100518)
650425.76	4188183.34	181.83429	(17021419)	650525.76	4188183.34	164.11776 (17121819)
650625.76	4188183.34	147.07844	(17030921)	650725.76	4188183.34	131.39289 (17122508)
650825.76	4188183.34	118.91117	(13042023)	651125.76	4188183.34	96.07681 (17121319)
649125.76	4188233.34	112.92245	(17020501)	649225.76	4188233.34	129.91540 (17020501)
649325.76	4188233.34	138.97167	(17031301)	649425.76	4188233.34	151.41000 (17032401)
649525.76	4188233.34	165.80308	(17041124)	649625.76	4188233.34	189.51031 (17021408)
649725.76	4188233.34	208.86151	(13122309)	649825.76	4188233.34	230.63476 (17040207)
649925.76	4188233.34	285.99111	(17041807)	650025.76	4188233.34	291.56151 (14041223)
650125.76	4188233.34	318.49597	(13030408)	650225.76	4188233.34	289.68338 (14020517)
650325.76	4188233.34	210.09446	(17021419)	650425.76	4188233.34	188.89070 (17121518)
650525.76	4188233.34	167.16907	(17030921)	650625.76	4188233.34	146.61543 (13021319)
650725.76	4188233.34	131.00025	(17020321)	650825.76	4188233.34	121.01806 (14021320)
651125.76	4188233.34	100.15699	(14012017)	649125.76	4188283.34	113.95441 (17041004)
649225.76	4188283.34	127.25504	(17012803)	649325.76	4188283.34	138.26731 (15021608)
649425.76	4188283.34	157.36513	(17020501)	649525.76	4188283.34	169.34260 (17031301)
649625.76	4188283.34	187.43772	(15010709)	649725.76	4188283.34	211.45266 (14120809)
649825.76	4188283.34	270.61932	(13010809)	649925.76	4188283.34	305.21060 (14041207)
650025.76	4188283.34	391.22888	(16031019)	650125.76	4188283.34	360.42228 (17012619)
650225.76	4188283.34	262.68415	(17010418)	650325.76	4188283.34	238.96032 (14010409)
650425.76	4188283.34	186.67279	(13081801)	650525.76	4188283.34	167.14120 (17042120)
650625.76	4188283.34	151.55507	(17112222)	650725.76	4188283.34	133.65594 (16021224)
650825.76	4188283.34	123.99141	(17042121)	651125.76	4188283.34	100.78661 (17122519)
649125.76	4188333.34	114.60094	(17121302)	649225.76	4188333.34	127.17861 (17031806)
649325.76	4188333.34	140.60837	(17031806)	649425.76	4188333.34	152.32140 (17122606)
649525.76	4188333.34	170.60766	(15021608)	649625.76	4188333.34	186.28789 (17011802)
649725.76	4188333.34	247.38860	(15010709)	649825.76	4188333.34	264.57954 (14120809)
649925.76	4188333.34	361.85715	(16030302)	650025.76	4188333.34	559.11861 (13032819)
650125.76	4188333.34	473.18944	(17022318)	650225.76	4188333.34	333.63824 (15091218)
650325.76	4188333.34	222.97666	(13011309)	650425.76	4188333.34	197.10121 (14091307)
650525.76	4188333.34	171.73458	(14091921)	650625.76	4188333.34	153.28540 (15021118)
650725.76	4188333.34	134.09655	(14021608)	650825.76	4188333.34	124.64471 (17121522)
651125.76	4188333.34	98.41277	(17122719)	649125.76	4188383.34	119.23996 (17122404)
649225.76	4188383.34	131.20131	(17122404)	649325.76	4188383.34	143.06632 (17122404)
649425.76	4188383.34	152.94491	(15030924)	649525.76	4188383.34	167.87974 (15030924)
649625.76	4188383.34	205.08226	(16122709)	649725.76	4188383.34	247.50286 (16122709)
649825.76	4188383.34	349.33601	(16020517)	649925.76	4188383.34	451.07599 (17020119)
650025.76	4188383.34	849.71124	(15091304)	650125.76	4188383.34	646.21513 (17030818)

650225.76 4188383.34 332.36257 (17122309) 650325.76 4188383.34 243.84218 (14091307)  
\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 189

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
650425.76	4188383.34	198.85393 (17080204)	650525.76	4188383.34	175.26088 (14073004)
650625.76	4188383.34	156.42512 (17021219)	650725.76	4188383.34	138.56259 (17021219)
650825.76	4188383.34	124.87581 (14051320)	651125.76	4188383.34	102.04496 (17122621)
649125.76	4188433.34	118.29643 (17123022)	649225.76	4188433.34	127.65148 (17123022)
649325.76	4188433.34	137.56451 (13040606)	649425.76	4188433.34	151.64337 (13040606)
649525.76	4188433.34	170.96847 (16122909)	649625.76	4188433.34	206.07153 (16122909)
649725.76	4188433.34	245.70402 (16122909)	649825.76	4188433.34	272.28760 (15010909)
649925.76	4188433.34	476.03954 (15022118)	650025.76	4188433.34	562.27276 (16050119)
650125.76	4188433.34	762.64007 (17062122)	650225.76	4188433.34	327.94997 (15092119)
650325.76	4188433.34	234.67179 (15102617)	650425.76	4188433.34	197.09638 (15043021)
650525.76	4188433.34	171.52004 (17091205)	650625.76	4188433.34	153.98786 (17091205)
650725.76	4188433.34	137.01463 (17091205)	650825.76	4188433.34	122.75242 (15021422)
651125.76	4188433.34	98.69771 (16010203)	649125.76	4188483.34	119.62052 (17122119)
649225.76	4188483.34	129.86340 (17121123)	649325.76	4188483.34	144.10464 (17121123)
649425.76	4188483.34	157.90495 (17121123)	649525.76	4188483.34	173.20422 (17013109)
649625.76	4188483.34	214.26344 (17013109)	649725.76	4188483.34	246.00054 (17013109)
650425.76	4188483.34	202.06924 (17022708)	650525.76	4188483.34	180.25959 (17022708)
650625.76	4188483.34	158.19715 (17021220)	650725.76	4188483.34	140.89458 (17021220)
650825.76	4188483.34	128.36672 (15121617)	651125.76	4188483.34	102.33642 (13123017)
649125.76	4188533.34	118.10640 (17021301)	649225.76	4188533.34	127.52154 (17030907)
649325.76	4188533.34	144.21007 (17021502)	649425.76	4188533.34	157.39924 (17021502)
649525.76	4188533.34	173.62345 (17040504)	649625.76	4188533.34	194.36362 (15013009)
649725.76	4188533.34	231.80139 (17122509)	650425.76	4188533.34	190.57701 (15091922)
650525.76	4188533.34	172.36797 (14120819)	650625.76	4188533.34	159.64587 (14120819)
650725.76	4188533.34	143.81641 (14122318)	650825.76	4188533.34	128.16544 (14122318)
651125.76	4188533.34	102.92727 (17020901)	649125.76	4188583.34	118.00626 (17012722)
649225.76	4188583.34	131.19881 (17120103)	649325.76	4188583.34	139.16044 (17120103)
649425.76	4188583.34	155.81654 (17013004)	649525.76	4188583.34	172.25470 (17011123)
649625.76	4188583.34	195.80182 (17022608)	649725.76	4188583.34	221.00920 (13020309)
650425.76	4188583.34	210.45501 (16012717)	650525.76	4188583.34	170.45156 (15120623)
650625.76	4188583.34	154.71033 (14022323)	650725.76	4188583.34	139.66367 (14011919)
650825.76	4188583.34	127.80677 (14120819)	651125.76	4188583.34	102.44200 (14021603)
649125.76	4188633.34	115.73618 (17121720)	649225.76	4188633.34	129.13817 (17013004)
649325.76	4188633.34	141.61220 (17011123)	649425.76	4188633.34	157.02053 (17020508)
649525.76	4188633.34	166.25755 (17031723)	649625.76	4188633.34	187.24593 (17010901)
649725.76	4188633.34	214.22235 (17040507)	649825.76	4188633.34	238.16841 (17040407)
649925.76	4188633.34	280.07879 (14032818)	650025.76	4188633.34	285.18235 (17020920)

650125.76 4188633.34 292.63302 (17010917) 650225.76 4188633.34 249.36859 (17040807)  
650325.76 4188633.34 215.92878 (17091207) 650425.76 4188633.34 186.55335 (15031322)  
650525.76 4188633.34 174.41111 (15022308) 650625.76 4188633.34 152.96433 (16041723)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 190

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

-----  
650725.76 4188633.34 138.27807 (15120623) 650825.76 4188633.34 126.60969 (13121417)  
651125.76 4188633.34 101.22003 (13042024) 649125.76 4188683.34 118.14638 (17122523)  
649225.76 4188683.34 129.15544 (17011123) 649325.76 4188683.34 141.09889 (17020508)  
649425.76 4188683.34 149.52928 (17121121) 649525.76 4188683.34 168.17913 (17020721)  
649625.76 4188683.34 184.72807 (17040507) 649725.76 4188683.34 193.27424 (13103108)  
649825.76 4188683.34 207.76005 (17012317) 649925.76 4188683.34 257.76898 (16121409)  
650025.76 4188683.34 253.56948 (15091607) 650125.76 4188683.34 245.89588 (14010309)  
650225.76 4188683.34 236.84462 (17102317) 650325.76 4188683.34 202.46670 (14011517)  
650425.76 4188683.34 184.27034 (13122709) 650525.76 4188683.34 164.42737 (14021304)  
650625.76 4188683.34 149.11380 (13020422) 650725.76 4188683.34 138.02083 (16041723)  
650825.76 4188683.34 124.05114 (15120623) 651125.76 4188683.34 100.51429 (15021205)  
649125.76 4188733.34 117.46974 (17120518) 649225.76 4188733.34 120.62545 (17120518)  
649325.76 4188733.34 137.23812 (17121121) 649425.76 4188733.34 149.40347 (17020721)  
649525.76 4188733.34 156.20974 (17030206) 649625.76 4188733.34 171.37790 (13091907)  
649725.76 4188733.34 192.43268 (15091220) 649825.76 4188733.34 213.75073 (16110408)  
649925.76 4188733.34 251.79139 (14120909) 650025.76 4188733.34 226.41390 (15091607)  
650125.76 4188733.34 223.55855 (14122609) 650225.76 4188733.34 213.06633 (17102317)  
650325.76 4188733.34 198.10054 (17040807) 650425.76 4188733.34 175.12357 (17012922)  
650525.76 4188733.34 159.41195 (13020120) 650625.76 4188733.34 147.30324 (16021207)  
650725.76 4188733.34 132.44824 (14022020) 650825.76 4188733.34 120.79604 (16041723)  
651125.76 4188733.34 100.38514 (15120117) 649125.76 4188783.34 108.92846 (17121121)  
649225.76 4188783.34 125.30025 (17122118) 649325.76 4188783.34 132.77790 (17122524)  
649425.76 4188783.34 141.33731 (17030206) 649525.76 4188783.34 147.54278 (13101020)  
649625.76 4188783.34 161.15315 (15102307) 649725.76 4188783.34 174.38537 (16103120)  
649825.76 4188783.34 197.07842 (13081824) 649925.76 4188783.34 218.70081 (14120909)  
650025.76 4188783.34 204.48964 (15100518) 650125.76 4188783.34 218.14496 (14122609)  
650225.76 4188783.34 189.75855 (14021524) 650325.76 4188783.34 187.09324 (15020318)  
650425.76 4188783.34 168.08066 (15020301) 650525.76 4188783.34 157.13783 (13120224)  
650625.76 4188783.34 144.24592 (13020120) 650725.76 4188783.34 131.01841 (16021207)  
650825.76 4188783.34 118.47974 (14022020) 651125.76 4188783.34 99.14503 (13030120)  
649125.76 4188833.34 113.74729 (17122118) 649225.76 4188833.34 121.54680 (17122524)  
649325.76 4188833.34 126.66545 (17030206) 649425.76 4188833.34 132.02742 (15100104)  
649525.76 4188833.34 141.01924 (14122717) 649625.76 4188833.34 163.19731 (15091220)  
649725.76 4188833.34 166.43835 (15091121) 649825.76 4188833.34 181.33990 (15011809)  
649925.76 4188833.34 187.98614 (15020721) 650025.76 4188833.34 186.24818 (15102306)



650125.76 4188833.34 198.97237 (14122609) 650225.76 4188833.34 178.00863 (15011721)  
650325.76 4188833.34 173.98865 (17120123) 650425.76 4188833.34 165.81683 (14021523)  
650525.76 4188833.34 149.51660 (16011924) 650625.76 4188833.34 137.06776 (17122322)  
650725.76 4188833.34 127.71312 (13020120) 650825.76 4188833.34 117.17903 (14010518)  
651125.76 4188833.34 99.77857 (14012318) 649125.76 4188833.34 111.13149 (17122524)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 191

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK3 \*\*\*

INCLUDING SOURCE(S): STCK3 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

-----  
649225.76 4188833.34 113.36614 (17030206) 649325.76 4188833.34 117.00487 (14102501)  
649425.76 4188833.34 128.65658 (13081903) 649525.76 4188833.34 138.50887 (15091220)  
649625.76 4188833.34 149.81662 (16103120) 649725.76 4188833.34 170.28787 (15091121)  
649825.76 4188833.34 171.37313 (15102802) 649925.76 4188833.34 178.02172 (16071404)  
650025.76 4188833.34 178.60261 (15030919) 650125.76 4188833.34 177.43419 (17120719)  
650225.76 4188833.34 175.76534 (17032421) 650325.76 4188833.34 166.54043 (15092122)  
650425.76 4188833.34 157.41758 (15022703) 650525.76 4188833.34 147.99124 (17011918)  
650625.76 4188833.34 134.57654 (17122308) 650725.76 4188833.34 128.02018 (17122322)  
650825.76 4188833.34 113.55091 (15012906) 651125.76 4188833.34 98.02994 (15021922)  
650125.76 4188933.34 171.85354 (17120719) 650225.76 4188933.34 164.99505 (13022508)  
650325.76 4188933.34 159.02996 (13020219) 650425.76 4188933.34 153.27457 (15020318)  
650525.76 4188933.34 143.00850 (17121323) 650625.76 4188933.34 128.02280 (13012505)  
650725.76 4188933.34 120.40042 (13020618) 650825.76 4188933.34 115.47067 (17122322)  
651125.76 4188933.34 93.45912 (17011506) 650425.76 4188933.34 143.89088 (17120123)  
650525.76 4188983.34 133.64171 (15022703) 650625.76 4188983.34 128.79752 (17011918)  
650725.76 4188983.34 118.83428 (13030119) 650825.76 4188983.34 111.31430 (13020618)  
651125.76 4188983.34 94.57105 (13121617) 650525.76 4189033.34 132.26438 (14021218)  
650625.76 4189033.34 124.52250 (17121323) 650725.76 4189033.34 113.98554 (14040724)  
650825.76 4189033.34 106.92436 (13121217) 651125.76 4189033.34 93.43171 (13121617)  
650525.76 4189083.34 124.80324 (17031107) 650625.76 4189083.34 117.86528 (14022422)  
650725.76 4189083.34 112.89138 (14012019) 650825.76 4189083.34 108.94406 (17042922)  
651125.76 4189083.34 90.05214 (13122521) 650525.76 4189133.34 119.55993 (14120621)  
650625.76 4189133.34 112.65943 (13040319) 650725.76 4189133.34 109.04577 (13121517)  
650825.76 4189133.34 105.21495 (14011617) 651125.76 4189133.34 90.76432 (17121119)  
650781.98 4189510.65 90.92377 (17022324) 650760.33 4189397.50 94.26852 (15120420)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 192

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
649676.34	4188314.55	181.66357 (14122219)	649629.66	4188294.84	172.66615 (17031301)
649810.15	4188312.48	212.59018 (15010709)	649364.10	4188360.20	132.15062 (13012303)
649327.80	4188355.01	127.67102 (13012303)	649380.70	4188758.52	134.20785 (17122118)
650495.81	4188841.51	162.98244 (13121017)	650597.47	4188832.17	149.14791 (16011924)
650536.27	4188878.85	154.17372 (13121017)	650577.76	4188877.81	152.64765 (17011918)
650602.66	4188860.18	147.66521 (15030420)	650610.95	4188880.93	147.03003 (17011918)
650638.10	4188858.53	144.54349 (16011924)	650664.10	4188331.03	160.63393 (15072004)
650668.72	4188350.83	161.99028 (15021118)	650677.96	4188379.86	162.12463 (13070405)
650699.74	4188414.84	159.00892 (17091205)	650758.47	4188658.36	146.20686 (16041723)
650765.73	4188678.82	144.10241 (16041723)	650773.65	4188706.54	138.54189 (13020422)
650778.27	4188726.34	137.32949 (14022020)	650805.33	4188805.53	129.22143 (14021304)
650806.65	4188824.01	126.72706 (13020120)	650811.27	4188843.81	127.85907 (13020120)
650814.57	4188862.29	126.81041 (17122322)	650846.24	4188924.98	118.85526 (17122322)
650850.86	4188951.38	117.19407 (13020618)	650854.82	4188976.46	115.39981 (13020618)
650698.00	4188307.32	151.39639 (14091921)	650692.60	4188291.80	154.68995 (17112222)
650724.82	4189245.80	106.85374 (16121307)	650726.07	4189273.37	106.20691 (17041522)
650856.27	4189006.30	113.66329 (13030119)	650857.23	4189022.60	113.72153 (13030119)
650859.15	4189041.29	113.48667 (17042922)	650859.15	4189058.54	112.45845 (17042922)
650860.58	4189076.28	109.77427 (17042922)	650861.54	4189094.49	109.57038 (14011617)
650857.71	4189113.19	110.27810 (14011617)	650847.16	4189118.94	109.87113 (14011617)
650848.12	4189134.76	108.64368 (14012019)	650850.04	4189155.37	106.17124 (14012019)
650851.48	4189171.66	105.60790 (13121517)	650853.87	4189184.12	105.11292 (13121517)
650856.75	4189199.46	104.02209 (13121517)	650857.71	4189213.36	103.40575 (14011519)
650860.58	4189226.30	103.50517 (17122321)	650862.50	4189242.60	103.33196 (17122321)
650865.38	4189258.42	102.34443 (17122321)	650867.77	4189275.19	100.58142 (17122321)
650868.73	4189291.49	98.03715 (17122321)	650872.09	4189309.23	96.25613 (16122921)
650874.00	4189325.04	94.26789 (16122921)	650875.92	4189340.38	95.39228 (17012601)
650878.80	4189355.24	95.95197 (17012601)	650881.19	4189373.45	96.22991 (17012601)
650884.55	4189390.71	95.80440 (17012601)	650888.86	4189407.01	94.95171 (17012601)
650889.82	4189427.14	93.36348 (17012601)	650891.74	4189443.43	91.56162 (17012601)
650895.09	4189461.17	89.83497 (15120420)	650898.45	4189475.55	88.87623 (17022706)
650898.45	4189489.93	89.42984 (17022706)	650902.28	4189504.31	89.24612 (17022706)
650709.41	4188344.56	153.79987 (15021118)	650722.45	4188284.03	149.66379 (17112222)
650745.73	4188280.30	145.83785 (17112222)	650735.49	4188223.50	141.48325 (13021319)
650721.52	4188167.62	142.16434 (14043004)	650525.76	4188133.34	178.67350 (17011317)
651125.76	4188133.34	102.25642 (15021623)	649125.76	4188183.34	108.61630 (17020501)
649225.76	4188183.34	115.71554 (17121824)	649325.76	4188183.34	127.01002 (17122522)
649425.76	4188183.34	137.11638 (17032401)	649525.76	4188183.34	150.53872 (17040104)
649625.76	4188183.34	169.55238 (17021408)	649725.76	4188183.34	178.16664 (16020801)
649825.76	4188183.34	194.59736 (15120820)	649925.76	4188183.34	223.98477 (14010609)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
650025.76	4188183.34	244.17471 (16091007)	650125.76	4188183.34	260.57634 (17090907)
650225.76	4188183.34	266.13871 (13030408)	650325.76	4188183.34	215.03603 (15021218)
650425.76	4188183.34	197.60375 (14100518)	650525.76	4188183.34	180.18675 (17013121)
650625.76	4188183.34	161.66741 (17121819)	650725.76	4188183.34	144.27507 (17030921)
650825.76	4188183.34	129.42742 (17122508)	651125.76	4188183.34	101.14702 (14021320)
649125.76	4188233.34	108.04771 (17012803)	649225.76	4188233.34	116.88494 (17020501)
649325.76	4188233.34	131.23802 (17020501)	649425.76	4188233.34	140.79903 (17031301)
649525.76	4188233.34	155.19447 (17032401)	649625.76	4188233.34	169.53001 (17041124)
649725.76	4188233.34	189.93202 (17021408)	649825.76	4188233.34	221.33952 (13010809)
649925.76	4188233.34	264.42158 (14010609)	650025.76	4188233.34	326.11365 (17041807)
650125.76	4188233.34	290.77736 (17090907)	650225.76	4188233.34	273.40354 (15032620)
650325.76	4188233.34	286.14582 (14020517)	650425.76	4188233.34	209.61748 (17021419)
650525.76	4188233.34	181.59841 (17121518)	650625.76	4188233.34	163.33053 (17030921)
650725.76	4188233.34	144.75925 (13021319)	650825.76	4188233.34	129.38884 (14060905)
651125.76	4188233.34	104.62973 (17042121)	649125.76	4188283.34	108.50526 (17022506)
649225.76	4188283.34	115.91998 (17041004)	649325.76	4188283.34	129.08568 (17012803)
649425.76	4188283.34	139.94370 (17020501)	649525.76	4188283.34	158.62507 (17020501)
649625.76	4188283.34	168.86894 (17020424)	649725.76	4188283.34	189.10376 (17032324)
649825.76	4188283.34	239.98973 (14120809)	649925.76	4188283.34	279.27971 (13010809)
650025.76	4188283.34	364.14871 (14041207)	650125.76	4188283.34	378.71827 (14041222)
650225.76	4188283.34	339.85833 (17011319)	650325.76	4188283.34	257.11700 (14040907)
650425.76	4188283.34	233.06099 (14010409)	650525.76	4188283.34	183.45945 (13081801)
650625.76	4188283.34	164.28018 (17020321)	650725.76	4188283.34	149.11962 (17112222)
650825.76	4188283.34	131.68317 (16021224)	651125.76	4188283.34	105.00819 (17122519)
649125.76	4188333.34	108.15820 (17030124)	649225.76	4188333.34	116.24666 (17121302)
649325.76	4188333.34	129.79795 (17031806)	649425.76	4188333.34	141.61937 (17031806)
649525.76	4188333.34	152.63288 (17122606)	649625.76	4188333.34	174.19103 (15021608)
649725.76	4188333.34	190.00903 (14122219)	649825.76	4188333.34	250.54977 (15010709)
649925.76	4188333.34	307.30049 (14120809)	650025.76	4188333.34	404.63774 (14120717)
650125.76	4188333.34	568.68317 (15032518)	650225.76	4188333.34	440.47803 (17012417)
650325.76	4188333.34	304.67174 (14010409)	650425.76	4188333.34	214.60887 (14011817)
650525.76	4188333.34	191.27000 (14091307)	650625.76	4188333.34	168.15084 (14091921)
650725.76	4188333.34	150.42966 (14021608)	650825.76	4188333.34	131.88863 (14021608)
651125.76	4188333.34	104.87119 (17122719)	649125.76	4188383.34	110.26685 (17122404)
649225.76	4188383.34	121.39738 (17122404)	649325.76	4188383.34	132.99766 (17122404)
649425.76	4188383.34	143.99699 (17122404)	649525.76	4188383.34	155.00986 (15030924)
649625.76	4188383.34	169.43159 (16021502)	649725.76	4188383.34	212.58658 (16122709)
649825.76	4188383.34	243.63618 (16122709)	649925.76	4188383.34	371.83218 (16020517)
650025.76	4188383.34	429.35594 (14091201)	650125.76	4188383.34	869.58026 (17090422)
650225.76	4188383.34	573.52713 (17021018)	650325.76	4188383.34	319.96817 (17122309)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

650425.76	4188383.34	236.17237	(14091307)	650525.76	4188383.34	195.05757	(17080204)
650625.76	4188383.34	172.27210	(14073004)	650725.76	4188383.34	153.52595	(13070405)
650825.76	4188383.34	136.17795	(17021219)	651125.76	4188383.34	107.09726	(17122621)
649125.76	4188433.34	111.44544	(17031802)	649225.76	4188433.34	120.18516	(17123022)
649325.76	4188433.34	129.61888	(17123022)	649425.76	4188433.34	140.10434	(13040606)
649525.76	4188433.34	154.25391	(13040606)	649625.76	4188433.34	176.54695	(14122109)
649725.76	4188433.34	212.04406	(16122909)	649825.76	4188433.34	250.55245	(16122909)
649925.76	4188433.34	293.17624	(17010703)	650025.76	4188433.34	521.71161	(14020603)
650125.76	4188433.34	152.04220	(14012010)	650225.76	4188433.34	653.01608	(17080423)
650325.76	4188433.34	307.05267	(17082922)	650425.76	4188433.34	234.17332	(15102617)
650525.76	4188433.34	194.32279	(15043021)	650625.76	4188433.34	170.60113	(17091205)
650725.76	4188433.34	152.80426	(17091205)	650825.76	4188433.34	135.88586	(17091205)
651125.76	4188433.34	103.87548	(13020220)	649125.76	4188483.34	112.26513	(17122119)
649225.76	4188483.34	121.72893	(17122119)	649325.76	4188483.34	131.51532	(17122119)
649425.76	4188483.34	145.57737	(17121123)	649525.76	4188483.34	159.96107	(17031724)
649625.76	4188483.34	176.39976	(17031724)	649725.76	4188483.34	217.99417	(17013109)
650425.76	4188483.34	264.59066	(13040507)	650525.76	4188483.34	202.52287	(17022708)
650625.76	4188483.34	176.55692	(17022708)	650725.76	4188483.34	154.76185	(17021220)
650825.76	4188483.34	139.31108	(15121617)	651125.76	4188483.34	108.41847	(13123017)
649125.76	4188533.34	112.23981	(17021301)	649225.76	4188533.34	119.86025	(17021301)
649325.76	4188533.34	129.09518	(17030907)	649425.76	4188533.34	145.97011	(17021502)
649525.76	4188533.34	159.67455	(17021502)	649625.76	4188533.34	176.00046	(17040504)
649725.76	4188533.34	200.67457	(15122909)	650425.76	4188533.34	224.25237	(17012917)
650525.76	4188533.34	190.20509	(15091922)	650625.76	4188533.34	173.22135	(14120819)
650725.76	4188533.34	157.52839	(13011717)	650825.76	4188533.34	141.45746	(14122318)
651125.76	4188533.34	108.00360	(17020901)	649125.76	4188583.34	111.05180	(17021502)
649225.76	4188583.34	119.65403	(17021502)	649325.76	4188583.34	133.05967	(17120103)
649425.76	4188583.34	141.19143	(17120103)	649525.76	4188583.34	157.79656	(17013004)
649625.76	4188583.34	174.53422	(17011123)	649725.76	4188583.34	196.96793	(17022608)
650425.76	4188583.34	224.24812	(14012517)	650525.76	4188583.34	204.51764	(16012717)
650625.76	4188583.34	167.24008	(15120623)	650725.76	4188583.34	153.63345	(14011919)
650825.76	4188583.34	135.86876	(13042104)	651125.76	4188583.34	108.63266	(14021120)
649125.76	4188633.34	109.71646	(17010624)	649225.76	4188633.34	117.19451	(17121720)
649325.76	4188633.34	130.90686	(17013004)	649425.76	4188633.34	144.08320	(17011123)
649525.76	4188633.34	159.86543	(17022608)	649625.76	4188633.34	167.08570	(17031723)
649725.76	4188633.34	191.36485	(17020721)	649825.76	4188633.34	219.86780	(15010309)
649925.76	4188633.34	247.81536	(14040707)	650025.76	4188633.34	325.24252	(14032818)
650125.76	4188633.34	299.60501	(16092419)	650225.76	4188633.34	261.84008	(15070204)
650325.76	4188633.34	233.15383	(16090707)	650425.76	4188633.34	221.91753	(13122709)
650525.76	4188633.34	183.30116	(17120217)	650625.76	4188633.34	172.58461	(16012717)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK4 \*\*\*

INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

650725.76	4188633.34	149.66016	(15120623)	650825.76	4188633.34	135.32110 (14012623)
651125.76	4188633.34	107.43279	(14010519)	649125.76	4188683.34	109.77452 (17121720)
649225.76	4188683.34	119.61507	(17122523)	649325.76	4188683.34	130.75976 (17011123)
649425.76	4188683.34	142.64257	(17020508)	649525.76	4188683.34	152.51914 (17032420)
649625.76	4188683.34	172.68614	(17020721)	649725.76	4188683.34	185.77265 (17040507)
649825.76	4188683.34	201.56648	(13103108)	649925.76	4188683.34	210.48044 (13101019)
650025.76	4188683.34	272.75168	(14120909)	650125.76	4188683.34	248.97795 (15091607)
650225.76	4188683.34	235.41150	(16053106)	650325.76	4188683.34	218.45122 (17040807)
650425.76	4188683.34	198.94458	(17042923)	650525.76	4188683.34	183.24015 (13122709)
650625.76	4188683.34	165.55914	(15011517)	650725.76	4188683.34	146.38830 (15022308)
650825.76	4188683.34	135.26316	(16041723)	651125.76	4188683.34	106.65742 (14021501)
649125.76	4188733.34	109.68671	(17121721)	649225.76	4188733.34	119.09297 (17120518)
649325.76	4188733.34	121.75222	(17031723)	649425.76	4188733.34	139.41298 (17122118)
649525.76	4188733.34	152.97384	(17020721)	649625.76	4188733.34	158.17172 (17040507)
649725.76	4188733.34	171.83762	(13091907)	649825.76	4188733.34	192.00671 (15091220)
649925.76	4188733.34	222.91851	(16110408)	650025.76	4188733.34	257.64355 (14120909)
650125.76	4188733.34	221.33997	(15100518)	650225.76	4188733.34	235.19191 (14010309)
650325.76	4188733.34	220.49192	(17102317)	650425.76	4188733.34	185.28967 (14021523)
650525.76	4188733.34	174.05483	(15042724)	650625.76	4188733.34	159.46961 (13020120)
650725.76	4188733.34	146.81368	(15011517)	650825.76	4188733.34	130.22703 (13020422)
651125.76	4188733.34	105.62694	(15120117)	649125.76	4188783.34	107.73312 (17120518)
649225.76	4188783.34	111.38754	(17121121)	649325.76	4188783.34	127.23358 (17122118)
649425.76	4188783.34	135.18556	(17020721)	649525.76	4188783.34	143.20279 (17030206)
649625.76	4188783.34	151.13950	(13091907)	649725.76	4188783.34	163.40995 (15091220)
649825.76	4188783.34	175.71714	(16103120)	649925.76	4188783.34	196.59178 (13081824)
650025.76	4188783.34	201.96069	(17031721)	650125.76	4188783.34	201.76155 (17020906)
650225.76	4188783.34	207.46697	(14010309)	650325.76	4188783.34	194.08529 (13092819)
650425.76	4188783.34	188.01754	(17040807)	650525.76	4188783.34	165.78430 (15030420)
650625.76	4188783.34	153.34657	(13120224)	650725.76	4188783.34	141.13252 (13020120)
650825.76	4188783.34	130.64889	(14010718)	651125.76	4188783.34	105.04105 (14012318)
649125.76	4188833.34	104.37002	(17121121)	649225.76	4188833.34	115.07339 (17122118)
649325.76	4188833.34	123.41990	(17122524)	649425.76	4188833.34	128.88518 (17030206)
649525.76	4188833.34	133.41873	(15100104)	649625.76	4188833.34	142.68639 (13102904)
649725.76	4188833.34	161.86187	(15091220)	649825.76	4188833.34	177.60295 (15091121)
649925.76	4188833.34	184.95807	(15011809)	650025.76	4188833.34	188.34141 (16071404)
650125.76	4188833.34	184.11260	(14121220)	650225.76	4188833.34	185.67057 (14122609)
650325.76	4188833.34	179.48086	(15011721)	650425.76	4188833.34	173.70356 (15020318)
650525.76	4188833.34	163.99187	(14021523)	650625.76	4188833.34	149.39161 (16011924)
650725.76	4188833.34	140.08048	(17122322)	650825.76	4188833.34	123.43270 (13020120)
651125.76	4188833.34	104.43393	(15021922)	649125.76	4188883.34	106.60019 (17020404)

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK4 \*\*\*  
INCLUDING SOURCE(S): STCK4 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)
649225.76	4188883.34	112.70862 (17122524)	649325.76	4188883.34	115.61297 (17030206)
649425.76	4188883.34	118.81939 (15100104)	649525.76	4188883.34	129.04377 (13081903)
649625.76	4188883.34	144.22557 (15091220)	649725.76	4188883.34	153.03252 (16103120)
649825.76	4188883.34	168.20911 (16091821)	649925.76	4188883.34	175.01033 (17031722)
650025.76	4188883.34	183.38552 (17121417)	650125.76	4188883.34	176.83482 (14121220)
650225.76	4188883.34	176.13967 (16020924)	650325.76	4188883.34	173.70766 (17032421)
650425.76	4188883.34	163.04866 (16121405)	650525.76	4188883.34	154.05225 (13121017)
650625.76	4188883.34	142.70106 (15020301)	650725.76	4188883.34	132.16040 (13120224)
650825.76	4188883.34	126.96466 (17122322)	651125.76	4188883.34	101.55055 (14120704)
650125.76	4188933.34	168.10716 (14121220)	650225.76	4188933.34	166.09560 (14121317)
650325.76	4188933.34	166.40435 (17032421)	650425.76	4188933.34	159.07393 (17121820)
650525.76	4188933.34	153.82125 (15020318)	650625.76	4188933.34	140.55953 (17121323)
650725.76	4188933.34	128.25786 (16011924)	650825.76	4188933.34	119.48239 (13020618)
651125.76	4188933.34	99.74016 (13121319)	650425.76	4188983.34	148.97170 (13020219)
650525.76	4188983.34	143.94663 (17031107)	650625.76	4188983.34	133.63479 (13121017)
650725.76	4188983.34	124.27194 (17011918)	650825.76	4188983.34	117.09156 (13030119)
651125.76	4188983.34	100.14627 (13121617)	650525.76	4189033.34	132.39913 (16121405)
650625.76	4189033.34	128.74019 (15022703)	650725.76	4189033.34	122.04536 (17022603)
650825.76	4189033.34	114.98831 (17042922)	651125.76	4189033.34	95.96936 (13122521)
650525.76	4189083.34	128.71102 (13022108)	650625.76	4189083.34	125.57167 (14021218)
650725.76	4189083.34	118.90475 (17120124)	650825.76	4189083.34	113.00806 (14011617)
651125.76	4189083.34	96.60698 (17121119)	650525.76	4189133.34	123.28756 (13020219)
650625.76	4189133.34	119.79544 (17041522)	650725.76	4189133.34	112.10572 (15030918)
650825.76	4189133.34	108.58406 (15021918)	651125.76	4189133.34	93.67455 (17123020)
650781.98	4189510.65	93.75745 (17021405)	650760.33	4189397.50	98.04974 (17022324)

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK5 \*\*\*  
INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
649676.34	4188314.55	165.05194	(17020501)	649629.66	4188294.84	161.30470 (17020501)
649810.15	4188312.48	201.69400	(15010709)	649364.10	4188360.20	123.33103 (17121908)
649327.80	4188355.01	119.59442	(17121908)	649380.70	4188758.52	118.14268 (17121121)
650495.81	4188841.51	172.87132	(16121405)	650597.47	4188832.17	166.78622 (14021523)
650536.27	4188878.85	165.29868	(17120123)	650577.76	4188877.81	165.14025 (15020318)
650602.66	4188860.18	159.11460	(13121017)	650610.95	4188880.93	154.65611 (15022703)
650638.10	4188858.53	158.96998	(14021523)	650664.10	4188331.03	178.06992 (14091921)
650668.72	4188350.83	177.47534	(17030920)	650677.96	4188379.86	180.03201 (17080204)
650699.74	4188414.84	180.63461	(17091119)	650758.47	4188658.36	160.09621 (15022308)
650765.73	4188678.82	153.55604	(13020422)	650773.65	4188706.54	155.39133 (15011517)
650778.27	4188726.34	150.99426	(16021207)	650805.33	4188805.53	142.93728 (17122322)
650806.65	4188824.01	142.31442	(17122322)	650811.27	4188843.81	135.16259 (17122322)
650814.57	4188862.29	135.57856	(13120224)	650846.24	4188924.98	126.59253 (17122308)
650850.86	4188951.38	124.73775	(16011924)	650854.82	4188976.46	121.00544 (13012505)
650698.00	4188307.32	168.15505	(17021401)	650692.60	4188291.80	169.33439 (17042120)
650724.82	4189245.80	111.40953	(17031101)	650726.07	4189273.37	109.77160 (17021405)
650856.27	4189006.30	119.36799	(13040320)	650857.23	4189022.60	118.03443 (14011617)
650859.15	4189041.29	118.78349	(17011918)	650859.15	4189058.54	117.54492 (17011918)
650860.58	4189076.28	115.74086	(17022603)	650861.54	4189094.49	114.74187 (17121323)
650857.71	4189113.19	114.26013	(17120124)	650847.16	4189118.94	113.93798 (17120124)
650848.12	4189134.76	113.23451	(17122321)	650850.04	4189155.37	110.73101 (17122321)
650851.48	4189171.66	108.49546	(16122921)	650853.87	4189184.12	107.01306 (16122921)
650856.75	4189199.46	105.18455	(17031023)	650857.71	4189213.36	106.58933 (17012601)
650860.58	4189226.30	106.96938	(17012601)	650862.50	4189242.60	107.08154 (17012601)
650865.38	4189258.42	106.41669	(17012601)	650867.77	4189275.19	105.08921 (17012601)
650868.73	4189291.49	103.05735	(17012601)	650872.09	4189309.23	101.54414 (15120420)
650874.00	4189325.04	100.21002	(16121307)	650875.92	4189340.38	100.06344 (17022706)
650878.80	4189355.24	99.84183	(17022706)	650881.19	4189373.45	99.22276 (17022706)
650884.55	4189390.71	98.18235	(17022706)	650888.86	4189407.01	97.38780 (17022324)
650889.82	4189427.14	96.66231	(17022324)	650891.74	4189443.43	95.61093 (17022324)
650895.09	4189461.17	94.18251	(17022324)	650898.45	4189475.55	92.89241 (17022324)
650898.45	4189489.93	91.13087	(17022324)	650902.28	4189504.31	90.37371 (17021405)
650709.41	4188344.56	170.33042	(15072004)	650722.45	4188284.03	163.42522 (17021401)
650745.73	4188280.30	159.28530	(17021401)	650735.49	4188223.50	159.78493 (17030921)
650721.52	4188167.62	162.46722	(17121518)	650525.76	4188133.34	194.86817 (17120117)
651125.76	4188133.34	108.70654	(17020824)	649125.76	4188183.34	101.51395 (17012823)
649225.76	4188183.34	109.27163	(17020501)	649325.76	4188183.34	116.51566 (17021006)
649425.76	4188183.34	128.14572	(17122522)	649525.76	4188183.34	137.09262 (17032401)
649625.76	4188183.34	151.71496	(17040104)	649725.76	4188183.34	168.74733 (17021408)
649825.76	4188183.34	178.25823	(16020801)	649925.76	4188183.34	194.41204 (15041802)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 198

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK5 \*\*\*  
 INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

650025.76	4188183.34	213.70453	(15032207)	650125.76	4188183.34	242.25036 (16091007)
650225.76	4188183.34	264.32429	(17090907)	650325.76	4188183.34	259.65024 (16041107)
650425.76	4188183.34	219.05424	(15012217)	650525.76	4188183.34	193.74993 (14100518)
650625.76	4188183.34	179.46704	(17013121)	650725.76	4188183.34	159.45282 (17121819)
650825.76	4188183.34	142.17060	(17030921)	651125.76	4188183.34	109.03636 (15021623)
649125.76	4188233.34	103.17416	(17011205)	649225.76	4188233.34	108.53460 (17012803)
649325.76	4188233.34	118.59936	(17020501)	649425.76	4188233.34	131.98339 (17020501)
649525.76	4188233.34	141.68251	(17031301)	649625.76	4188233.34	156.63510 (17032401)
649725.76	4188233.34	170.66314	(17041124)	649825.76	4188233.34	190.49148 (14120809)
649925.76	4188233.34	232.89738	(13010809)	650025.76	4188233.34	282.88929 (14010609)
650125.76	4188233.34	318.69691	(17041807)	650225.76	4188233.34	298.98738 (17090907)
650325.76	4188233.34	275.69046	(15032620)	650425.76	4188233.34	273.58966 (14020517)
650525.76	4188233.34	205.39142	(17021419)	650625.76	4188233.34	179.03992 (17121819)
650725.76	4188233.34	159.97780	(17030921)	650825.76	4188233.34	143.75608 (13021319)
651125.76	4188233.34	110.33382	(17121319)	649125.76	4188283.34	102.96065 (17022506)
649225.76	4188283.34	109.03732	(13033006)	649325.76	4188283.34	117.21180 (17012803)
649425.76	4188283.34	130.01413	(17012803)	649525.76	4188283.34	142.39157 (17020501)
649625.76	4188283.34	159.16095	(17020501)	649725.76	4188283.34	171.76684 (17020424)
649825.76	4188283.34	191.77873	(17041124)	649925.76	4188283.34	251.89176 (14120809)
650025.76	4188283.34	271.25972	(13010809)	650125.76	4188283.34	357.39480 (14041207)
650225.76	4188283.34	387.47617	(16040721)	650325.76	4188283.34	339.51859 (16090207)
650425.76	4188283.34	262.50168	(14040907)	650525.76	4188283.34	228.66804 (14010409)
650625.76	4188283.34	181.13703	(13081801)	650725.76	4188283.34	162.82146 (17021401)
650825.76	4188283.34	147.57997	(17112222)	651125.76	4188283.34	112.22804 (17042121)
649125.76	4188333.34	104.00084	(17121420)	649225.76	4188333.34	108.66211 (17030124)
649325.76	4188333.34	117.05230	(17121302)	649425.76	4188333.34	131.07459 (17031806)
649525.76	4188333.34	142.45063	(17031806)	649625.76	4188333.34	153.37672 (17041004)
649725.76	4188333.34	175.66136	(15021608)	649825.76	4188333.34	191.72577 (15010709)
649925.76	4188333.34	250.75912	(15010709)	650025.76	4188333.34	319.86889 (14120809)
650125.76	4188333.34	404.17404	(13030719)	650225.76	4188333.34	563.18781 (17012517)
650325.76	4188333.34	415.71411	(17040521)	650425.76	4188333.34	306.45755 (14010409)
650525.76	4188333.34	213.11447	(14011817)	650625.76	4188333.34	188.91939 (14091307)
650725.76	4188333.34	165.54405	(14091921)	650825.76	4188333.34	148.95332 (14021608)
651125.76	4188333.34	112.15720	(17121522)	649125.76	4188383.34	102.77306 (17013008)
649225.76	4188383.34	111.28182	(17122404)	649325.76	4188383.34	122.48169 (17122404)
649425.76	4188383.34	134.08512	(17122404)	649525.76	4188383.34	144.93318 (17122404)
649625.76	4188383.34	156.43257	(15030924)	649725.76	4188383.34	171.59971 (16021502)
649825.76	4188383.34	216.78285	(16122709)	649925.76	4188383.34	243.55701 (16122709)
650025.76	4188383.34	379.16495	(16020517)	650125.76	4188383.34	461.41082 (14091201)
650225.76	4188383.34	887.30899	(17061924)	650325.76	4188383.34	525.44575 (17010505)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK5 \*\*\*  
INCLUDING SOURCE(S): STCK5 ,



\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC  
(YYMMDDHH)

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
650425.76	4188383.34	317.79838	(17122309)	650525.76	4188383.34	227.99908	(14091307)
650625.76	4188383.34	193.06322	(17080204)	650725.76	4188383.34	170.19287	(14073004)
650825.76	4188383.34	151.69813	(13070405)	651125.76	4188383.34	112.49642	(13021621)
649125.76	4188433.34	106.17265	(17031802)	649225.76	4188433.34	112.06764	(17123022)
649325.76	4188433.34	121.05823	(17123022)	649425.76	4188433.34	130.51989	(17123022)
649525.76	4188433.34	141.41302	(13040606)	649625.76	4188433.34	155.59379	(13040606)
649725.76	4188433.34	179.55419	(14122109)	649825.76	4188433.34	215.74156	(16122909)
649925.76	4188433.34	253.62488	(16122909)	650025.76	4188433.34	308.18440	(17010703)
650125.76	4188433.34	557.33994	(14020603)	650225.76	4188433.34	65.63401	(13122610)
650325.76	4188433.34	596.19164	(17080423)	650425.76	4188433.34	294.57598	(17082922)
650525.76	4188433.34	230.02981	(15102617)	650625.76	4188433.34	191.54132	(15043021)
650725.76	4188433.34	168.95723	(17091205)	650825.76	4188433.34	151.14181	(17091205)
651125.76	4188433.34	110.53517	(15032524)	649125.76	4188483.34	104.26298	(17122119)
649225.76	4188483.34	113.13229	(17122119)	649325.76	4188483.34	122.64617	(17122119)
649425.76	4188483.34	132.43118	(17122119)	649525.76	4188483.34	146.97690	(17121123)
649625.76	4188483.34	161.63095	(17031724)	649725.76	4188483.34	179.11854	(17013109)
650425.76	4188483.34	330.09935	(15120709)	650525.76	4188483.34	255.70137	(13040507)
650625.76	4188483.34	200.46718	(17022708)	650725.76	4188483.34	173.91702	(17022708)
650825.76	4188483.34	153.08321	(17021220)	651125.76	4188483.34	114.75782	(13123017)
649125.76	4188533.34	105.00993	(17031805)	649225.76	4188533.34	113.00254	(17021301)
649325.76	4188533.34	120.50329	(17021301)	649425.76	4188533.34	130.38486	(17030907)
649525.76	4188533.34	147.54447	(17021502)	649625.76	4188533.34	160.46473	(17021502)
649725.76	4188533.34	177.10599	(17040504)	650425.76	4188533.34	294.39284	(14040407)
650525.76	4188533.34	221.38560	(17012917)	650625.76	4188533.34	188.33732	(15091922)
650725.76	4188533.34	172.26363	(14120819)	650825.76	4188533.34	155.86506	(13011717)
651125.76	4188533.34	114.03158	(14021603)	649125.76	4188583.34	104.05577	(17121322)
649225.76	4188583.34	111.97450	(17021502)	649325.76	4188583.34	120.28415	(17021502)
649425.76	4188583.34	134.22908	(17120103)	649525.76	4188583.34	142.14163	(17041005)
649625.76	4188583.34	158.79661	(17013004)	649725.76	4188583.34	176.20977	(17011123)
650425.76	4188583.34	243.42769	(15022708)	650525.76	4188583.34	213.73199	(14012517)
650625.76	4188583.34	199.44919	(16012717)	650725.76	4188583.34	164.77462	(15120623)
650825.76	4188583.34	152.56490	(14011919)	651125.76	4188583.34	115.59784	(14021120)
649125.76	4188633.34	103.27554	(17010624)	649225.76	4188633.34	110.18258	(17010624)
649325.76	4188633.34	118.67291	(17121720)	649425.76	4188633.34	131.70397	(17013004)
649525.76	4188633.34	146.22952	(17011123)	649625.76	4188633.34	162.20568	(17022608)
649725.76	4188633.34	170.25739	(17032420)	649825.76	4188633.34	194.88849	(17020721)
649925.76	4188633.34	223.39853	(15010309)	650025.76	4188633.34	246.60300	(14040707)
650125.76	4188633.34	332.50325	(14032818)	650225.76	4188633.34	298.95637	(16121018)
650325.76	4188633.34	263.19950	(15070204)	650425.76	4188633.34	241.00234	(16090707)
650525.76	4188633.34	222.84540	(13122709)	650625.76	4188633.34	181.83912	(15011517)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 200

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
650725.76	4188633.34	170.60342 (16012717)	650825.76	4188633.34	149.35677 (15120623)
651125.76	4188633.34	112.39454 (17122919)	649125.76	4188683.34	102.21389 (17021224)
649225.76	4188683.34	110.27323 (17121720)	649325.76	4188683.34	120.52319 (17122523)
649425.76	4188683.34	131.19382 (17011123)	649525.76	4188683.34	142.72615 (17020508)
649625.76	4188683.34	154.35459 (17032420)	649725.76	4188683.34	175.41109 (17020721)
649825.76	4188683.34	183.20883 (17040507)	649925.76	4188683.34	204.24977 (13103108)
650025.76	4188683.34	209.61870 (16110408)	650125.76	4188683.34	291.87491 (14120909)
650225.76	4188683.34	240.00466 (17121917)	650325.76	4188683.34	240.53159 (16053106)
650425.76	4188683.34	230.70429 (17040807)	650525.76	4188683.34	195.41377 (17042923)
650625.76	4188683.34	179.48181 (13122709)	650725.76	4188683.34	164.38929 (15011517)
650825.76	4188683.34	144.86271 (15022308)	651125.76	4188683.34	111.77266 (15031407)
649125.76	4188733.34	102.47304 (17122523)	649225.76	4188733.34	110.37438 (17121721)
649325.76	4188733.34	120.11705 (17120518)	649425.76	4188733.34	122.03753 (17031723)
649525.76	4188733.34	141.32158 (17122118)	649625.76	4188733.34	155.03092 (17020721)
649725.76	4188733.34	158.20029 (17040507)	649825.76	4188733.34	169.49127 (13091907)
649925.76	4188733.34	187.44669 (15091220)	650025.76	4188733.34	221.34210 (16110408)
650125.76	4188733.34	245.05596 (14120909)	650225.76	4188733.34	217.34346 (14032807)
650325.76	4188733.34	229.77601 (14010309)	650425.76	4188733.34	215.77369 (17102317)
650525.76	4188733.34	180.35379 (15020304)	650625.76	4188733.34	174.04726 (15042724)
650725.76	4188733.34	157.47251 (13020120)	650825.76	4188733.34	145.77109 (15011517)
651125.76	4188733.34	112.85802 (13030120)	649125.76	4188783.34	102.50145 (17011201)
649225.76	4188783.34	107.92540 (17120518)	649325.76	4188783.34	113.53879 (17121121)
649425.76	4188783.34	128.26413 (17122118)	649525.76	4188783.34	136.74298 (17020721)
649625.76	4188783.34	143.52646 (17030206)	649725.76	4188783.34	152.70630 (13091907)
649825.76	4188783.34	169.87518 (15091220)	649925.76	4188783.34	173.91812 (16021522)
650025.76	4188783.34	197.06574 (15011809)	650125.76	4188783.34	200.76607 (15020721)
650225.76	4188783.34	200.99208 (15101507)	650325.76	4188783.34	216.11246 (14010309)
650425.76	4188783.34	190.92308 (13092819)	650525.76	4188783.34	187.41104 (17040807)
650625.76	4188783.34	161.93972 (15030420)	650725.76	4188783.34	151.19567 (16092620)
650825.76	4188783.34	138.28231 (13020120)	651125.76	4188783.34	110.86169 (14012318)
649125.76	4188833.34	98.92404 (17010620)	649225.76	4188833.34	105.77790 (17121121)
649325.76	4188833.34	115.53270 (17122118)	649425.76	4188833.34	124.39355 (17122524)
649525.76	4188833.34	129.87677 (17030206)	649625.76	4188833.34	133.58575 (13101020)
649725.76	4188833.34	144.68216 (15102307)	649825.76	4188833.34	162.01267 (14120419)
649925.76	4188833.34	182.48908 (15091121)	650025.76	4188833.34	181.46215 (15011809)
650125.76	4188833.34	194.54237 (17121417)	650225.76	4188833.34	187.80939 (13010917)
650325.76	4188833.34	184.84868 (14010309)	650425.76	4188833.34	177.63574 (14021524)
650525.76	4188833.34	177.33201 (15020318)	650625.76	4188833.34	162.39787 (17011918)
650725.76	4188833.34	148.12904 (17122308)	650825.76	4188833.34	139.92986 (17122322)
651125.76	4188833.34	109.62563 (14120704)	649125.76	4188883.34	99.18562 (17121007)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK5 \*\*\*

INCLUDING SOURCE(S): STCK5 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
649225.76	4188883.34	107.22269 (17020404)	649325.76	4188883.34	113.50237 (17122524)
649425.76	4188883.34	116.87811 (17030206)	649525.76	4188883.34	119.81750 (15100104)
649625.76	4188883.34	128.51778 (13081903)	649725.76	4188883.34	147.31300 (15091220)
649825.76	4188883.34	153.14472 (16103120)	649925.76	4188883.34	165.87643 (15011709)
650025.76	4188883.34	176.01267 (17031722)	650125.76	4188883.34	181.80337 (17121417)
650225.76	4188883.34	178.55186 (13010917)	650325.76	4188883.34	171.68725 (16020924)
650425.76	4188883.34	169.42148 (16020921)	650525.76	4188883.34	163.62169 (16121405)
650625.76	4188883.34	154.04782 (13121017)	650725.76	4188883.34	140.77801 (15030420)
650825.76	4188883.34	132.26292 (13120224)	651125.76	4188883.34	106.81757 (13121319)
650125.76	4188933.34	163.53267 (15102102)	650225.76	4188933.34	168.39379 (13010917)
650325.76	4188933.34	166.48078 (16020924)	650425.76	4188933.34	168.11735 (17032421)
650525.76	4188933.34	157.20043 (13022108)	650625.76	4188933.34	150.99372 (15020318)
650725.76	4188933.34	141.01331 (17011918)	650825.76	4188933.34	128.48170 (16011924)
651125.76	4188933.34	106.85141 (13121617)	650425.76	4188983.34	154.49322 (13022508)
650525.76	4188983.34	150.01332 (13020219)	650625.76	4188983.34	143.19696 (17031107)
650725.76	4188983.34	133.77238 (17120124)	650825.76	4188983.34	123.20910 (13040320)
651125.76	4188983.34	102.57931 (13011920)	650525.76	4189033.34	142.95285 (17031007)
650625.76	4189033.34	133.88137 (17120123)	650725.76	4189033.34	128.33802 (15022703)
650825.76	4189033.34	121.76957 (17011918)	651125.76	4189033.34	102.74692 (17121119)
650525.76	4189083.34	130.73139 (16020921)	650625.76	4189083.34	126.85798 (13022108)
650725.76	4189083.34	125.78022 (14021218)	650825.76	4189083.34	118.73070 (17120124)
651125.76	4189083.34	100.80661 (13020618)	650525.76	4189133.34	130.78529 (16020921)
650625.76	4189133.34	122.15801 (17121820)	650725.76	4189133.34	118.68165 (17022604)
650825.76	4189133.34	112.09987 (15030918)	651125.76	4189133.34	98.38988 (17013020)
650781.98	4189510.65	95.15125 (17012921)	650760.33	4189397.50	99.72698 (15021907)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*

\*\*\* 15:03:05

PAGE 202

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
649676.34	4188314.55	152.26672 (15021608)	649629.66	4188294.84	145.03455 (15021608)
649810.15	4188312.48	174.44570 (14122219)	649364.10	4188360.20	115.75183 (17121908)

649327.80	4188355.01	112.43368	(17121908)	649380.70	4188758.52	115.30175	(17120518)
650495.81	4188841.51	179.37358	(15011721)	650597.47	4188832.17	173.61906	(15020318)
650536.27	4188878.85	167.00556	(17121905)	650577.76	4188877.81	169.31579	(15092122)
650602.66	4188860.18	169.65933	(17120123)	650610.95	4188880.93	165.05028	(17120123)
650638.10	4188858.53	171.93496	(15020318)	650664.10	4188331.03	196.98812	(17081203)
650668.72	4188350.83	210.65371	(14091307)	650677.96	4188379.86	198.99759	(17061306)
650699.74	4188414.84	205.63254	(17091119)	650758.47	4188658.36	173.83217	(15011517)
650765.73	4188678.82	168.29579	(15031322)	650773.65	4188706.54	167.61904	(15031322)
650778.27	4188726.34	162.78529	(13020120)	650805.33	4188805.53	152.58156	(13120224)
650806.65	4188824.01	149.25266	(17122308)	650811.27	4188843.81	147.32751	(16011924)
650814.57	4188862.29	143.88700	(16011924)	650846.24	4188924.98	133.22520	(15020301)
650850.86	4188951.38	135.12898	(17011918)	650854.82	4188976.46	132.69683	(17011918)
650698.00	4188307.32	189.44354	(17021005)	650692.60	4188291.80	185.61609	(13081801)
650724.82	4189245.80	115.27425	(17031322)	650726.07	4189273.37	112.85489	(17031322)
650856.27	4189006.30	129.89305	(17121323)	650857.23	4189022.60	127.28863	(17120124)
650859.15	4189041.29	125.09833	(17120124)	650859.15	4189058.54	120.98085	(14022422)
650860.58	4189076.28	118.39687	(15030918)	650861.54	4189094.49	118.02576	(15022703)
650857.71	4189113.19	117.37699	(13040319)	650847.16	4189118.94	119.31847	(14021218)
650848.12	4189134.76	118.15264	(13040319)	650850.04	4189155.37	115.39889	(13040319)
650851.48	4189171.66	113.27188	(15120420)	650853.87	4189184.12	112.69217	(17022604)
650856.75	4189199.46	112.11072	(17041522)	650857.71	4189213.36	111.94093	(17041522)
650860.58	4189226.30	111.13856	(17041522)	650862.50	4189242.60	109.67857	(17041522)
650865.38	4189258.42	108.01979	(13011719)	650867.77	4189275.19	106.91453	(13011719)
650868.73	4189291.49	105.31673	(13011719)	650872.09	4189309.23	103.88458	(17031101)
650874.00	4189325.04	103.66912	(17031101)	650875.92	4189340.38	103.02569	(17031101)
650878.80	4189355.24	102.56484	(17021405)	650881.19	4189373.45	102.36803	(17021405)
650884.55	4189390.71	101.69297	(17021405)	650888.86	4189407.01	100.76878	(17021405)
650889.82	4189427.14	99.25559	(17021405)	650891.74	4189443.43	97.67485	(17021405)
650895.09	4189461.17	95.80740	(15021907)	650898.45	4189475.55	94.82695	(15021907)
650898.45	4189489.93	93.63672	(15021907)	650902.28	4189504.31	92.46438	(15021907)
650709.41	4188344.56	192.32112	(14091307)	650722.45	4188284.03	177.05201	(13081801)
650745.73	4188280.30	172.23084	(17021005)	650735.49	4188223.50	173.92791	(17121819)
650721.52	4188167.62	173.76510	(17013121)	650525.76	4188133.34	191.60182	(13051306)
651125.76	4188133.34	116.30188	(17020824)	649125.76	4188183.34	99.11036	(17011605)
649225.76	4188183.34	102.98385	(17012823)	649325.76	4188183.34	109.95047	(17020501)
649425.76	4188183.34	119.10166	(17021006)	649525.76	4188183.34	129.53775	(17122522)
649625.76	4188183.34	138.18559	(16120523)	649725.76	4188183.34	152.04430	(17120623)
649825.76	4188183.34	163.45219	(15021905)	649925.76	4188183.34	185.42776	(13010809)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 203

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

-----

650025.76	4188183.34	200.08557	(17040207)	650125.76	4188183.34	213.79873	(14120801)
650225.76	4188183.34	238.70780	(13090907)	650325.76	4188183.34	258.71793	(17011209)
650425.76	4188183.34	235.34747	(15090707)	650525.76	4188183.34	224.30579	(14020517)
650625.76	4188183.34	192.17851	(17032505)	650725.76	4188183.34	177.02918	(16021519)
650825.76	4188183.34	154.40565	(17121819)	651125.76	4188183.34	116.34113	(14060905)
649125.76	4188233.34	100.00001	(17011205)	649225.76	4188233.34	103.39327	(17011205)
649325.76	4188233.34	109.22223	(17011605)	649425.76	4188233.34	121.64747	(17020501)
649525.76	4188233.34	132.76829	(17121824)	649625.76	4188233.34	142.20345	(17031301)
649725.76	4188233.34	157.78579	(17032401)	649825.76	4188233.34	170.02073	(17041124)
649925.76	4188233.34	202.65157	(14120809)	650025.76	4188233.34	244.24306	(13010809)
650125.76	4188233.34	286.40784	(14010609)	650225.76	4188233.34	276.35473	(15091207)
650325.76	4188233.34	299.05147	(17020417)	650425.76	4188233.34	264.79175	(17011319)
650525.76	4188233.34	236.44448	(14020517)	650625.76	4188233.34	199.21390	(16052906)
650725.76	4188233.34	173.99203	(17121819)	650825.76	4188233.34	155.82519	(13012507)
651125.76	4188233.34	117.83926	(14021320)	649125.76	4188283.34	97.10983	(17122902)
649225.76	4188283.34	104.20654	(17022506)	649325.76	4188283.34	110.08674	(13033006)
649425.76	4188283.34	119.89969	(17012803)	649525.76	4188283.34	131.20994	(17012803)
649625.76	4188283.34	146.81530	(17020501)	649725.76	4188283.34	159.60662	(17121824)
649825.76	4188283.34	175.49836	(17020424)	649925.76	4188283.34	194.47384	(17041124)
650025.76	4188283.34	265.74658	(14120809)	650125.76	4188283.34	246.31163	(15031105)
650225.76	4188283.34	344.71879	(17041807)	650325.76	4188283.34	363.15397	(14022604)
650425.76	4188283.34	332.18197	(16090207)	650525.76	4188283.34	254.61593	(14040907)
650625.76	4188283.34	216.89648	(14010409)	650725.76	4188283.34	176.01825	(13081801)
650825.76	4188283.34	160.21746	(17021401)	651125.76	4188283.34	120.67021	(17042121)
649125.76	4188333.34	100.52318	(17121420)	649225.76	4188333.34	104.44646	(17121420)
649325.76	4188333.34	109.57255	(17121302)	649425.76	4188333.34	119.53598	(17031806)
649525.76	4188333.34	133.22899	(17031806)	649625.76	4188333.34	143.52665	(17122606)
649725.76	4188333.34	156.84572	(15021608)	649825.76	4188333.34	177.07418	(15021608)
649925.76	4188333.34	207.48181	(15010709)	650025.76	4188333.34	243.13410	(15010709)
650125.76	4188333.34	319.99330	(14120809)	650225.76	4188333.34	392.66090	(15070302)
650325.76	4188333.34	540.09150	(15022008)	650425.76	4188333.34	377.86127	(17011217)
650525.76	4188333.34	295.19496	(14010409)	650625.76	4188333.34	207.62214	(14011817)
650725.76	4188333.34	183.63291	(14091307)	650825.76	4188333.34	162.50132	(15072004)
651125.76	4188333.34	120.29308	(17121522)	649125.76	4188383.34	98.24178	(17013008)
649225.76	4188383.34	103.60692	(17013008)	649325.76	4188383.34	113.22919	(17122404)
649425.76	4188383.34	124.41670	(17122404)	649525.76	4188383.34	135.79226	(17122404)
649625.76	4188383.34	145.97891	(17122404)	649725.76	4188383.34	158.38711	(15030924)
649825.76	4188383.34	179.20560	(16122709)	649925.76	4188383.34	222.98033	(16122709)
650025.76	4188383.34	255.06613	(16020517)	650125.76	4188383.34	373.62774	(16020517)
650225.76	4188383.34	524.84244	(16072324)	650325.76	4188383.34	891.61626	(15092018)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\*\* 15:03:05

PAGE 204

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

(YYMMDDHH)

-----

650425.76	4188383.34	451.81804	(14100318)	650525.76	4188383.34	303.81344	(17122309)
650625.76	4188383.34	220.95069	(17061306)	650725.76	4188383.34	189.18394	(17080204)
650825.76	4188383.34	167.02951	(13070405)	651125.76	4188383.34	119.79670	(14051320)
649125.76	4188433.34	101.26295	(17031802)	649225.76	4188433.34	107.01362	(17031802)
649325.76	4188433.34	113.63176	(17123022)	649425.76	4188433.34	122.72033	(17123022)
649525.76	4188433.34	132.21234	(17123022)	649625.76	4188433.34	143.78431	(13040606)
649725.76	4188433.34	157.94465	(13040606)	649825.76	4188433.34	186.17233	(14122109)
649925.76	4188433.34	222.16954	(14122109)	650025.76	4188433.34	257.37952	(16122909)
650125.76	4188433.34	336.46708	(17010703)	650225.76	4188433.34	638.79389	(15101524)
650325.76	4188433.34	621.16167	(17052219)	650425.76	4188433.34	512.62250	(17100718)
650525.76	4188433.34	274.91330	(17082922)	650625.76	4188433.34	224.64713	(15102617)
650725.76	4188433.34	187.24299	(15043021)	650825.76	4188433.34	166.62865	(17091205)
651125.76	4188433.34	117.83844	(17091205)	649125.76	4188483.34	99.47457	(17120922)
649225.76	4188483.34	105.69923	(17122119)	649325.76	4188483.34	114.77182	(17122119)
649425.76	4188483.34	124.49470	(17122119)	649525.76	4188483.34	134.45887	(17122119)
649625.76	4188483.34	149.05176	(17121123)	649725.76	4188483.34	164.48926	(17031724)
650425.76	4188483.34	484.57591	(16021421)	650525.76	4188483.34	320.52145	(13040507)
650625.76	4188483.34	238.58776	(13040507)	650725.76	4188483.34	197.21207	(17022708)
650825.76	4188483.34	169.24249	(17022708)	651125.76	4188483.34	123.57172	(15121617)
649125.76	4188533.34	100.86368	(17031805)	649225.76	4188533.34	106.02417	(17021301)
649325.76	4188533.34	114.39618	(17021301)	649425.76	4188533.34	121.90067	(17021301)
649525.76	4188533.34	132.41780	(17030907)	649625.76	4188533.34	149.93188	(17021502)
649725.76	4188533.34	162.09296	(17021502)	650425.76	4188533.34	403.45893	(17012302)
650525.76	4188533.34	287.99941	(14040407)	650625.76	4188533.34	214.58897	(17012917)
650725.76	4188533.34	184.52874	(13010317)	650825.76	4188533.34	170.24917	(14120819)
651125.76	4188533.34	122.41268	(16022023)	649125.76	4188583.34	100.99333	(17011121)
649225.76	4188583.34	104.75128	(17121322)	649325.76	4188583.34	113.57906	(17021502)
649425.76	4188583.34	121.82180	(17120103)	649525.76	4188583.34	136.19180	(17120103)
649625.76	4188583.34	144.74853	(17041005)	649725.76	4188583.34	160.30999	(17013004)
650425.76	4188583.34	306.27602	(16031402)	650525.76	4188583.34	255.18345	(13122709)
650625.76	4188583.34	219.48021	(17013017)	650725.76	4188583.34	188.11490	(16012717)
650825.76	4188583.34	159.98279	(16040703)	651125.76	4188583.34	123.26635	(14120819)
649125.76	4188633.34	99.31626	(17031703)	649225.76	4188633.34	104.64843	(17010624)
649325.76	4188633.34	111.20757	(17010624)	649425.76	4188633.34	120.84007	(17013004)
649525.76	4188633.34	133.11009	(17013004)	649625.76	4188633.34	149.27863	(17011123)
649725.76	4188633.34	165.47374	(17022608)	649825.76	4188633.34	174.94009	(17032420)
649925.76	4188633.34	197.50096	(17020721)	650025.76	4188633.34	224.15334	(15010309)
650125.76	4188633.34	240.47262	(17103108)	650225.76	4188633.34	309.22213	(14120909)
650325.76	4188633.34	305.31129	(17012024)	650425.76	4188633.34	277.74461	(17102317)
650525.76	4188633.34	240.36387	(16090707)	650625.76	4188633.34	217.67962	(13122709)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 205

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
650725.76	4188633.34	178.13192	(14012520)	650825.76	4188633.34	165.85843 (16012717)
651125.76	4188633.34	120.74327	(13121417)	649125.76	4188683.34	94.24458 (14012320)
649225.76	4188683.34	103.76055	(17021224)	649325.76	4188683.34	111.21837 (17121720)
649425.76	4188683.34	121.94082	(17122523)	649525.76	4188683.34	132.12606 (17020508)
649625.76	4188683.34	142.83411	(17020508)	649725.76	4188683.34	156.78687 (17122118)
649825.76	4188683.34	178.06024	(17020721)	649925.76	4188683.34	182.56046 (15010309)
650025.76	4188683.34	203.83429	(13103108)	650125.76	4188683.34	238.28864 (16110408)
650225.76	4188683.34	284.22668	(14120909)	650325.76	4188683.34	259.54781 (15012717)
650425.76	4188683.34	222.47141	(14011618)	650525.76	4188683.34	233.27839 (17040807)
650625.76	4188683.34	188.61351	(15042724)	650725.76	4188683.34	176.75522 (15031322)
650825.76	4188683.34	160.25373	(15011517)	651125.76	4188683.34	119.49111 (15120623)
649125.76	4188733.34	96.68501	(17122608)	649225.76	4188733.34	103.79191 (17122523)
649325.76	4188733.34	111.49387	(17121721)	649425.76	4188733.34	121.63022 (17120518)
649525.76	4188733.34	123.61014	(17121121)	649625.76	4188733.34	143.73282 (17122118)
649725.76	4188733.34	157.29230	(17020721)	649825.76	4188733.34	157.83726 (14083006)
649925.76	4188733.34	169.56394	(13010418)	650025.76	4188733.34	189.52871 (16022308)
650125.76	4188733.34	211.97469	(13081824)	650225.76	4188733.34	213.59238 (17121921)
650325.76	4188733.34	237.41634	(15012717)	650425.76	4188733.34	221.25487 (16053106)
650525.76	4188733.34	203.38851	(16092007)	650625.76	4188733.34	181.60041 (13022722)
650725.76	4188733.34	170.01951	(15042724)	650825.76	4188733.34	156.54692 (15031322)
651125.76	4188733.34	118.08649	(14012318)	649125.76	4188783.34	95.74039 (17122702)
649225.76	4188783.34	103.67012	(17011201)	649325.76	4188783.34	108.30424 (17120518)
649425.76	4188783.34	116.59549	(17121121)	649525.76	4188783.34	129.53846 (17122118)
649625.76	4188783.34	138.58194	(17020721)	649725.76	4188783.34	142.91371 (17030206)
649825.76	4188783.34	153.67143	(13091907)	649925.76	4188783.34	177.16178 (15091220)
650025.76	4188783.34	177.38605	(14122019)	650125.76	4188783.34	204.81602 (15011809)
650225.76	4188783.34	206.16642	(15103117)	650325.76	4188783.34	212.36492 (15012717)
650425.76	4188783.34	212.51548	(14010309)	650525.76	4188783.34	192.91349 (17102317)
650625.76	4188783.34	178.62528	(17040807)	650725.76	4188783.34	162.04301 (16011924)
650825.76	4188783.34	152.24937	(17122322)	651125.76	4188783.34	116.62076 (14120704)
649125.76	4188833.34	98.74295	(17011201)	649225.76	4188833.34	99.57425 (17120707)
649325.76	4188833.34	107.79002	(17121121)	649425.76	4188833.34	116.06683 (17122118)
649525.76	4188833.34	125.44477	(17122524)	649625.76	4188833.34	130.68900 (17030206)
649725.76	4188833.34	137.03969	(13101020)	649825.76	4188833.34	148.71603 (15102307)
649925.76	4188833.34	160.58550	(14120419)	650025.76	4188833.34	184.12318 (15091121)
650125.76	4188833.34	185.05038	(17031722)	650225.76	4188833.34	190.87122 (17121417)
650325.76	4188833.34	190.07946	(14120806)	650425.76	4188833.34	198.44162 (14010309)
650525.76	4188833.34	178.50596	(13092819)	650625.76	4188833.34	175.63370 (15020318)
650725.76	4188833.34	160.55911	(17011918)	650825.76	4188833.34	145.12907 (17122308)
651125.76	4188833.34	114.66512	(14010718)	649125.76	4188883.34	93.81380 (17122805)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK6 \*\*\*

INCLUDING SOURCE(S): STCK6 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

649225.76	4188883.34	99.93049	(17121007)	649325.76	4188883.34	108.01613 (17020404)
649425.76	4188883.34	114.41789	(17122524)	649525.76	4188883.34	118.35103 (17030206)
649625.76	4188883.34	120.82074	(15100104)	649725.76	4188883.34	130.73784 (14122717)
649825.76	4188883.34	150.31479	(15091220)	649925.76	4188883.34	150.09437 (13092407)
650025.76	4188883.34	169.23466	(13081824)	650125.76	4188883.34	171.28399 (14120909)
650225.76	4188883.34	172.73124	(15120707)	650325.76	4188883.34	180.57528 (13010917)
650425.76	4188883.34	176.60914	(17011607)	650525.76	4188883.34	167.23373 (15011721)
650625.76	4188883.34	163.88974	(17120123)	650725.76	4188883.34	154.90827 (14021523)
650825.76	4188883.34	138.35537	(13012505)	651125.76	4188883.34	113.98883 (14010518)
650125.76	4188933.34	164.01778	(16100903)	650225.76	4188933.34	165.06940 (13122120)
650325.76	4188933.34	170.80394	(13010917)	650425.76	4188933.34	165.31397 (15120722)
650525.76	4188933.34	163.67780	(16020921)	650625.76	4188933.34	150.86398 (15092122)
650725.76	4188933.34	147.67474	(15022703)	650825.76	4188933.34	140.17547 (17011918)
651125.76	4188933.34	109.62218	(13011920)	650425.76	4188983.34	158.09423 (17122703)
650525.76	4188983.34	159.00693	(17032421)	650625.76	4188983.34	149.44385 (17121820)
650725.76	4188983.34	144.02530	(15020318)	650825.76	4188983.34	134.36533 (17121323)
651125.76	4188983.34	108.96530	(17122322)	650525.76	4189033.34	145.85872 (16021204)
650625.76	4189033.34	140.32456	(17031007)	650725.76	4189033.34	135.22345 (17120123)
650825.76	4189033.34	125.00351	(15022703)	651125.76	4189033.34	107.98103 (13020618)
650525.76	4189083.34	136.25317	(16122724)	650625.76	4189083.34	134.92832 (17031007)
650725.76	4189083.34	124.37678	(14120621)	650825.76	4189083.34	123.65679 (14021218)
651125.76	4189083.34	103.77968	(13030119)	650525.76	4189133.34	132.15210 (17031024)
650625.76	4189133.34	126.30996	(16020921)	650725.76	4189133.34	121.05941 (13022108)
650825.76	4189133.34	117.59504	(15021124)	651125.76	4189133.34	104.86056 (17042922)
650781.98	4189510.65	95.65730	(17122223)	650760.33	4189397.50	103.56056 (17122223)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\* 15:03:05

PAGE 207

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
---------------------------	-------------	------	------------	-------------	-------------	------

649676.34	4188314.55	139.46852	(17012803)	649629.66	4188294.84	135.01725 (17012803)
649810.15	4188312.48	161.64492	(17020501)	649364.10	4188360.20	109.18336 (17122404)
649327.80	4188355.01	106.57368	(17121420)	649380.70	4188758.52	109.21805 (17120518)
650495.81	4188841.51	193.70718	(14010309)	650597.47	4188832.17	179.45506 (13092819)
650536.27	4188878.85	179.15546	(13022508)	650577.76	4188877.81	171.62815 (16020921)
650602.66	4188860.18	172.76583	(14021524)	650610.95	4188880.93	166.91770 (14021524)
650638.10	4188858.53	174.46929	(15092122)	650664.10	4188331.03	222.09322 (13011309)
650668.72	4188350.83	221.81029	(14011817)	650677.96	4188379.86	241.46649 (14091307)



650699.74	4188414.84	230.15086	(15102617)	650758.47	4188658.36	187.78636	(15031322)
650765.73	4188678.82	187.01106	(13122709)	650773.65	4188706.54	180.07192	(16092620)
650778.27	4188726.34	176.01080	(15042724)	650805.33	4188805.53	156.93167	(15030420)
650806.65	4188824.01	157.87773	(15030420)	650811.27	4188843.81	157.76691	(17011918)
650814.57	4188862.29	156.92979	(17011918)	650846.24	4188924.98	146.08390	(14021523)
650850.86	4188951.38	139.15161	(17120124)	650854.82	4188976.46	135.85274	(13121017)
650698.00	4188307.32	206.48610	(17102718)	650692.60	4188291.80	219.95072	(14010409)
650724.82	4189245.80	115.81106	(16020921)	650726.07	4189273.37	112.97809	(17120204)
650856.27	4189006.30	134.01117	(15022703)	650857.23	4189022.60	131.86444	(14021218)
650859.15	4189041.29	132.20653	(14021218)	650859.15	4189058.54	130.48572	(14021218)
650860.58	4189076.28	126.55391	(14021218)	650861.54	4189094.49	124.13516	(17031107)
650857.71	4189113.19	122.05462	(17041522)	650847.16	4189118.94	121.64559	(17041522)
650848.12	4189134.76	120.50068	(14120621)	650850.04	4189155.37	117.82940	(14120621)
650851.48	4189171.66	117.14004	(17031101)	650853.87	4189184.12	116.72078	(17031101)
650856.75	4189199.46	115.79138	(17031101)	650857.71	4189213.36	114.53504	(17031101)
650860.58	4189226.30	113.07881	(17031101)	650862.50	4189242.60	112.04810	(17021405)
650865.38	4189258.42	110.87352	(17021405)	650867.77	4189275.19	109.19838	(17021405)
650868.73	4189291.49	108.07343	(15021907)	650872.09	4189309.23	106.60489	(15021907)
650874.00	4189325.04	104.99775	(15021907)	650875.92	4189340.38	103.31779	(14020118)
650878.80	4189355.24	102.16093	(14020118)	650881.19	4189373.45	101.92288	(17012921)
650884.55	4189390.71	101.65130	(17012921)	650888.86	4189407.01	101.11639	(17012921)
650889.82	4189427.14	100.55418	(17012921)	650891.74	4189443.43	99.75510	(17012921)
650895.09	4189461.17	98.68414	(17012921)	650898.45	4189475.55	97.73616	(17012921)
650898.45	4189489.93	96.52911	(17012921)	650902.28	4189504.31	95.66451	(17122223)
650709.41	4188344.56	208.86357	(14091307)	650722.45	4188284.03	194.64214	(14010409)
650745.73	4188280.30	188.45980	(17030921)	650735.49	4188223.50	193.02564	(16021519)
650721.52	4188167.62	186.87332	(17032505)	650525.76	4188133.34	218.69816	(15090707)
651125.76	4188133.34	119.60188	(17122619)	649125.76	4188183.34	95.62909	(17011605)
649225.76	4188183.34	99.75616	(17011605)	649325.76	4188183.34	104.91648	(17012823)
649425.76	4188183.34	112.32192	(17121824)	649525.76	4188183.34	122.22449	(17021006)
649625.76	4188183.34	132.93403	(17032401)	649725.76	4188183.34	144.05345	(17121220)
649825.76	4188183.34	160.10635	(17021408)	649925.76	4188183.34	170.99772	(16021508)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 208

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK7 \*\*\*  
 INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) (YYMMDDHH)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
650025.76	4188183.34	204.58220 (13010809)	650125.76	4188183.34	234.05625 (14010609)
650225.76	4188183.34	244.67405 (17041807)	650325.76	4188183.34	250.53955 (14032718)
650425.76	4188183.34	260.69956 (14091007)	650525.76	4188183.34	223.76512 (14022219)
650625.76	4188183.34	223.47310 (14020517)	650725.76	4188183.34	195.18866 (17011317)
650825.76	4188183.34	174.66450 (17121518)	651125.76	4188183.34	124.45248 (17020824)
649125.76	4188233.34	96.23914 (17011205)	649225.76	4188233.34	101.05646 (17011205)

649325.76	4188233.34	104.91537	(17011605)	649425.76	4188233.34	110.10392	(17011605)
649525.76	4188233.34	125.76267	(17020501)	649625.76	4188233.34	135.16695	(17121824)
649725.76	4188233.34	144.47784	(17032401)	649825.76	4188233.34	157.90918	(17032324)
649925.76	4188233.34	178.74645	(17021408)	650025.76	4188233.34	209.22069	(14120809)
650125.76	4188233.34	227.48381	(13010809)	650225.76	4188233.34	258.29555	(14041207)
650325.76	4188233.34	290.18461	(16040707)	650425.76	4188233.34	301.07444	(17021318)
650525.76	4188233.34	267.75068	(16090207)	650625.76	4188233.34	213.71358	(17121818)
650725.76	4188233.34	195.74904	(16021519)	650825.76	4188233.34	169.77263	(14041501)
651125.76	4188233.34	123.63215	(17112222)	649125.76	4188283.34	93.76218	(17122902)
649225.76	4188283.34	99.27427	(17022506)	649325.76	4188283.34	105.99819	(17022506)
649425.76	4188283.34	111.49956	(13033006)	649525.76	4188283.34	123.72701	(17012803)
649625.76	4188283.34	133.32303	(15021608)	649725.76	4188283.34	152.47415	(17020501)
649825.76	4188283.34	164.76468	(17031301)	649925.76	4188283.34	179.62360	(15010709)
650025.76	4188283.34	192.11147	(15120724)	650125.76	4188283.34	257.06480	(14120809)
650225.76	4188283.34	302.33980	(14010609)	650325.76	4188283.34	354.71952	(16123108)
650425.76	4188283.34	382.74902	(17022520)	650525.76	4188283.34	349.62811	(14020517)
650625.76	4188283.34	239.91990	(17031318)	650725.76	4188283.34	192.39702	(15091122)
650825.76	4188283.34	172.96893	(17021005)	651125.76	4188283.34	124.52884	(17042121)
649125.76	4188333.34	97.17886	(17121420)	649225.76	4188333.34	101.52178	(17121420)
649325.76	4188333.34	105.45253	(17030124)	649425.76	4188333.34	112.24371	(17121302)
649525.76	4188333.34	123.63232	(17031806)	649625.76	4188333.34	136.21723	(17031806)
649725.76	4188333.34	146.77821	(17122606)	649825.76	4188333.34	164.70600	(15021608)
649925.76	4188333.34	178.71229	(17011802)	650025.76	4188333.34	229.22211	(15010709)
650125.76	4188333.34	226.14563	(17020105)	650225.76	4188333.34	310.79630	(16122521)
650325.76	4188333.34	482.04482	(16031020)	650425.76	4188333.34	519.04889	(17022519)
650525.76	4188333.34	344.05330	(17122019)	650625.76	4188333.34	256.99996	(14010409)
650725.76	4188333.34	199.80531	(17081203)	650825.76	4188333.34	177.25046	(14091921)
651125.76	4188333.34	125.09584	(17122519)	649125.76	4188383.34	94.32087	(17013008)
649225.76	4188383.34	99.67639	(17013008)	649325.76	4188383.34	105.80584	(17122404)
649425.76	4188383.34	116.32642	(17122404)	649525.76	4188383.34	127.41788	(17122404)
649625.76	4188383.34	138.28066	(17122404)	649725.76	4188383.34	147.18247	(15030924)
649825.76	4188383.34	160.83357	(15030924)	649925.76	4188383.34	191.42436	(16122709)
650025.76	4188383.34	229.90181	(16122709)	650125.76	4188383.34	304.79686	(16020517)
650225.76	4188383.34	366.37624	(17020119)	650325.76	4188383.34	621.50431	(13050401)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 209

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	------------	-------------	-------------	------

650425.76	4188383.34	775.32007	(15043019)	650525.76	4188383.34	388.85902	(17121918)
650625.76	4188383.34	274.26294	(17122309)	650725.76	4188383.34	210.21888	(17061306)
650825.76	4188383.34	182.55909	(17080204)	651125.76	4188383.34	128.40303	(14051320)
649125.76	4188433.34	97.03075	(17031802)	649225.76	4188433.34	102.61729	(17031802)

649325.76	4188433.34	108.36923	(17031802)	649425.76	4188433.34	116.16563	(17123022)
649525.76	4188433.34	125.38394	(17123022)	649625.76	4188433.34	134.86709	(17123022)
649725.76	4188433.34	147.58195	(13040606)	649825.76	4188433.34	164.91964	(14122109)
649925.76	4188433.34	197.14211	(14122109)	650025.76	4188433.34	234.05850	(14122109)
650125.76	4188433.34	277.05521	(15010909)	650225.76	4188433.34	383.25195	(17010703)
650325.76	4188433.34	809.20747	(16111922)	650425.76	4188433.34	1114.65617	(16091920)
650525.76	4188433.34	415.06672	(15092119)	650625.76	4188433.34	256.87181	(15102617)
650725.76	4188433.34	214.99486	(15102617)	650825.76	4188433.34	180.06583	(15043021)
651125.76	4188433.34	128.85322	(17091205)	649125.76	4188483.34	95.78669	(17121203)
649225.76	4188483.34	100.94690	(17120922)	649325.76	4188483.34	108.09570	(17122119)
649425.76	4188483.34	117.49546	(17122119)	649525.76	4188483.34	127.54340	(17122119)
649625.76	4188483.34	137.75944	(17122119)	649725.76	4188483.34	152.49629	(17121123)
650425.76	4188483.34	915.30280	(17092618)	650525.76	4188483.34	408.12871	(15120709)
650625.76	4188483.34	304.94742	(13040507)	650725.76	4188483.34	213.83088	(17022708)
650825.76	4188483.34	190.36638	(17022708)	651125.76	4188483.34	132.90700	(15121617)
649125.76	4188533.34	96.93073	(17031805)	649225.76	4188533.34	102.38631	(17031805)
649325.76	4188533.34	108.20324	(17021301)	649425.76	4188533.34	116.69854	(17021301)
649525.76	4188533.34	124.34879	(17120904)	649625.76	4188533.34	136.11937	(17021502)
649725.76	4188533.34	153.83577	(17021502)	650425.76	4188533.34	586.66940	(17012020)
650525.76	4188533.34	350.28378	(17011917)	650625.76	4188533.34	259.83357	(17013017)
650725.76	4188533.34	200.18546	(14012521)	650825.76	4188533.34	179.67448	(16012718)
651125.76	4188533.34	132.01704	(14122318)	649125.76	4188583.34	98.31521	(17011121)
649225.76	4188583.34	102.09076	(17011121)	649325.76	4188583.34	106.06501	(17013005)
649425.76	4188583.34	116.21790	(17021502)	649525.76	4188583.34	125.59429	(17120103)
649625.76	4188583.34	139.25552	(17120103)	649725.76	4188583.34	148.78707	(17041005)
650425.76	4188583.34	409.68057	(17012101)	650525.76	4188583.34	292.79282	(16090707)
650625.76	4188583.34	276.91826	(17122709)	650725.76	4188583.34	219.17306	(17013017)
650825.76	4188583.34	177.21482	(15021208)	651125.76	4188583.34	132.52718	(14120819)
649125.76	4188633.34	95.14003	(17031703)	649225.76	4188633.34	100.67713	(17031703)
649325.76	4188633.34	106.87075	(17010624)	649425.76	4188633.34	112.71977	(17010624)
649525.76	4188633.34	124.73537	(17013004)	649625.76	4188633.34	134.92183	(17013004)
649725.76	4188633.34	153.56457	(17011123)	649825.76	4188633.34	169.16585	(17022608)
649925.76	4188633.34	179.49367	(17032420)	650025.76	4188633.34	210.33287	(17040507)
650125.76	4188633.34	231.41738	(13103108)	650225.76	4188633.34	241.43738	(13110517)
650325.76	4188633.34	286.43018	(14120923)	650425.76	4188633.34	327.92097	(15020317)
650525.76	4188633.34	257.73816	(17102317)	650625.76	4188633.34	222.16264	(15022708)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 210

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650725.76	4188633.34	196.28709	(15031322)	650825.76	4188633.34	179.76099	(15022308)
651125.76	4188633.34	130.71254	(13121417)	649125.76	4188683.34	91.60080	(17031923)

649225.76	4188683.34	96.11961	(13013118)	649325.76	4188683.34	106.22563	(17021224)
649425.76	4188683.34	112.90061	(17122523)	649525.76	4188683.34	125.61597	(17011123)
649625.76	4188683.34	137.33594	(17020508)	649725.76	4188683.34	144.63024	(17031723)
649825.76	4188683.34	161.08176	(17122118)	649925.76	4188683.34	176.74805	(17020721)
650025.76	4188683.34	192.22003	(13091907)	650125.76	4188683.34	213.03993	(14040707)
650225.76	4188683.34	239.03355	(16110408)	650325.76	4188683.34	260.38628	(15103117)
650425.76	4188683.34	295.54779	(14122609)	650525.76	4188683.34	247.47532	(17102317)
650625.76	4188683.34	200.43544	(17042204)	650725.76	4188683.34	191.66495	(17061906)
650825.76	4188683.34	174.56847	(15031322)	651125.76	4188683.34	127.50502	(15120623)
649125.76	4188733.34	92.12760	(17122608)	649225.76	4188733.34	97.83332	(17122608)
649325.76	4188733.34	105.74199	(17122523)	649425.76	4188733.34	112.92066	(17121721)
649525.76	4188733.34	123.46807	(17120518)	649625.76	4188733.34	130.29875	(17121121)
649725.76	4188733.34	145.71241	(17122118)	649825.76	4188733.34	157.34290	(17020721)
649925.76	4188733.34	163.99138	(15100104)	650025.76	4188733.34	181.90891	(15012017)
650125.76	4188733.34	191.79061	(14101505)	650225.76	4188733.34	225.00674	(15011809)
650325.76	4188733.34	234.02972	(15103117)	650425.76	4188733.34	255.98154	(14122609)
650525.76	4188733.34	199.76764	(17091003)	650625.76	4188733.34	211.60236	(17040807)
650725.76	4188733.34	180.56276	(17042923)	650825.76	4188733.34	166.58720	(16092620)
651125.76	4188733.34	124.56839	(14030421)	649125.76	4188783.34	91.67453	(17122608)
649225.76	4188783.34	97.00255	(17031807)	649325.76	4188783.34	105.35744	(17011201)
649425.76	4188783.34	108.29647	(17120518)	649525.76	4188783.34	120.95695	(17121121)
649625.76	4188783.34	130.06107	(17122118)	649725.76	4188783.34	139.09997	(17020721)
649825.76	4188783.34	144.21946	(15100104)	649925.76	4188783.34	153.71875	(13010418)
650025.76	4188783.34	178.41391	(15091220)	650125.76	4188783.34	196.42538	(15091121)
650225.76	4188783.34	200.60005	(14120909)	650325.76	4188783.34	200.17456	(16120917)
650425.76	4188783.34	212.79576	(14122609)	650525.76	4188783.34	199.63010	(16053106)
650625.76	4188783.34	187.64357	(16091807)	650725.76	4188783.34	174.21083	(14021523)
650825.76	4188783.34	161.03903	(17012922)	651125.76	4188783.34	121.79975	(14022020)
649125.76	4188833.34	94.32071	(17011201)	649225.76	4188833.34	99.58900	(17011201)
649325.76	4188833.34	100.92146	(17120707)	649425.76	4188833.34	110.44703	(17121121)
649525.76	4188833.34	115.70309	(17122118)	649625.76	4188833.34	125.30276	(17122524)
649725.76	4188833.34	129.19173	(17030206)	649825.76	4188833.34	139.41130	(13101020)
649925.76	4188833.34	154.36719	(15091220)	650025.76	4188833.34	165.55160	(16103120)
650125.76	4188833.34	182.42388	(13081824)	650225.76	4188833.34	198.15294	(14120909)
650325.76	4188833.34	186.09353	(15011318)	650425.76	4188833.34	198.27989	(13012117)
650525.76	4188833.34	191.04624	(13022508)	650625.76	4188833.34	179.49264	(15092122)
650725.76	4188833.34	167.37481	(17040807)	650825.76	4188833.34	153.72088	(15030420)
651125.76	4188833.34	120.84222	(14010518)	649125.76	4188883.34	92.32677	(17011201)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 211

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK7 \*\*\*

INCLUDING SOURCE(S): STCK7 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

-----

649225.76	4188883.34	95.68541	(17122805)	649325.76	4188883.34	101.51769	(17041706)
649425.76	4188883.34	108.64769	(17020404)	649525.76	4188883.34	114.50644	(17122524)
649625.76	4188883.34	118.79498	(17030206)	649725.76	4188883.34	124.68722	(13101020)
649825.76	4188883.34	133.67894	(15102307)	649925.76	4188883.34	149.50776	(14120419)
650025.76	4188883.34	157.53205	(15091121)	650125.76	4188883.34	169.58981	(16040607)
650225.76	4188883.34	173.07847	(17031721)	650325.76	4188883.34	180.32136	(15100423)
650425.76	4188883.34	186.32970	(13012117)	650525.76	4188883.34	179.87256	(14010309)
650625.76	4188883.34	169.87701	(13020219)	650725.76	4188883.34	166.91322	(15020318)
650825.76	4188883.34	151.75621	(17011918)	651125.76	4188883.34	118.12774	(13020120)
650125.76	4188933.34	159.71358	(14102101)	650225.76	4188933.34	163.80618	(17040405)
650325.76	4188933.34	170.49775	(15100423)	650425.76	4188933.34	172.96597	(13012117)
650525.76	4188933.34	169.80558	(17021304)	650625.76	4188933.34	156.85016	(17031007)
650725.76	4188933.34	155.19715	(17120123)	650825.76	4188933.34	144.21530	(13121017)
651125.76	4188933.34	118.77251	(17122322)	650425.76	4188983.34	163.20069	(17040505)
650525.76	4188983.34	159.76916	(17011607)	650625.76	4188983.34	153.51414	(16020921)
650725.76	4188983.34	143.29707	(13022108)	650825.76	4188983.34	139.02304	(15020318)
651125.76	4188983.34	114.60487	(13020618)	650525.76	4189033.34	152.09589	(17122822)
650625.76	4189033.34	150.06706	(17032421)	650725.76	4189033.34	140.11310	(17121820)
650825.76	4189033.34	133.39009	(14021218)	651125.76	4189033.34	111.62489	(13030119)
650525.76	4189083.34	145.04747	(17122703)	650625.76	4189083.34	138.69547	(17032421)
650725.76	4189083.34	133.02685	(17031007)	650825.76	4189083.34	126.96274	(17120123)
651125.76	4189083.34	110.08309	(17042922)	650525.76	4189133.34	138.55544	(17122703)
650625.76	4189133.34	130.07227	(13121618)	650725.76	4189133.34	128.58638	(17031007)
650825.76	4189133.34	120.81466	(17031101)	651125.76	4189133.34	108.62981	(14011617)
650781.98	4189510.65	97.20174	(15021919)	650760.33	4189397.50	104.12331	(13012019)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 212

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)

649676.34	4188314.55	219.02449	(17041807)	649629.66	4188294.84	200.17023	(17022208)
649810.15	4188312.48	235.02630	(14032718)	649364.10	4188360.20	159.95613	(13120107)
649327.80	4188355.01	162.24651	(17021408)	649380.70	4188758.52	176.36707	(17011123)
650495.81	4188841.51	141.85500	(15021222)	650597.47	4188832.17	128.86833	(14012623)
650536.27	4188878.85	137.47002	(16041723)	650577.76	4188877.81	130.83180	(15021222)
650602.66	4188860.18	129.15948	(15120623)	650610.95	4188880.93	126.57080	(15021222)
650638.10	4188858.53	124.41469	(15120623)	650664.10	4188331.03	118.46255	(17020824)
650668.72	4188350.83	117.32082	(17020824)	650677.96	4188379.86	116.92851	(14060905)
650699.74	4188414.84	115.56805	(14021320)	650758.47	4188658.36	115.59278	(13123017)
650765.73	4188678.82	115.73267	(17020901)	650773.65	4188706.54	115.01535	(17020901)
650778.27	4188726.34	113.29828	(14021603)	650805.33	4188805.53	110.51037	(14010519)
650806.65	4188824.01	109.77633	(14010519)	650811.27	4188843.81	108.46327	(15021205)
650814.57	4188862.29	109.06539	(14021501)	650846.24	4188924.98	105.41481	(15010823)

650850.86	4188951.38	105.50235	(13030120)	650854.82	4188976.46	105.07756	(14012318)
650698.00	4188307.32	113.32762	(17020824)	650692.60	4188291.80	111.39540	(15030721)
650724.82	4189245.80	103.78512	(13020618)	650726.07	4189273.37	102.15174	(13020618)
650856.27	4189006.30	104.21140	(14012318)	650857.23	4189022.60	103.92915	(15021922)
650859.15	4189041.29	103.33190	(15021922)	650859.15	4189058.54	102.88561	(14120704)
650860.58	4189076.28	100.71742	(14120704)	650861.54	4189094.49	98.68067	(13121319)
650857.71	4189113.19	99.82511	(13121319)	650847.16	4189118.94	100.02299	(13121319)
650848.12	4189134.76	101.09497	(13121617)	650850.04	4189155.37	101.37985	(13121617)
650851.48	4189171.66	100.07415	(13121617)	650853.87	4189184.12	98.25573	(13121617)
650856.75	4189199.46	97.30675	(13122521)	650857.71	4189213.36	96.68205	(13122521)
650860.58	4189226.30	95.38570	(13122521)	650862.50	4189242.60	94.24602	(15120204)
650865.38	4189258.42	95.05412	(17121119)	650867.77	4189275.19	95.48403	(17121119)
650868.73	4189291.49	94.85962	(17121119)	650872.09	4189309.23	92.96623	(17121119)
650874.00	4189325.04	91.95607	(17123020)	650875.92	4189340.38	91.72353	(17123020)
650878.80	4189355.24	91.35653	(13020618)	650881.19	4189373.45	90.87395	(13020618)
650884.55	4189390.71	89.49162	(13020618)	650888.86	4189407.01	89.82078	(17013020)
650889.82	4189427.14	89.97241	(17013020)	650891.74	4189443.43	89.31307	(17013020)
650895.09	4189461.17	87.96681	(17013020)	650898.45	4189475.55	87.89507	(17042922)
650898.45	4189489.93	88.04565	(17042922)	650902.28	4189504.31	87.49109	(17042922)
650709.41	4188344.56	112.07666	(14120721)	650722.45	4188284.03	109.39630	(17121906)
650745.73	4188280.30	107.72342	(17121906)	650735.49	4188223.50	108.53854	(17122619)
650721.52	4188167.62	105.38946	(17012523)	650525.76	4188133.34	127.16118	(17031320)
651125.76	4188133.34	83.99186	(17121906)	649125.76	4188183.34	125.25698	(13041820)
649225.76	4188183.34	135.66953	(14021403)	649325.76	4188183.34	143.61514	(15120820)
649425.76	4188183.34	155.98526	(15120519)	649525.76	4188183.34	170.19753	(13022418)
649625.76	4188183.34	176.59183	(13032724)	649725.76	4188183.34	179.74720	(17122819)
649825.76	4188183.34	185.80878	(16040207)	649925.76	4188183.34	180.04529	(14121116)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 213

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650025.76	4188183.34	194.96122	(16041107)	650125.76	4188183.34	175.28887	(13122017)
650225.76	4188183.34	169.49785	(17122517)	650325.76	4188183.34	150.29017	(17013019)
650425.76	4188183.34	139.92853	(16021119)	650525.76	4188183.34	126.12698	(15021221)
650625.76	4188183.34	118.67270	(17011307)	650725.76	4188183.34	106.15575	(14120805)
650825.76	4188183.34	101.59058	(17122619)	651125.76	4188183.34	82.29059	(17020824)
649125.76	4188233.34	124.13278	(13120107)	649225.76	4188233.34	138.00060	(13041820)
649325.76	4188233.34	154.08507	(14021403)	649425.76	4188233.34	159.06828	(17020104)
649525.76	4188233.34	172.48365	(15120208)	649625.76	4188233.34	183.36533	(17041924)
649725.76	4188233.34	190.19867	(13040403)	649825.76	4188233.34	199.37810	(16040207)
649925.76	4188233.34	202.73015	(14121116)	650025.76	4188233.34	195.83290	(16041107)
650125.76	4188233.34	174.07778	(14121122)	650225.76	4188233.34	171.32243	(17120117)

650325.76	4188233.34	158.71278	(17012607)	650425.76	4188233.34	140.01104	(17031320)
650525.76	4188233.34	130.08619	(16021201)	650625.76	4188233.34	115.10383	(17012523)
650725.76	4188233.34	110.19793	(17122619)	650825.76	4188233.34	102.19796	(17121906)
651125.76	4188233.34	83.32177	(14120721)	649125.76	4188283.34	128.65458	(17021408)
649225.76	4188283.34	137.93069	(13120107)	649325.76	4188283.34	152.55055	(14033104)
649425.76	4188283.34	173.74967	(17020902)	649525.76	4188283.34	186.47949	(14010609)
649625.76	4188283.34	196.70744	(17022208)	649725.76	4188283.34	205.52646	(15022508)
649825.76	4188283.34	209.96669	(16040207)	649925.76	4188283.34	220.84649	(14121116)
650025.76	4188283.34	201.89969	(15090707)	650125.76	4188283.34	187.69443	(17012919)
650225.76	4188283.34	168.94260	(16041802)	650325.76	4188283.34	167.70065	(17011317)
650425.76	4188283.34	144.98519	(16021201)	650525.76	4188283.34	128.92556	(17121819)
650625.76	4188283.34	119.06125	(17122619)	650725.76	4188283.34	109.17541	(17121906)
650825.76	4188283.34	104.37814	(17020824)	651125.76	4188283.34	82.77349	(14022504)
649125.76	4188333.34	134.89268	(17121220)	649225.76	4188333.34	144.92478	(17021408)
649325.76	4188333.34	155.15265	(16021508)	649425.76	4188333.34	172.60724	(16032106)
649525.76	4188333.34	185.43544	(15041802)	649625.76	4188333.34	199.67377	(15032207)
649725.76	4188333.34	234.06955	(17041807)	649825.76	4188333.34	229.39087	(14032718)
649925.76	4188333.34	231.47355	(16121309)	650025.76	4188333.34	211.90567	(17021319)
650125.76	4188333.34	197.08709	(14020517)	650225.76	4188333.34	180.40586	(17032505)
650325.76	4188333.34	163.51941	(17013121)	650425.76	4188333.34	146.84779	(17121819)
650525.76	4188333.34	130.61990	(17030921)	650625.76	4188333.34	120.49427	(17122508)
650725.76	4188333.34	111.66874	(17020824)	650825.76	4188333.34	104.42805	(15021623)
651125.76	4188333.34	83.54503	(14012017)	649125.76	4188383.34	135.87224	(17032401)
649225.76	4188383.34	145.62062	(17121220)	649325.76	4188383.34	162.74658	(17021408)
649425.76	4188383.34	176.39337	(14120809)	649525.76	4188383.34	216.26170	(13010809)
649625.76	4188383.34	256.94654	(14010609)	649725.76	4188383.34	291.28330	(17041807)
649825.76	4188383.34	276.37857	(14032718)	649925.76	4188383.34	267.02266	(16121309)
650025.76	4188383.34	225.83102	(16090207)	650125.76	4188383.34	203.16980	(14100518)
650225.76	4188383.34	183.65085	(17013121)	650325.76	4188383.34	166.58909	(17121819)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 214

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK8 \*\*\*

INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	148.97183	(17030921)	650525.76	4188383.34	132.04932	(17122508)
650625.76	4188383.34	120.85034	(14060905)	650725.76	4188383.34	111.56426	(15021623)
650825.76	4188383.34	103.82832	(14021320)	651125.76	4188383.34	89.46388	(14012017)
649125.76	4188433.34	139.27226	(17121824)	649225.76	4188433.34	149.06373	(17031301)
649325.76	4188433.34	163.62345	(17032401)	649425.76	4188433.34	179.39637	(17021408)
649525.76	4188433.34	225.15916	(14120809)	649625.76	4188433.34	229.80402	(13010809)
649725.76	4188433.34	301.55365	(14041207)	649825.76	4188433.34	308.94952	(14032718)
649925.76	4188433.34	340.16662	(13030408)	650025.76	4188433.34	299.06049	(14020517)
650125.76	4188433.34	212.74600	(17021419)	650225.76	4188433.34	187.72148	(17121518)

650325.76	4188433.34	167.84385	(17030921)	650425.76	4188433.34	149.22191	(13021319)
650525.76	4188433.34	132.64240	(17112222)	650625.76	4188433.34	123.01524	(14021320)
650725.76	4188433.34	113.24280	(17121319)	650825.76	4188433.34	107.49178	(17042121)
651125.76	4188433.34	87.42284	(17122519)	649125.76	4188483.34	137.15915	(17012803)
649225.76	4188483.34	153.04679	(17020501)	649325.76	4188483.34	168.06027	(14122219)
649425.76	4188483.34	193.48182	(15010709)	649525.76	4188483.34	196.94614	(15021607)
649625.76	4188483.34	275.90973	(14120809)	649725.76	4188483.34	311.80369	(14010609)
650425.76	4188483.34	153.05318	(17112222)	650525.76	4188483.34	134.53073	(16021224)
650625.76	4188483.34	125.06459	(17042121)	650725.76	4188483.34	113.93144	(14091806)
650825.76	4188483.34	108.18371	(17122519)	651125.76	4188483.34	85.84063	(17122519)
649125.76	4188533.34	138.83763	(17031806)	649225.76	4188533.34	151.70130	(17031806)
649325.76	4188533.34	164.59914	(15031424)	649425.76	4188533.34	185.29087	(15021608)
649525.76	4188533.34	232.69679	(15010709)	649625.76	4188533.34	245.51575	(17020106)
649725.76	4188533.34	354.04264	(16122521)	650425.76	4188533.34	155.48196	(15021118)
650525.76	4188533.34	136.82146	(14030224)	650625.76	4188533.34	126.83297	(17121522)
650725.76	4188533.34	115.05011	(17121522)	650825.76	4188533.34	106.78799	(17122719)
651125.76	4188533.34	88.64799	(17122621)	649125.76	4188583.34	141.69941	(17122404)
649225.76	4188583.34	154.53627	(17122404)	649325.76	4188583.34	170.87938	(14122109)
649425.76	4188583.34	192.49392	(16122709)	649525.76	4188583.34	249.84595	(16122709)
649625.76	4188583.34	294.39851	(16020517)	649725.76	4188583.34	406.08122	(17020119)
650425.76	4188583.34	158.66503	(17021219)	650525.76	4188583.34	139.75126	(14051320)
650625.76	4188583.34	125.75061	(14051320)	650725.76	4188583.34	115.32294	(14030319)
650825.76	4188583.34	108.72300	(17122621)	651125.76	4188583.34	89.94148	(17122621)
649125.76	4188633.34	140.20103	(17120902)	649225.76	4188633.34	154.47423	(17120902)
649325.76	4188633.34	176.49767	(17012309)	649425.76	4188633.34	211.57286	(17012309)
649525.76	4188633.34	251.35692	(17012309)	649625.76	4188633.34	275.02715	(17012309)
649725.76	4188633.34	435.33157	(15020723)	649825.76	4188633.34	1138.39479	(17100318)
649925.76	4188633.34	840.65474	(15041721)	650025.76	4188633.34	357.38746	(16031719)
650125.76	4188633.34	231.62130	(16062406)	650225.76	4188633.34	199.35172	(15091921)
650325.76	4188633.34	176.48374	(13031019)	650425.76	4188633.34	154.74305	(17013023)
650525.76	4188633.34	138.78963	(14012317)	650625.76	4188633.34	125.47937	(14012317)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 215

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK8 \*\*\*  
 INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650725.76	4188633.34	114.07761	(16010203)	650825.76	4188633.34	107.36415	(16010203)
651125.76	4188633.34	88.48960	(16010203)	649125.76	4188683.34	143.18683	(17121123)
649225.76	4188683.34	155.77117	(17012801)	649325.76	4188683.34	178.14878	(17013109)
649425.76	4188683.34	213.49323	(17013109)	649525.76	4188683.34	233.04652	(15013009)
649625.76	4188683.34	302.85737	(16123009)	649725.76	4188683.34	417.71137	(17032124)
649825.76	4188683.34	808.33819	(14120606)	649925.76	4188683.34	673.47553	(13120217)
650025.76	4188683.34	359.67811	(15120709)	650125.76	4188683.34	281.83967	(13040507)



650225.76	4188683.34	213.68508	(13040507)	650325.76	4188683.34	177.33507	(17022708)
650425.76	4188683.34	159.58780	(17021220)	650525.76	4188683.34	144.87096	(17021220)
650625.76	4188683.34	129.16634	(17021220)	650725.76	4188683.34	119.39156	(17020901)
650825.76	4188683.34	111.55478	(17020901)	651125.76	4188683.34	90.86003	(14022208)
649125.76	4188733.34	143.54819	(17021502)	649225.76	4188733.34	155.37751	(17120103)
649325.76	4188733.34	169.34336	(17040504)	649425.76	4188733.34	188.70017	(15122909)
649525.76	4188733.34	229.89665	(17122509)	649625.76	4188733.34	283.23203	(13020309)
649725.76	4188733.34	349.55319	(13110108)	649825.76	4188733.34	525.85488	(17020219)
649925.76	4188733.34	481.37532	(17010120)	650025.76	4188733.34	323.28862	(17122709)
650125.76	4188733.34	255.93772	(17013017)	650225.76	4188733.34	193.17763	(13030222)
650325.76	4188733.34	176.71977	(13010317)	650425.76	4188733.34	161.27552	(14120819)
650525.76	4188733.34	145.06262	(13011717)	650625.76	4188733.34	131.16609	(14122318)
650725.76	4188733.34	118.30324	(14021603)	650825.76	4188733.34	110.13463	(14021603)
651125.76	4188733.34	91.56416	(17020901)	649125.76	4188783.34	137.99625	(17041005)
649225.76	4188783.34	153.15459	(17013004)	649325.76	4188783.34	171.72967	(17011123)
649425.76	4188783.34	188.95937	(17022608)	649525.76	4188783.34	215.36310	(13020309)
649625.76	4188783.34	255.69697	(15010309)	649725.76	4188783.34	285.73719	(17103108)
649825.76	4188783.34	367.84187	(15031421)	649925.76	4188783.34	350.19286	(17010917)
650025.76	4188783.34	284.22337	(16090707)	650125.76	4188783.34	250.47640	(17122709)
650225.76	4188783.34	205.37537	(17013017)	650325.76	4188783.34	171.90217	(15021208)
650425.76	4188783.34	152.85593	(16040703)	650525.76	4188783.34	142.29988	(14011919)
650625.76	4188783.34	125.66364	(14120819)	650725.76	4188783.34	116.82970	(14120819)
650825.76	4188783.34	111.07086	(14021120)	651125.76	4188783.34	91.00938	(14021603)
649125.76	4188833.34	141.95049	(17011123)	649225.76	4188833.34	156.52138	(17020508)
649325.76	4188833.34	163.72203	(17032420)	649425.76	4188833.34	187.14765	(17020721)
649525.76	4188833.34	206.71705	(15010309)	649625.76	4188833.34	231.62469	(14040707)
649725.76	4188833.34	264.50151	(14122709)	649825.76	4188833.34	271.47314	(17120302)
649925.76	4188833.34	271.95397	(17010917)	650025.76	4188833.34	238.91302	(17040807)
650125.76	4188833.34	206.56981	(16040620)	650225.76	4188833.34	191.41545	(15031322)
650325.76	4188833.34	169.54480	(15022308)	650425.76	4188833.34	157.07232	(16041723)
650525.76	4188833.34	140.76408	(15120623)	650625.76	4188833.34	125.71108	(13121417)
650725.76	4188833.34	115.13659	(13121417)	650825.76	4188833.34	108.10635	(13120917)
651125.76	4188833.34	91.80654	(14021120)	649125.76	4188883.34	137.46385	(17020508)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* \*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
 STCK8 \*\*\*  
 INCLUDING SOURCE(S): STCK8 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
649225.76	4188883.34	149.00022	(17121121)	649325.76	4188883.34	167.70590	(17020721)
649425.76	4188883.34	178.89804	(17040507)	649525.76	4188883.34	188.01840	(13103108)
649625.76	4188883.34	202.95833	(17012317)	649725.76	4188883.34	247.68916	(16121409)
649825.76	4188883.34	233.29791	(15091607)	649925.76	4188883.34	247.60351	(14122609)
650025.76	4188883.34	244.77617	(17102317)	650125.76	4188883.34	192.80613	(13100518)

650225.76	4188883.34	184.03192	(17061906)	650325.76	4188883.34	169.23586	(15031322)
650425.76	4188883.34	149.04516	(14022020)	650525.76	4188883.34	137.14475	(16041723)
650625.76	4188883.34	124.46175	(15021222)	650725.76	4188883.34	114.82410	(15031407)
650825.76	4188883.34	107.32023	(14021501)	651125.76	4188883.34	89.28614	(13120917)
650125.76	4188933.34	205.20532	(17040807)	650225.76	4188933.34	173.53557	(17042923)
650325.76	4188933.34	160.66016	(16092620)	650425.76	4188933.34	147.71461	(14021304)
650525.76	4188933.34	132.71357	(15121521)	650625.76	4188933.34	121.67456	(13011820)
650725.76	4188933.34	114.36140	(14012318)	650825.76	4188933.34	107.39223	(13030120)
651125.76	4188933.34	89.32414	(14021501)	650425.76	4188983.34	144.79302	(17122322)
650525.76	4188983.34	131.10748	(14021304)	650625.76	4188983.34	119.49589	(14010718)
650725.76	4188983.34	113.02515	(15021922)	650825.76	4188983.34	107.36751	(14012318)
651125.76	4188983.34	89.44448	(15120117)	650525.76	4189033.34	128.72418	(13020120)
650625.76	4189033.34	118.86812	(14010518)	650725.76	4189033.34	108.91374	(13121319)
650825.76	4189033.34	105.60770	(14120704)	651125.76	4189033.34	86.65393	(15010823)
650525.76	4189083.34	124.66661	(17122322)	650625.76	4189083.34	114.91527	(13020120)
650725.76	4189083.34	110.64214	(13121617)	650825.76	4189083.34	101.75136	(13121319)
651125.76	4189083.34	88.46382	(14011317)	650525.76	4189133.34	119.11630	(17122308)
650625.76	4189133.34	115.74159	(17122322)	650725.76	4189133.34	106.46737	(15012906)
650825.76	4189133.34	103.20478	(13121617)	651125.76	4189133.34	88.81450	(14011317)
650781.98	4189510.65	92.06239	(14011617)	650760.33	4189397.50	97.33456	(17042922)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 217

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

-----

649676.34	4188314.55	210.07306	(14010609)	649629.66	4188294.84	194.79112	(14010609)
649810.15	4188312.48	214.99272	(14041420)	649364.10	4188360.20	151.86079	(17021408)
649327.80	4188355.01	146.77398	(17040104)	649380.70	4188758.52	162.95007	(17013004)
650495.81	4188841.51	157.51226	(16012717)	650597.47	4188832.17	143.00643	(15120623)
650536.27	4188878.85	147.29984	(13020422)	650577.76	4188877.81	140.28659	(13011820)
650602.66	4188860.18	141.81131	(16041723)	650610.95	4188880.93	138.14752	(16041723)
650638.10	4188858.53	134.77730	(15021222)	650664.10	4188331.03	122.98053	(15091223)
650668.72	4188350.83	126.00174	(17122508)	650677.96	4188379.86	124.89495	(13021319)
650699.74	4188414.84	122.85565	(14060905)	650758.47	4188658.36	125.17846	(14012317)
650765.73	4188678.82	123.15934	(15121617)	650773.65	4188706.54	122.93627	(17021220)
650778.27	4188726.34	120.96792	(14021603)	650805.33	4188805.53	116.36910	(14010519)
650806.65	4188824.01	115.66399	(14011919)	650811.27	4188843.81	116.32755	(13121417)
650814.57	4188862.29	114.58784	(15031407)	650846.24	4188924.98	112.93590	(13030120)
650850.86	4188951.38	112.15707	(14012318)	650854.82	4188976.46	109.94863	(14012318)
650698.00	4188307.32	120.57567	(17122619)	650692.60	4188291.80	120.75227	(17122619)
650724.82	4189245.80	108.24766	(13030119)	650726.07	4189273.37	108.96360	(17042922)
650856.27	4189006.30	109.96613	(14120704)	650857.23	4189022.60	109.28202	(14120704)
650859.15	4189041.29	106.09203	(14120704)	650859.15	4189058.54	106.12483	(13121319)

650860.58	4189076.28	106.04321	(13121319)	650861.54	4189094.49	106.64513	(13121617)
650857.71	4189113.19	107.36834	(13121617)	650847.16	4189118.94	107.14537	(13121617)
650848.12	4189134.76	104.39146	(13121617)	650850.04	4189155.37	103.77119	(15012906)
650851.48	4189171.66	102.49861	(13011920)	650853.87	4189184.12	101.37310	(13011920)
650856.75	4189199.46	102.52713	(17121119)	650857.71	4189213.36	102.82544	(17121119)
650860.58	4189226.30	102.10344	(17121119)	650862.50	4189242.60	100.15282	(17121119)
650865.38	4189258.42	99.64355	(17123020)	650867.77	4189275.19	99.10146	(17123020)
650868.73	4189291.49	99.24587	(13020618)	650872.09	4189309.23	98.05771	(13020618)
650874.00	4189325.04	96.44491	(17013020)	650875.92	4189340.38	96.71165	(17013020)
650878.80	4189355.24	96.28983	(17013020)	650881.19	4189373.45	95.04001	(17013020)
650884.55	4189390.71	95.67126	(17042922)	650888.86	4189407.01	95.48514	(17042922)
650889.82	4189427.14	94.55018	(17042922)	650891.74	4189443.43	93.80640	(17122923)
650895.09	4189461.17	92.85388	(17122923)	650898.45	4189475.55	91.63853	(17122923)
650898.45	4189489.93	91.95456	(14011617)	650902.28	4189504.31	91.78241	(14011617)
650709.41	4188344.56	122.29403	(17020824)	650722.45	4188284.03	118.82823	(17122619)
650745.73	4188280.30	117.01878	(17122619)	650735.49	4188223.50	113.10731	(17012523)
650721.52	4188167.62	118.75553	(17011307)	650525.76	4188133.34	139.08188	(17012607)
651125.76	4188133.34	87.78887	(17121906)	649125.76	4188183.34	115.36331	(17031507)
649225.76	4188183.34	125.72262	(13041820)	649325.76	4188183.34	138.33992	(14021403)
649425.76	4188183.34	142.42473	(15120820)	649525.76	4188183.34	155.53956	(15122801)
649625.76	4188183.34	169.86837	(13022418)	649725.76	4188183.34	174.71593	(13032724)
649825.76	4188183.34	182.69486	(17122819)	649925.76	4188183.34	186.19540	(16040207)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 218

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  
STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
650025.76	4188183.34	190.72888	(14121116)	650125.76	4188183.34	190.16659	(16041107)
650225.76	4188183.34	171.79127	(17011805)	650325.76	4188183.34	166.12673	(17122517)
650425.76	4188183.34	151.14642	(17013019)	650525.76	4188183.34	140.73694	(17031320)
650625.76	4188183.34	126.18796	(15021221)	650725.76	4188183.34	116.77136	(17011307)
650825.76	4188183.34	105.64378	(14120805)	651125.76	4188183.34	88.03105	(17121906)
649125.76	4188233.34	116.23048	(17021408)	649225.76	4188233.34	125.59887	(15022202)
649325.76	4188233.34	138.07197	(15021806)	649425.76	4188233.34	153.53017	(14021403)
649525.76	4188233.34	159.21901	(16042106)	649625.76	4188233.34	173.38179	(15120208)
649725.76	4188233.34	183.78681	(13033005)	649825.76	4188233.34	190.11224	(13090907)
649925.76	4188233.34	202.94124	(16040207)	650025.76	4188233.34	209.11470	(14121116)
650125.76	4188233.34	188.17960	(15090707)	650225.76	4188233.34	171.66602	(17041904)
650325.76	4188233.34	174.25001	(17120117)	650425.76	4188233.34	155.25065	(17012607)
650525.76	4188233.34	136.66472	(13040506)	650625.76	4188233.34	128.49168	(16021201)
650725.76	4188233.34	113.84132	(14120805)	650825.76	4188233.34	109.92152	(17122619)
651125.76	4188233.34	88.27155	(14120721)	649125.76	4188283.34	122.52125	(17121220)
649225.76	4188283.34	130.89955	(17021408)	649325.76	4188283.34	139.51983	(13010907)

649425.76	4188283.34	153.84992	(17020108)	649525.76	4188283.34	172.71166	(17020902)
649625.76	4188283.34	192.50982	(14010609)	649725.76	4188283.34	194.32424	(15120819)
649825.76	4188283.34	204.43978	(14031819)	649925.76	4188283.34	218.73055	(16040207)
650025.76	4188283.34	219.06035	(14121116)	650125.76	4188283.34	198.18600	(14040722)
650225.76	4188283.34	191.44223	(17122517)	650325.76	4188283.34	167.71971	(14091124)
650425.76	4188283.34	164.69730	(17031320)	650525.76	4188283.34	144.37358	(16021201)
650625.76	4188283.34	126.87679	(17121819)	650725.76	4188283.34	118.59598	(17122619)
650825.76	4188283.34	108.46925	(17121906)	651125.76	4188283.34	88.98071	(15021623)
649125.76	4188333.34	122.38362	(17032401)	649225.76	4188333.34	135.85692	(17121220)
649325.76	4188333.34	147.94921	(17021408)	649425.76	4188333.34	158.32031	(16021508)
649525.76	4188333.34	175.35006	(16030403)	649625.76	4188333.34	186.49363	(14022024)
649725.76	4188333.34	203.84412	(13022418)	649825.76	4188333.34	227.23814	(16091007)
649925.76	4188333.34	229.95842	(16040207)	650025.76	4188333.34	229.50287	(16121309)
650125.76	4188333.34	212.75361	(17021319)	650225.76	4188333.34	193.68086	(17120117)
650325.76	4188333.34	182.42097	(17011317)	650425.76	4188333.34	162.90076	(14043023)
650525.76	4188333.34	144.62506	(17121819)	650625.76	4188333.34	129.33198	(15091223)
650725.76	4188333.34	119.71242	(17020824)	650825.76	4188333.34	110.15161	(17020824)
651125.76	4188333.34	88.84662	(16010723)	649125.76	4188383.34	124.84145	(17021006)
649225.76	4188383.34	137.55576	(17032401)	649325.76	4188383.34	147.70810	(17121501)
649425.76	4188383.34	166.89382	(17021408)	649525.76	4188383.34	177.96338	(14120809)
649625.76	4188383.34	217.23850	(13010809)	649725.76	4188383.34	262.56372	(14010609)
649825.76	4188383.34	295.87753	(17041807)	649925.76	4188383.34	248.89588	(14032718)
650025.76	4188383.34	279.96512	(13030408)	650125.76	4188383.34	221.05434	(15102117)
650225.76	4188383.34	202.88943	(14100518)	650325.76	4188383.34	184.53295	(17013121)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 219

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

650425.76	4188383.34	164.46246	(17121819)	650525.76	4188383.34	146.61920	(17030921)
650625.76	4188383.34	131.06713	(17020824)	650725.76	4188383.34	120.34799	(14060905)
650825.76	4188383.34	110.43297	(14022504)	651125.76	4188383.34	93.41987	(14012017)
649125.76	4188433.34	128.94472	(17020501)	649225.76	4188433.34	140.46608	(17121824)
649325.76	4188433.34	148.94545	(17031301)	649425.76	4188433.34	164.35318	(17032324)
649525.76	4188433.34	185.12571	(17021408)	649625.76	4188433.34	223.74098	(14120809)
649725.76	4188433.34	223.67640	(17040207)	649825.76	4188433.34	296.81880	(14041207)
649925.76	4188433.34	305.09429	(14041223)	650025.76	4188433.34	319.10953	(13030408)
650125.76	4188433.34	304.30254	(14020517)	650225.76	4188433.34	212.28780	(17021419)
650325.76	4188433.34	183.16495	(17121819)	650425.76	4188433.34	164.10232	(17030921)
650525.76	4188433.34	147.87601	(13021319)	650625.76	4188433.34	132.28140	(17112222)
650725.76	4188433.34	122.24465	(14021320)	650825.76	4188433.34	112.64858	(16012901)
651125.76	4188433.34	92.00972	(14012017)	649125.76	4188483.34	125.40133	(17041004)
649225.76	4188483.34	137.96471	(17012803)	649325.76	4188483.34	155.35507	(17020501)

649425.76	4188483.34	169.35777	(17031301)	649525.76	4188483.34	195.89679	(15010709)
649625.76	4188483.34	203.64736	(15042719)	649725.76	4188483.34	261.84286	(14120809)
650425.76	4188483.34	169.19735	(17021401)	650525.76	4188483.34	151.04923	(17112222)
650625.76	4188483.34	132.99379	(15072004)	650725.76	4188483.34	124.17655	(17042121)
650825.76	4188483.34	112.94849	(14091806)	651125.76	4188483.34	93.07780	(17122519)
649125.76	4188533.34	124.71604	(13012303)	649225.76	4188533.34	140.27030	(17031806)
649325.76	4188533.34	152.93530	(17122606)	649425.76	4188533.34	166.60670	(15031424)
649525.76	4188533.34	185.76698	(15021608)	649625.76	4188533.34	241.30781	(15010709)
649725.76	4188533.34	253.27205	(17020106)	650425.76	4188533.34	171.76673	(15072004)
650525.76	4188533.34	153.43064	(15021118)	650625.76	4188533.34	135.46497	(14030224)
650725.76	4188533.34	125.78696	(17121522)	650825.76	4188533.34	114.04607	(17122719)
651125.76	4188533.34	92.48200	(17122621)	649125.76	4188583.34	129.52912	(17122404)
649225.76	4188583.34	142.96739	(17122404)	649325.76	4188583.34	155.62655	(17122404)
649425.76	4188583.34	172.80391	(14122109)	649525.76	4188583.34	197.71841	(16122709)
649625.76	4188583.34	254.81577	(16122709)	649725.76	4188583.34	315.04598	(16020517)
650425.76	4188583.34	176.79134	(17091119)	650525.76	4188583.34	156.72553	(17021219)
650625.76	4188583.34	138.40916	(14051320)	650725.76	4188583.34	124.47316	(14051320)
650825.76	4188583.34	114.48477	(14030319)	651125.76	4188583.34	95.39569	(17122621)
649125.76	4188633.34	128.17033	(17120902)	649225.76	4188633.34	141.51398	(17120902)
649325.76	4188633.34	155.84227	(17120902)	649425.76	4188633.34	179.49915	(17012309)
649525.76	4188633.34	215.23084	(17012309)	649625.76	4188633.34	254.93279	(17012309)
649725.76	4188633.34	278.55654	(17010702)	649825.76	4188633.34	462.83198	(15020723)
649925.76	4188633.34	1093.77468	(17100318)	650025.76	4188633.34	758.75373	(15020217)
650125.76	4188633.34	336.28663	(16092518)	650225.76	4188633.34	227.81002	(15090821)
650325.76	4188633.34	197.41014	(13031019)	650425.76	4188633.34	174.22592	(13031019)
650525.76	4188633.34	153.03331	(17013023)	650625.76	4188633.34	137.49383	(14012317)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 220

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						

650725.76	4188633.34	124.28155	(14012317)	650825.76	4188633.34	113.45045	(16010203)
651125.76	4188633.34	93.82959	(16010203)	649125.76	4188683.34	131.68854	(17121123)
649225.76	4188683.34	144.34850	(17121123)	649325.76	4188683.34	157.17089	(17012801)
649425.76	4188683.34	181.53723	(17013109)	649525.76	4188683.34	216.45609	(17013109)
649625.76	4188683.34	239.33367	(15013009)	649725.76	4188683.34	304.81417	(16123009)
649825.76	4188683.34	444.29776	(17041619)	649925.76	4188683.34	866.86068	(15101602)
650025.76	4188683.34	616.14810	(13120217)	650125.76	4188683.34	365.08300	(15120709)
650225.76	4188683.34	277.42183	(13040507)	650325.76	4188683.34	206.76654	(13040507)
650425.76	4188683.34	175.57025	(17022708)	650525.76	4188683.34	158.34766	(17021220)
650625.76	4188683.34	143.38304	(17021220)	650725.76	4188683.34	127.72032	(17021220)
650825.76	4188683.34	118.66685	(17020901)	651125.76	4188683.34	95.55185	(17020901)
649125.76	4188733.34	130.27595	(17021502)	649225.76	4188733.34	144.73400	(17021502)

649325.76	4188733.34	157.13090	(17120103)	649425.76	4188733.34	169.69432	(17040504)
649525.76	4188733.34	191.92467	(15122909)	649625.76	4188733.34	231.27963	(17122509)
649725.76	4188733.34	291.12806	(13020309)	649825.76	4188733.34	349.69189	(14120408)
649925.76	4188733.34	528.05005	(14021001)	650025.76	4188733.34	464.58913	(17012022)
650125.76	4188733.34	339.17297	(17122709)	650225.76	4188733.34	249.76713	(17013017)
650325.76	4188733.34	190.63276	(17021422)	650425.76	4188733.34	174.60552	(13010317)
650525.76	4188733.34	160.01793	(14120819)	650625.76	4188733.34	143.52047	(13011717)
650725.76	4188733.34	129.82956	(14122318)	650825.76	4188733.34	117.59242	(14021603)
651125.76	4188733.34	96.25387	(17020901)	649125.76	4188783.34	130.08474	(17120103)
649225.76	4188783.34	139.74801	(17013004)	649325.76	4188783.34	153.55200	(17013004)
649425.76	4188783.34	172.62675	(17011123)	649525.76	4188783.34	186.82911	(17031723)
649625.76	4188783.34	220.51122	(13020309)	649725.76	4188783.34	250.84721	(15010309)
649825.76	4188783.34	299.62097	(14122709)	649925.76	4188783.34	376.57055	(17120302)
650025.76	4188783.34	324.88326	(16122318)	650125.76	4188783.34	281.68051	(16090707)
650225.76	4188783.34	247.26180	(17122709)	650325.76	4188783.34	204.77058	(16012717)
650425.76	4188783.34	170.38285	(15021208)	650525.76	4188783.34	152.15299	(14022323)
650625.76	4188783.34	140.89143	(14011919)	650725.76	4188783.34	125.11779	(14120819)
650825.76	4188783.34	115.76683	(13042024)	651125.76	4188783.34	96.19787	(14021603)
649125.76	4188833.34	126.99099	(17013004)	649225.76	4188833.34	143.62855	(17011123)
649325.76	4188833.34	157.98774	(17020508)	649425.76	4188833.34	166.90320	(17032420)
649525.76	4188833.34	190.50888	(17020721)	649625.76	4188833.34	211.33672	(15010309)
649725.76	4188833.34	237.88007	(14040707)	649825.76	4188833.34	285.36401	(14032818)
649925.76	4188833.34	271.65398	(17021807)	650025.76	4188833.34	280.98144	(17010917)
650125.76	4188833.34	248.20027	(17040807)	650225.76	4188833.34	209.96393	(17091207)
650325.76	4188833.34	189.89997	(15031322)	650425.76	4188833.34	170.14574	(15022308)
650525.76	4188833.34	155.26014	(16041723)	650625.76	4188833.34	139.43995	(15120623)
650725.76	4188833.34	125.17960	(13121417)	650825.76	4188833.34	113.72005	(13121417)
651125.76	4188833.34	96.12816	(14021120)	649125.76	4188833.34	126.93036	(17020508)

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 221

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:

STCK9 \*\*\*

INCLUDING SOURCE(S): STCK9 ,

\*\*\* DISCRETE CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
-------------	-------------	------	------------	-------------	-------------	------	------------

649225.76	4188883.34	137.22590	(17020508)	649325.76	4188883.34	150.19086	(17122118)
649425.76	4188883.34	170.27452	(17020721)	649525.76	4188883.34	177.25740	(17040507)
649625.76	4188883.34	192.71817	(15012017)	649725.76	4188883.34	205.93407	(13101019)
649825.76	4188883.34	252.54372	(16121409)	649925.76	4188883.34	248.71465	(15091607)
650025.76	4188883.34	243.27476	(14010309)	650125.76	4188883.34	239.17582	(17102317)
650225.76	4188883.34	194.97742	(13100518)	650325.76	4188883.34	183.58619	(16092620)
650425.76	4188883.34	166.53391	(15031322)	650525.76	4188883.34	147.92673	(14022020)
650625.76	4188883.34	136.66121	(16041723)	650725.76	4188883.34	123.20663	(13030120)
650825.76	4188883.34	114.30305	(15031407)	651125.76	4188883.34	94.76542	(13120917)
650125.76	4188933.34	204.40507	(13092819)	650225.76	4188933.34	201.11591	(17040807)

650325.76	4188933.34	171.22501	(17012922)	650425.76	4188933.34	159.59962	(17122322)
650525.76	4188933.34	146.64948	(14021304)	650625.76	4188933.34	132.03257	(14022020)
650725.76	4188933.34	120.28190	(13011820)	650825.76	4188933.34	113.40778	(14012318)
651125.76	4188933.34	94.25478	(14021501)	650425.76	4188983.34	154.91693	(13120224)
650525.76	4188983.34	142.53841	(13020120)	650625.76	4188983.34	129.82256	(14021304)
650725.76	4188983.34	117.41561	(16100822)	650825.76	4188983.34	112.55612	(15021922)
651125.76	4188983.34	93.59740	(15120117)	650525.76	4189033.34	137.56665	(13120224)
650625.76	4189033.34	127.87455	(13020120)	650725.76	4189033.34	118.01551	(14010518)
650825.76	4189033.34	107.87752	(14022307)	651125.76	4189033.34	92.92207	(15010921)
650525.76	4189083.34	133.87018	(16011924)	650625.76	4189083.34	125.67078	(17122322)
650725.76	4189083.34	113.50007	(13020120)	650825.76	4189083.34	109.80860	(13121617)
651125.76	4189083.34	94.36944	(14011317)	650525.76	4189133.34	127.13293	(13040320)
650625.76	4189133.34	119.14516	(13020618)	650725.76	4189133.34	115.26447	(17122322)
650825.76	4189133.34	106.03980	(15012906)	651125.76	4189133.34	91.11293	(14120704)
650781.98	4189510.65	93.89481	(13121517)	650760.33	4189397.50	101.76046	(14011617)

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 222

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824 HRS) RESULTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

NETWORK

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

-----

SLINE7 1ST HIGHEST VALUE IS 81.57230 AT ( 650425.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 79.76445 AT ( 650425.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 75.96965 AT ( 650525.76, 4188583.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 67.04790 AT ( 650525.76, 4188533.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 60.40938 AT ( 650325.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 59.27276 AT ( 649725.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 58.15951 AT ( 650425.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 57.91571 AT ( 649825.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 56.53131 AT ( 649925.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 55.41647 AT ( 650225.76, 4188433.34, 10.06, 10.06, 0.00) DC

SLINE8 1ST HIGHEST VALUE IS 132.89053 AT ( 650725.76, 4188983.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 132.10456 AT ( 650725.76, 4189083.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 113.00527 AT ( 650725.76, 4189033.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 104.84825 AT ( 650725.76, 4188933.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 93.10955 AT ( 650725.76, 4189133.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 85.68703 AT ( 650725.76, 4188883.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 85.67949 AT ( 650625.76, 4188683.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 83.06367 AT ( 650625.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 74.06851 AT ( 650525.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 72.12944 AT ( 650725.76, 4188833.34, 10.06, 10.06, 0.00) DC

SLINE9 1ST HIGHEST VALUE IS 132.89053 AT ( 650725.76, 4188983.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 132.10456 AT ( 650725.76, 4189083.34, 10.06, 10.06, 0.00) DC

3RD HIGHEST VALUE IS 113.00527 AT ( 650725.76, 4189033.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 104.84825 AT ( 650725.76, 4188933.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 93.10955 AT ( 650725.76, 4189133.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 85.68703 AT ( 650725.76, 4188883.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 85.67949 AT ( 650625.76, 4188683.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 83.06367 AT ( 650625.76, 4188633.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 74.06851 AT ( 650525.76, 4188633.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 72.12944 AT ( 650725.76, 4188833.34, 10.06, 10.06, 0.00) DC

STCK1 1ST HIGHEST VALUE IS 97.44906 AT ( 649925.76, 4188433.34, 10.06, 10.06, 0.00) DC  
2ND HIGHEST VALUE IS 81.96510 AT ( 649925.76, 4188383.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 35.03218 AT ( 650025.76, 4188383.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 34.25296 AT ( 649925.76, 4188333.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 30.42169 AT ( 650025.76, 4188433.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 29.96043 AT ( 650025.76, 4188333.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 21.37997 AT ( 650025.76, 4188283.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 17.67391 AT ( 649925.76, 4188283.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 16.85192 AT ( 650125.76, 4188383.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 16.70070 AT ( 650125.76, 4188333.34, 10.06, 10.06, 0.00) DC

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 223

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824 HRS) RESULTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3

\*\*

NETWORK

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE  
GRID-ID

-----  
STCK10 1ST HIGHEST VALUE IS 57.71726 AT ( 650125.76, 4188633.34, 10.06, 10.06, 0.00) DC  
2ND HIGHEST VALUE IS 22.06068 AT ( 650225.76, 4188633.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 15.87151 AT ( 650025.76, 4188683.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 14.80119 AT ( 650225.76, 4188433.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 14.00699 AT ( 650125.76, 4188683.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 13.91209 AT ( 650125.76, 4188433.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 13.57327 AT ( 650225.76, 4188683.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 12.31240 AT ( 650325.76, 4188633.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 12.30345 AT ( 649925.76, 4188733.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 11.58119 AT ( 650325.76, 4188433.34, 10.06, 10.06, 0.00) DC

STCK11 1ST HIGHEST VALUE IS 51.10462 AT ( 650225.76, 4188633.34, 10.06, 10.06, 0.00) DC  
2ND HIGHEST VALUE IS 20.52066 AT ( 650325.76, 4188633.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 15.34643 AT ( 650225.76, 4188683.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 14.43060 AT ( 650325.76, 4188433.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 14.27560 AT ( 650225.76, 4188433.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 13.27242 AT ( 650325.76, 4188683.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 13.23046 AT ( 650025.76, 4188733.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 13.22581 AT ( 650425.76, 4188533.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 13.03214 AT ( 650425.76, 4188583.34, 10.06, 10.06, 0.00) DC



10TH HIGHEST VALUE IS 12.52444 AT ( 650425.76, 4188483.34, 10.06, 10.06, 0.00) DC

STCK12 1ST HIGHEST VALUE IS 46.39027 AT ( 650325.76, 4188633.34, 10.06, 10.06, 0.00) DC

2ND HIGHEST VALUE IS 22.57814 AT ( 650425.76, 4188583.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 21.89151 AT ( 650425.76, 4188533.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 19.44368 AT ( 650425.76, 4188633.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 18.51145 AT ( 650425.76, 4188483.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 15.13998 AT ( 650325.76, 4188683.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 14.67428 AT ( 650325.76, 4188433.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 14.34151 AT ( 650425.76, 4188433.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 13.62687 AT ( 650125.76, 4188733.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 13.45554 AT ( 650125.76, 4188683.34, 10.06, 10.06, 0.00) DC

STCK13 1ST HIGHEST VALUE IS 48.10915 AT ( 650425.76, 4188583.34, 10.06, 10.06, 0.00) DC

2ND HIGHEST VALUE IS 40.91944 AT ( 650425.76, 4188633.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 36.24807 AT ( 650425.76, 4188533.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 30.52961 AT ( 650325.76, 4188633.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 22.79833 AT ( 650425.76, 4188483.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 20.58451 AT ( 650525.76, 4188583.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 20.08075 AT ( 650525.76, 4188533.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 18.02196 AT ( 650525.76, 4188633.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 17.34565 AT ( 650525.76, 4188483.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 16.40515 AT ( 650425.76, 4188683.34, 10.06, 10.06, 0.00) DC

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 224

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824 HRS) RESULTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

NETWORK

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE  
GRID-ID

STCK14 1ST HIGHEST VALUE IS 92.34819 AT ( 650425.76, 4188633.34, 10.06, 10.06, 0.00) DC

2ND HIGHEST VALUE IS 80.39681 AT ( 650425.76, 4188583.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 40.18433 AT ( 650525.76, 4188583.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 33.92966 AT ( 650525.76, 4188633.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 33.18366 AT ( 650525.76, 4188533.34, 10.06, 10.06, 0.00) DC  
6TH HIGHEST VALUE IS 31.00976 AT ( 650425.76, 4188533.34, 10.06, 10.06, 0.00) DC  
7TH HIGHEST VALUE IS 22.53507 AT ( 650525.76, 4188483.34, 10.06, 10.06, 0.00) DC  
8TH HIGHEST VALUE IS 20.97207 AT ( 650325.76, 4188683.34, 10.06, 10.06, 0.00) DC  
9TH HIGHEST VALUE IS 18.32457 AT ( 650625.76, 4188583.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 18.13968 AT ( 650625.76, 4188533.34, 10.06, 10.06, 0.00) DC

STCK2 1ST HIGHEST VALUE IS 90.66235 AT ( 650025.76, 4188433.34, 10.06, 10.06, 0.00) DC

2ND HIGHEST VALUE IS 78.03564 AT ( 650025.76, 4188383.34, 10.06, 10.06, 0.00) DC  
3RD HIGHEST VALUE IS 35.21765 AT ( 650025.76, 4188333.34, 10.06, 10.06, 0.00) DC  
4TH HIGHEST VALUE IS 32.18575 AT ( 650125.76, 4188383.34, 10.06, 10.06, 0.00) DC  
5TH HIGHEST VALUE IS 28.39842 AT ( 650125.76, 4188433.34, 10.06, 10.06, 0.00) DC

6TH HIGHEST VALUE IS 28.02100 AT ( 650125.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 20.57565 AT ( 650125.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 18.45525 AT ( 650025.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 15.98951 AT ( 650225.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 15.85012 AT ( 650225.76, 4188333.34, 10.06, 10.06, 0.00) DC

STCK3 1ST HIGHEST VALUE IS 76.70501 AT ( 650125.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 74.65690 AT ( 650125.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 37.45106 AT ( 650125.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 29.28091 AT ( 650225.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 26.35938 AT ( 650225.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 25.67402 AT ( 650225.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 20.12733 AT ( 650225.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 19.93694 AT ( 650125.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 15.00915 AT ( 650325.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 14.98552 AT ( 650325.76, 4188333.34, 10.06, 10.06, 0.00) DC

STCK4 1ST HIGHEST VALUE IS 64.61434 AT ( 650225.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 64.38248 AT ( 650225.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 36.60764 AT ( 650225.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 26.02229 AT ( 650325.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 23.86431 AT ( 650325.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 23.23015 AT ( 650325.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 20.45206 AT ( 650225.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 18.88858 AT ( 650325.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 14.64233 AT ( 650125.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 13.99261 AT ( 650325.76, 4188233.34, 10.06, 10.06, 0.00) DC

\*\*\* AERMOD - VERSION 19191 \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\*

\*\*\* 15:03:05

PAGE 225

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824 HRS) RESULTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

NETWORK

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE  
 GRID-ID

STCK5 1ST HIGHEST VALUE IS 59.04697 AT ( 650325.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 57.01863 AT ( 650325.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 36.35457 AT ( 650325.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 24.24501 AT ( 650425.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 22.58400 AT ( 650425.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 21.67163 AT ( 650425.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 20.93865 AT ( 650325.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 18.84334 AT ( 650225.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 18.31004 AT ( 650425.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 14.66833 AT ( 650425.76, 4188483.34, 10.06, 10.06, 0.00) DC

STCK6 1ST HIGHEST VALUE IS 50.25674 AT ( 650425.76, 4188383.34, 10.06, 10.06, 0.00) DC

2ND HIGHEST VALUE IS 47.21088 AT ( 650425.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 35.80559 AT ( 650325.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 34.57687 AT ( 650425.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 21.64013 AT ( 650525.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 21.11918 AT ( 650425.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 20.52131 AT ( 650525.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 20.15663 AT ( 650425.76, 4188483.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 19.48930 AT ( 650525.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 18.22570 AT ( 650325.76, 4188333.34, 10.06, 10.06, 0.00) DC

STCK7 1ST HIGHEST VALUE IS 112.59204 AT ( 650425.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 66.25991 AT ( 650425.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 38.95290 AT ( 650525.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 35.88043 AT ( 650525.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 30.62642 AT ( 650525.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 27.01966 AT ( 650425.76, 4188333.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 20.62613 AT ( 650525.76, 4188283.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 19.47691 AT ( 650525.76, 4188483.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 18.26156 AT ( 650625.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 17.68050 AT ( 650625.76, 4188333.34, 10.06, 10.06, 0.00) DC

STCK8 1ST HIGHEST VALUE IS 73.59652 AT ( 649925.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 26.12823 AT ( 650025.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 25.78333 AT ( 649825.76, 4188683.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 15.52786 AT ( 650025.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 13.88968 AT ( 650025.76, 4188683.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 13.76962 AT ( 650125.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 12.67887 AT ( 649925.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 12.60390 AT ( 650125.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 9TH HIGHEST VALUE IS 11.15773 AT ( 650025.76, 4188383.34, 10.06, 10.06, 0.00) DC  
 10TH HIGHEST VALUE IS 11.02081 AT ( 649825.76, 4188733.34, 10.06, 10.06, 0.00) DC

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23  
 \*\*\* AERMET - VERSION 18081 \*\*\* \*\* 15:03:05

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824 HRS) RESULTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	AVERAGE CONC	NETWORK	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE
GRID-ID			

-----

STCK9 1ST HIGHEST VALUE IS 66.19515 AT ( 650025.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 2ND HIGHEST VALUE IS 24.26294 AT ( 650125.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 3RD HIGHEST VALUE IS 23.60443 AT ( 649925.76, 4188683.34, 10.06, 10.06, 0.00) DC  
 4TH HIGHEST VALUE IS 15.39359 AT ( 650125.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 5TH HIGHEST VALUE IS 13.59101 AT ( 650125.76, 4188683.34, 10.06, 10.06, 0.00) DC  
 6TH HIGHEST VALUE IS 13.35153 AT ( 650025.76, 4188433.34, 10.06, 10.06, 0.00) DC  
 7TH HIGHEST VALUE IS 13.12773 AT ( 650225.76, 4188633.34, 10.06, 10.06, 0.00) DC  
 8TH HIGHEST VALUE IS 12.25518 AT ( 650225.76, 4188433.34, 10.06, 10.06, 0.00) DC

9TH HIGHEST VALUE IS 11.31227 AT ( 650025.76, 4188683.34, 10.06, 10.06, 0.00) DC  
10TH HIGHEST VALUE IS 11.17747 AT ( 650125.76, 4188383.34, 10.06, 10.06, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
GP = GRIDPOLR  
DC = DISCCART  
DP = DISCPOLR

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\* 15:03:05

PAGE 227

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF OTHER IN MICROGRAMS/M\*\*3 \*\*

GROUP ID	DATE	AVERAGE CONC	NETWORK
ZFLAG) OF TYPE GRID-ID	(YYMMDDHH)	(YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL,
SLINE7 HIGH 1ST HIGH VALUE IS	907.11794 ON 14021408:	AT ( 650425.76, 4188383.34,	10.06, 10.06,
0.00) DC			
SLINE8 HIGH 1ST HIGH VALUE IS	2186.55927 ON 17011609:	AT ( 650725.76, 4189033.34,	10.06, 10.06,
0.00) DC			
SLINE9 HIGH 1ST HIGH VALUE IS	2186.55927 ON 17011609:	AT ( 650725.76, 4189033.34,	10.06, 10.06,
0.00) DC			
STCK1 HIGH 1ST HIGH VALUE IS	1003.41947 ON 16050119:	AT ( 649825.76, 4188433.34,	10.06, 10.06,
0.00) DC			
STCK10 HIGH 1ST HIGH VALUE IS	943.34747 ON 15031420:	AT ( 650025.76, 4188683.34,	10.06, 10.06,
0.00) DC			
STCK11 HIGH 1ST HIGH VALUE IS	947.52689 ON 16031118:	AT ( 650125.76, 4188683.34,	10.06, 10.06,
0.00) DC			
STCK12 HIGH 1ST HIGH VALUE IS	894.60759 ON 16012217:	AT ( 650225.76, 4188683.34,	10.06, 10.06,
0.00) DC			
STCK13 HIGH 1ST HIGH VALUE IS	853.68633 ON 16021724:	AT ( 650325.76, 4188683.34,	10.06, 10.06,
0.00) DC			
STCK14 HIGH 1ST HIGH VALUE IS	1144.10557 ON 15062521:	AT ( 650425.76, 4188633.34,	10.06, 10.06,
0.00) DC			
STCK2 HIGH 1ST HIGH VALUE IS	931.31263 ON 16050119:	AT ( 649925.76, 4188433.34,	10.06, 10.06,
0.00) DC			
STCK3 HIGH 1ST HIGH VALUE IS	849.71124 ON 15091304:	AT ( 650025.76, 4188383.34,	10.06, 10.06,

0.00) DC

STCK4 HIGH 1ST HIGH VALUE IS 869.58026 ON 17090422: AT ( 650125.76, 4188383.34, 10.06, 10.06, 0.00) DC

STCK5 HIGH 1ST HIGH VALUE IS 887.30899 ON 17061924: AT ( 650225.76, 4188383.34, 10.06, 10.06, 0.00) DC

STCK6 HIGH 1ST HIGH VALUE IS 891.61626 ON 15092018: AT ( 650325.76, 4188383.34, 10.06, 10.06, 0.00) DC

STCK7 HIGH 1ST HIGH VALUE IS 1114.65617 ON 16091920: AT ( 650425.76, 4188433.34, 10.06, 10.06, 0.00) DC

STCK8 HIGH 1ST HIGH VALUE IS 1138.39479 ON 17100318: AT ( 649825.76, 4188633.34, 10.06, 10.06, 0.00) DC

STCK9 HIGH 1ST HIGH VALUE IS 1093.77468 ON 17100318: AT ( 649925.76, 4188633.34, 10.06, 10.06, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
GP = GRIDPOLR  
DC = DISCCART  
DP = DISCPOLR

\*\*\* AERMOD - VERSION 19191 \*\*\* \*\*\* C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley \*\*\* 07/19/23

\*\*\* AERMET - VERSION 18081 \*\*\* \*\*\*

\*\*\* 15:03:05

PAGE 228

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT RURAL ADJ\_U\*

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)

A Total of 25 Warning Message(s)

A Total of 971 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 442 Calm Hours Identified

A Total of 529 Missing Hours Identified ( 1.21 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

SO W320 1402 PPARM: Input Parameter May Be Out-of-Range for Parameter VS  
SO W320 1403 PPARM: Input Parameter May Be Out-of-Range for Parameter VS  
SO W320 1404 PPARM: Input Parameter May Be Out-of-Range for Parameter VS  
SO W320 1405 PPARM: Input Parameter May Be Out-of-Range for Parameter VS

SO W320	1406	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1407	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1408	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1409	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1410	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1411	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1412	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1413	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1414	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1415	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
ME W186	3322	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	3322	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W420	34276	METQA: Wind Speed Out-of-Range. KURDAT =	16112904
MX W420	34282	METQA: Wind Speed Out-of-Range. KURDAT =	16112910
MX W420	34288	METQA: Wind Speed Out-of-Range. KURDAT =	16112916
MX W420	34294	METQA: Wind Speed Out-of-Range. KURDAT =	16112922
MX W420	34300	METQA: Wind Speed Out-of-Range. KURDAT =	16113004
MX W420	40768	METQA: Wind Speed Out-of-Range. KURDAT =	17082616
MX W420	40792	METQA: Wind Speed Out-of-Range. KURDAT =	17082716
MX W420	40798	METQA: Wind Speed Out-of-Range. KURDAT =	17082722
MX W420	40804	METQA: Wind Speed Out-of-Range. KURDAT =	17082804

\*\*\*\*\*  
 \*\*\* AERMOD Finishes Successfully \*\*\*  
 \*\*\*\*\*

*This page left intentionally blank.*

---

## **Appendix 4 – HARP2 Output File:**



GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: NCAcute  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER  
\*\*Exposure duration are only adjusted for cancer assessments\*\*

\*\*\*\*\*

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True  
Soil: False  
Dermal: False  
Mother's milk: False  
Water: False  
Fish: False  
Homegrown crops: False  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*

INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*  
Worker adjustment factors enabled: NO

\*\*Fraction at time at home\*\*  
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.  
Tier2 - What was changed: ED or start age changed|  
Calculating acute risk  
Acute risk breakdown by pollutant and receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-

977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY  
WAREHOUSE\_hra\AcuteNCAcuteRisk.csv

Acute risk total by receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-  
977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY

WAREHOUSE\_hra\AcuteNCAcuteRiskSumByRec.csv

HRA ran successfully

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: NCChronic  
Calculation Method: HighEnd

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER  
\*\*Exposure duration are only adjusted for cancer assessments\*\*

\*\*\*\*\*

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True  
Soil: True  
Dermal: True  
Mother's milk: True  
Water: False  
Fish: False  
Homegrown crops: False  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*

INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*  
Worker adjustment factors enabled: NO

\*\*Fraction at time at home\*\*  
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

\*\*\*\*\*

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05  
Soil mixing depth (m): 0.01  
Dermal climate: Mixed

\*\*\*\*\*

## TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY WAREHOUSE\_hra\ChronicNCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY WAREHOUSE\_hra\ChronicNCChronicRiskSumByRec.csv

HRA ran successfully

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: HighEnd

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 70

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 0  
2<16 Years Bin: 14  
16<30 Years Bin: 0  
16 to 70 Years Bin: 54

\*\*\*\*\*

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True  
Soil: True  
Dermal: True  
Mother's milk: True  
Water: False  
Fish: False  
Homegrown crops: False  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*

INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***  
3rd Trimester to 16 years: OFF  
16 years to 70 years: ON

\*\*\*\*\*  
**SOIL & DERMAL PATHWAY SETTINGS**

Deposition rate (m/s): 0.05  
Soil mixing depth (m): 0.01  
Dermal climate: Mixed

\*\*\*\*\*  
**TIER 2 SETTINGS**

Tier2 adjustments were used in this assessment. Please see the input file for details.  
Tier2 - What was changed: ED or start age changed|  
Calculating cancer risk  
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY WAREHOUSE\_\hra\Residential CancerCancerRisk.csv  
Cancer risk total by receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY WAREHOUSE\_\hra\Residential CancerCancerRiskSumByRec.csv  
HRA ran successfully

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Worker  
Scenario: Cancer  
Calculation Method: HighEnd

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16  
Total Exposure Duration: 40

Exposure Duration Bin Distribution

3rd Trimester Bin: 0  
0<2 Years Bin: 0  
2<9 Years Bin: 0  
2<16 Years Bin: 0  
16<30 Years Bin: 0  
16 to 70 Years Bin: 40

\*\*\*\*\*

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True  
Soil: True  
Dermal: True  
Mother's milk: False  
Water: False  
Fish: False  
Homegrown crops: False  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*

INHALATION

Daily breathing rate: Moderate8HR

\*\*Worker Adjustment Factors\*\*

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***  
3rd Trimester to 16 years: OFF  
16 years to 70 years: OFF

\*\*\*\*\*  
**SOIL & DERMAL PATHWAY SETTINGS**

Deposition rate (m/s): 0.05  
Soil mixing depth (m): 0.01  
Dermal climate: Mixed

\*\*\*\*\*  
**TIER 2 SETTINGS**

Tier2 adjustments were used in this assessment. Please see the input file for details.  
Tier2 - What was changed: ED or start age changed|  
Calculating cancer risk  
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY WAREHOUSE\_\hra\Workplace  
CanerCancerRisk.csv  
Cancer risk total by receptor saved to: C:\Users\Smith\Dropbox\My PC (DESKTOP-977GSBU)\Documents\HRA\Ashley Warehouse - Revised\HARP2\ASHLEY WAREHOUSE\_\hra\Workplace  
CanerCancerRiskSumByRec.csv  
HRA ran successfully



*This page left intentionally blank.*



# Traffic Impact Analysis Report

## **Ashley Furniture**

Lathrop, California

December 8, 2021

Revised: August 9, 2023



## Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>1.0 Introduction</b> .....	<b>6</b>
1.1 Project Description .....	6
1.2 Project Purpose.....	6
1.3 Other Analyses .....	6
1.4 Study Area.....	6
1.5 Analysis Scenarios.....	7
<b>2.0 Study Methodology</b> .....	<b>10</b>
2.1 Vehicle Miles Traveled .....	10
2.2 Level of Service Analysis Methodology.....	10
2.3 Level of Service Standards.....	12
2.4 Queuing Analysis.....	13
<b>3.0 Existing Conditions</b> .....	<b>14</b>
3.1 Existing Setting and Roadway System.....	14
3.2 Existing Pedestrian Facilities .....	15
3.3 Existing Bicycle Facilities.....	15
3.4 Existing Transit Facilities.....	16
3.5 Existing Peak Hour Traffic Volumes And Lane Configurations .....	18
3.6 Intersection Level of Service Analysis – Existing Conditions.....	21
3.7 Intersection Queuing – Existing Conditions .....	22
3.8 Freeway Mainline Level of Service – Existing Conditions.....	23
<b>4.0 Baseline Conditions</b> .....	<b>24</b>
4.1 Intersection Level of Service Analysis – Baseline Conditions.....	24
4.2 Intersection Queuing – Baseline Conditions .....	25
4.3 Freeway Mainline Level of Service – Baseline Conditions.....	26
<b>5.0 Baseline plus Project Conditions</b> .....	<b>30</b>
5.1 Project Trip Generation.....	30
5.2 Project Trip Distribution and Assignment .....	32

5.3 Intersection Level of Service Analysis – Baseline plus Project Conditions.....	37
5.4 Intersection Queuing – Baseline plus Project Conditions.....	40
5.5 Freeway Mainline Level of Service – Baseline plus Project Conditions.....	41
<b>6.0 Cumulative Conditions .....</b>	<b>45</b>
6.1 Intersection Level of Service Analysis – Cumulative Conditions .....	45
6.2 Intersection Queuing – Cumulative Conditions.....	46
<b>7.0 Cumulative plus Project Conditions .....</b>	<b>50</b>
7.1 Intersection Level of Service Analysis – Cumulative plus Project Conditions .....	50
7.2 Intersection Queuing – Cumulative plus Project Conditions.....	53
<b>8.0 Additional Analyses .....</b>	<b>56</b>
8.1 Vehicle Miles Traveled (VMT).....	56
8.2 Site Access .....	57
8.3 On-Site Circulation .....	57
8.4 Truck Operations.....	58
8.5 Parking.....	58
8.6 Pedestrian, Bicycle, and Transit impacts .....	58

**Tables**

Table 1: Level of Service Definitions for Signalized Intersections.....	11
Table 2: Level of Service Definitions for Stop Controlled Intersections.....	12
Table 3: LOS Criteria for Basic Freeway Segments.....	13
Table 4: Existing San Joaquin RTD Transit Service .....	16
Table 5: Intersection Level of Service Analysis – Existing Conditions.....	21
Table 6: Intersection Queuing – Existing Conditions .....	22
Table 7: Freeway Segment Level of Service Analysis – Existing Conditions.....	23
Table 8: Intersection Level of Service – Baseline Conditions.....	24
Table 9: Intersection Queuing – Baseline Conditions .....	25
Table 10: Freeway Segment Level of Service Analysis – Baseline Conditions .....	26
Table 11: Driveway Counts Summary.....	30
Table 12: Driveway Inbound/Outbound Splits .....	30

Table 13: Passenger Vehicle Trip Rates ..... 31

Table 14: Heavy Vehicle Trip Rates..... 31

Table 15: Project Trip Generation for Passenger Vehicles ..... 31

Table 16: Project Trip Generation for Heavy Trucks ..... 31

Table 17: Intersection Level of Service Analysis – Baseline plus Project Conditions ..... 38

Table 18: Intersection Queuing – Baseline plus Project Conditions with Mitigations..... 40

Table 19: Freeway Segment Level of Service Analysis – Baseline plus Project Conditions ..... 41

Table 20: Intersection Level of Service – Baseline Conditions ..... 46

Table 21: Intersection Queuing – Existing Conditions ..... 47

Table 22: Intersection Level of Service Analysis – Cumulative plus Project Conditions ..... 51

Table 23: Fair Share Analysis..... 53

Table 24: Intersection Queuing – Cumulative plus Project Conditions..... 54

Table 25: Land Use Changes for Base Year ..... 56

Table 26: VMT per Employee Comparison ..... 57

**Figures**

Figure 1: Vicinity Map ..... 8

Figure 2: Project Site Plan ..... 9

Figure 3: Existing Pedestrian, Bicycle, and Transit Facilities..... 17

Figure 4: Existing Conditions Lane Geometry, Traffic Controls, and Volumes ..... 19

Figure 5: Existing Freeway Mainline Volumes ..... 20

Figure 6: Baseline Conditions Lane Geometry, Traffic Controls, and Volumes ..... 28

Figure 7: Baseline Conditions Freeway Mainline Volumes..... 29

Figure 8: Passenger Vehicle Project Trip Distribution ..... 33

Figure 9: Passenger Vehicle Trip Assignment ..... 34

Figure 10: Heavy Vehicle Project Trip Distribution..... 35

Figure 11: Heavy Vehicle Trip Assignment ..... 36

Figure 12: Baseline plus Project Peak Hour Traffic Volumes..... 43

Figure 13: Baseline plus Project Freeway Mainline Volumes ..... 44

Figure 14: Cumulative Conditions Lane Geometry, Traffic Controls, and Volumes ..... 49

Figure 15: Cumulative plus Project Conditions Lane Geometry, Traffic Controls, and Volumes ..... 52

**Appendices**

Appendix A – Level of Service Methodology

Appendix B – Existing Conditions Level of Service and Queuing Sheets

Appendix C – Existing Conditions Freeway Level of Service Sheets

Appendix D – Baseline Conditions Level of Service and Queuing Sheets

Appendix E – Baseline Conditions Freeway Level of Service and Queuing Sheets

Appendix F – Ashley Driveway Counts

Appendix G – Baseline plus Project Level of Service and Queuing Sheets

Appendix H – Baseline plus Project Conditions Freeway Level of Service Sheets

Appendix I – Cumulative Conditions Level of Service and Queuing Sheets

Appendix J – Cumulative plus Project Level of Service and Queuing Sheets

## **EXECUTIVE SUMMARY**

This report summarizes the results of the Traffic Impact Analysis (TIA) conducted for the proposed Ashley Furniture distribution center in the City of Lathrop, California. The study area is near the Roth Road and Lathrop Road interchanges on I-5, specifically located northwest of the I-5/Lathrop Road interchange.

The project proposes to develop an approximately 1.5+ million square feet building to serve as a distribution center and retail facility. The development is strategically located near the I-5/Lathrop Road interchange. The project will also construct various driveways to serve as entry points for passenger vehicles and heavy trucks. The project also proposes to construct a roundabout at the intersection of Golden Valley Parkway/Dos Reis Road.

The purpose of the Traffic Impact Analysis is to evaluate the impacts on the transportation infrastructure due to the addition of the traffic from the proposed project. The report also includes evaluations and recommendations concerning project site access and on-site circulation for vehicles, bicycles, and pedestrians, and a vehicle miles travelled analysis.

To evaluate the impacts on the transportation infrastructure due to the addition of traffic from the proposed project, 14 study intersection were evaluated during the weekday morning (a.m.) peak hour and evening (p.m.) peak hour under five study scenarios. The study intersections were evaluated under *No Project* and *Plus Project* scenarios for Baseline Conditions and Cumulative Conditions. The study intersections were also evaluated for Existing Conditions. For the purpose of this analysis, potential traffic operational effects from the proposed project are identified based on established operational thresholds for the City of Lathrop and guidance published by the California Office of Planning and Research (OPR).

Of note, this TIA constitutes a third iteration of the report based on feedback received from the City and Caltrans. The second iteration included the addition of the Cumulative and Cumulative plus Project conditions and changes to the site layout. The latter change accounted for the removal of two previous site entrances (Study Intersections #13 and #16); in order to avoid confusion and to keep consistent with the previous TIA, the intersection numbering herein has not be revised. This third iteration adds a detailed queuing analysis at all intersections associated with the I-5/Lathrop Road and I-5/Roth Road interchanges.

### ***Project Trip Generation***

Using site specific data, the proposed Ashley Furniture is expected to generate 2,798 daily trips, including 203 a.m. peak hour trips (124 inbound, 79 outbound) and 255 p.m. peak hour trips (110 inbound, 145 outbound) for passenger vehicles.

In addition, the project is expected to generate 680 daily heavy truck trips, including 95 a.m. peak hour trips (14 inbound, 81 outbound) and 45 p.m. peak hour trips (31 inbound, 14 outbound).

### ***Existing Conditions – Intersection Level of Service***

Under this scenario, all of the study intersections operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour.



**Existing Conditions – Intersection Queuing**

Under this scenario, simulation showed queue spillback at three of the eight intersections studied, during one or both peak hours. No queue spillbacks would affect the freeway mainline at either interchange.

**Existing Conditions – Freeway Mainline Level of Service**

Under this scenario, all of the study freeway segments operate at acceptable levels of service (LOS D or better) during the a.m. and p.m. peak hour.

**Baseline Conditions – Intersection Level of Service**

Baseline conditions include all approved growth expected to be constructed between the year 2020 and the year 2022. Under this scenario, all of the study intersections operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour, except for Lathrop Rd/I-5 NB Ramps (Intersection #2) during the p.m. peak hour, which is projected to operate at LOS E (average delay of 70.4 seconds).

**Baseline Conditions – Intersection Queuing**

Under this scenario, simulation showed queue spillback at five of the eight intersections studied, during one or both peak hours. No queue spillbacks would affect the freeway mainline at either interchange.

**Baseline Conditions – Freeway Mainline Level of Service**

Under this scenario, all of the study freeway segments are projected to operate at acceptable levels of service (LOS D or better) during the a.m. and p.m. peak hour.

**Baseline plus Project Conditions – Intersection Level of Service**

Under this scenario, all but three of the study intersections would continue to operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour. The following intersection already operates at unacceptable level of service without the addition of project traffic.

- Lathrop Rd/I-5 NB Ramps (Intersection #2) degrades to LOS F in the p.m. peak hour, with an increase in average delay of 19.1 seconds.
  - With the recommended improvements described in Section 5.3.1, the intersection is projected to improve to LOS C in the a.m. and p.m. peak hours, with a delay of 20.2 seconds and 34.8 seconds, respectively.

The following two intersections would degrade from acceptable to unacceptable level of service with the addition of project traffic:

- Lathrop Rd-Spartan Way/I-5 SB Ramps (Intersection #3) would degrade from LOS D to LOS E in the a.m. and p.m. peak hour, a *substantial degradation*.
  - With the recommended improvements described in Section 5.3.1, the intersection is projected to improve to LOS D in the a.m. and p.m. peak hours, with a delay of 54.5 seconds and 54.9 seconds, respectively.
- Spartan Way/Golden Valley Pkwy (Intersection #4) would degrade from LOS C to LOS E in the a.m. peak hour and LOS D to LOS F in the p.m. peak hour, a *substantial degradation*.

- With the recommended improvements described in Section 5.3.1, the intersection is projected to improve to LOS D in the a.m. and p.m. peak hours, with a delay of 48.5 seconds and 52.9 seconds, respectively.

**Baseline plus Project Conditions – Intersection Queuing**

Under this scenario, simulation showed queue spillback at five of the eight intersections studied, during one or both peak hours. The proposed project (with mitigations) would not generate any new queue spillbacks, and no queue spillbacks would affect the freeway mainline at either interchange.

**Baseline plus Project Conditions – Freeway Mainline Level of Service**

Under this scenario, all of the study freeway segments are projected to operate at acceptable levels of service (LOS D or better) during the a.m. and p.m. peak hour.

**Cumulative Conditions – Intersection Level of Service**

Under this scenario, seven of the study intersections are projected to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours.

**Cumulative Conditions – Intersection Queuing**

Under this scenario, simulation showed queue spillback at six of the eight intersections studied, during one or both peak hours. No queue spillbacks would affect the freeway mainline at either interchange.

**Cumulative plus Project Conditions – Intersection Level of Service**

Under this scenario, seven of the study intersections are projected to continue to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours. At the seven intersections operating below jurisdictional standards, added project traffic would either degrade the level of service from acceptable to unacceptable, or increase average delay by more than 5.0 seconds, constituting *substantial inconsistencies* with the City of Lathrop standards.

A fair share analysis was conducted at the Lathrop Road/I-5 interchange and the Roth Road/I-5 interchange. At the Lathrop Road/I-5 interchange, individual intersection fair share percentages range from approximately one percent to six percent (or 5.1 percent overall). At the Roth Road/I-5 interchange, individual intersection fair share percentages range from approximately one percent to nine percent (or 4.5 percent overall).

**Cumulative plus Project Conditions – Intersection Queuing**

Under this scenario, simulation showed queue spillback at five of the eight intersections studied, during one or both peak hours. The proposed project would generate one new queue spillback at Intersection #1, although this queue length can be fully accommodated within the taper without affecting the adjacent through lane. No queue spillbacks would affect the freeway mainline at either interchange.

### ***VMT Impacts***

The proposed project was evaluated based on guidance from the Governor's Office of Planning and Research (OPR) and San Joaquin County Transportation Analysis Guidelines. Since the project is not screened out from the maps in the County Guidelines, TJKM inserted the proposed project into the San Joaquin COG 2018 RTP model and performed a base year plus project model run.

The project's 15.43 daily VMT per employee is lower than the San Joaquin County VMT threshold of 16.2. VMT impacts for the Ashley Furniture Homestore project are found to be ***less-than-significant*** for the base year, and thus no mitigation is required for VMT impacts attributable to this project.

### ***Site Access & On-Site Circulation***

The project would be accessed by a total of four driveways. All driveways are full access driveways. Heavy trucks (larger than SU-30) will generally be restricted to only using the northern driveway on Manthey Road and the I-5/Roth Road interchange. Drive aisles for passenger vehicles vary between 26-36 feet wide, while drive aisles for heavy trucks are 60-72 feet wide. Any proposed landscaping should be maintained to provide adequate sight distance. The proposed driveway locations, design, and sight distance are all **adequate**.

The site plan shows all proposed pedestrian facilities on the project frontage and connectivity from Manthey Road to the retail showroom entrance. The project site plan does show four crosswalks connecting the passenger vehicle parking lot to the retail showroom. The site plan shows two bike rack locations, one on the south side of the building and one on the east side. Sidewalks are planned to be provided within the passenger vehicle parking lot and along the eastern frontage of the building. Additionally, it appears that one sidewalk will front the Intersection #15 entrance (on the north side) that will connect the showroom to Manthey Road. The internal circulation on the project site is considered **adequate**.

### ***Truck Operations***

The proposed Ashley furniture is proposing to restrict heavy trucks (larger than SU-30) from using the Lathrop Road/I-5 interchange at all times to alleviate potential congestion on those intersections. Instead, trucks will be using the Roth Road/I-5 interchange via Manthey Road to access the Ashley Furniture site via the northernmost driveway only. Only local delivery trucks would be permitted on Dos Reis Boulevard and Golden Valley Parkway. Based on the level of service analysis, additional truck traffic on the Roth Road intersections is not expected to degrade the LOS to unacceptable operations.

### ***Parking***

Based on City of Lathrop parking requirements, the project is required to provide 893 stalls. Based on the site plan, the project is proposing to provide 942 stalls, satisfying City requirements. The project will provide 1,104 trailer stalls for company operations.

### ***Pedestrian Impacts***

Pedestrian access to the project site is facilitated by new sidewalks along Dos Reis Road and Manthey Road, and paved walkways within the parking lot and crosswalks. The proposed development project does not conflict with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is ***less than significant***.

***Bicycle Impacts***

As shown in **Figure 3**, there are no existing bicycle facilities on De Lima Road, Manthey Road and Dos Reis Road. If the project proposes bicycle facilities, it should show them on future site plans. The project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is ***less than significant***.

***Transit Impacts***

The project site is within a 3/4 mile of two San Joaquin RTD bus stops, located on the northwest corner of Lathrop Road/Harlan Road and in front of the Save Mart. Due to the lack of development north of Spartan Way, there are sidewalk gaps from the proposed project site to the bus stops. As development in the area increases, sidewalks should be installed to close the gap in pedestrian facilities. Impacts to transit service are expected to be ***less than significant***.

## 1.0 INTRODUCTION

This report summarizes the results of the Traffic Impact Analysis (TIA) for the proposed Ashley Furniture distribution center located north of the Spartan Way and Golden Valley Parkway intersection in the City of Lathrop, California. The location is northwest of the I-5/Lathrop Road interchange.

### 1.1 PROJECT DESCRIPTION

The project proposes to develop a 1.5+ million square foot building to serve as a distribution center and retail facility. The development is strategically located near the I-5/Lathrop Road interchange, although heavy trucks will be restricted to only using the I-5/Roth Road interchange to the north. The project will include various driveways to serve as entry points for passenger vehicles and heavy trucks. The project also proposes to construct a roundabout at the intersection of Golden Valley Parkway/Dos Reis Road.

The following section discusses the TIA's purpose, study intersections, and analysis scenarios.

### 1.2 PROJECT PURPOSE

The purpose of the Traffic Impact Analysis is to evaluate the impacts on the transportation infrastructure due to the addition of the traffic from the proposed project. The report also includes evaluations and recommendations concerning project site access and on-site circulation for vehicles, bicycles, and pedestrians, queuing analysis at the study intersections, and parking supply.

### 1.3 OTHER ANALYSES

The City of Lathrop has recently updated its General Plan. The Lathrop City Council voted to adopt the General Plan Update and certify the Final Environmental Impact Report (FEIR) on September 19, 2022.

### 1.4 STUDY AREA

The study area is located within the city limits of Lathrop, within the Central Lathrop Specific Plan Phase 2 area. The impacts of the proposed project were evaluated for the intersections discussed below.

#### 1.4.1 Study Intersections

TJKM evaluated traffic conditions at 14 study intersections during the a.m. and p.m. peak hours for a typical weekday. The study intersections were selected in consultation with the City of Lathrop staff. The peak periods in the City of Lathrop are between 6-9 a.m. and 3-6 p.m. The study intersections and associated traffic controls are as follows:

1. Lathrop Rd/Harlan Rd (Signal)
2. Lathrop Rd/I-5 NB Ramps\* (Signal)
3. Lathrop Rd-Spartan Way/I-5 SB Ramps\* (Signal)
4. Spartan Way/Golden Valley Pkwy (Signal)
5. Manthey Rd/De Lima Rd (One-Way Stop)
6. Manthey Rd/Dos Reis Rd (One-Way Stop)
7. Golden Valley Rd/Dos Reis Rd (Intersection does not currently exist)
8. Manthey Rd/Roth Rd (One-Way Stop)
9. Roth Rd/I-5 SB Ramps\* (One-Way Stop)

10. Roth Rd/I-5 NB Ramps\* (One-Way Stop)
11. Roth Rd/Harlan Rd (All-Way Stop)
12. Dos Reis Rd/Ashley Driveway #1 (One-Way Stop)
14. Manthey Rd/Ashley Driveway #3 (One-Way Stop)
15. Manthey Rd/Ashley Driveway #4 (One-Way Stop)

Notes:

*(\*) indicates that a intersection is owned and operated by Caltrans*

*In a previous version of this TIA, there were 16 study intersections. Intersections #13 (Manthey Rd/Ashley Driveway #2) and #16 (De Lima Rd/Ashley Truck Driveway) have been removed as per the latest plan update.*

**Figure 1** illustrates the study intersections and the vicinity map of the proposed project. **Figure 2** shows the proposed project site plan, dated March 29, 2023.

#### **1.4.2 Study Freeway Segments**

TJKM also evaluated freeway mainline operations for the a.m. and p.m. peak hours for a typical weekday. The following freeway segments were selected in consultation with the City of Lathrop staff:

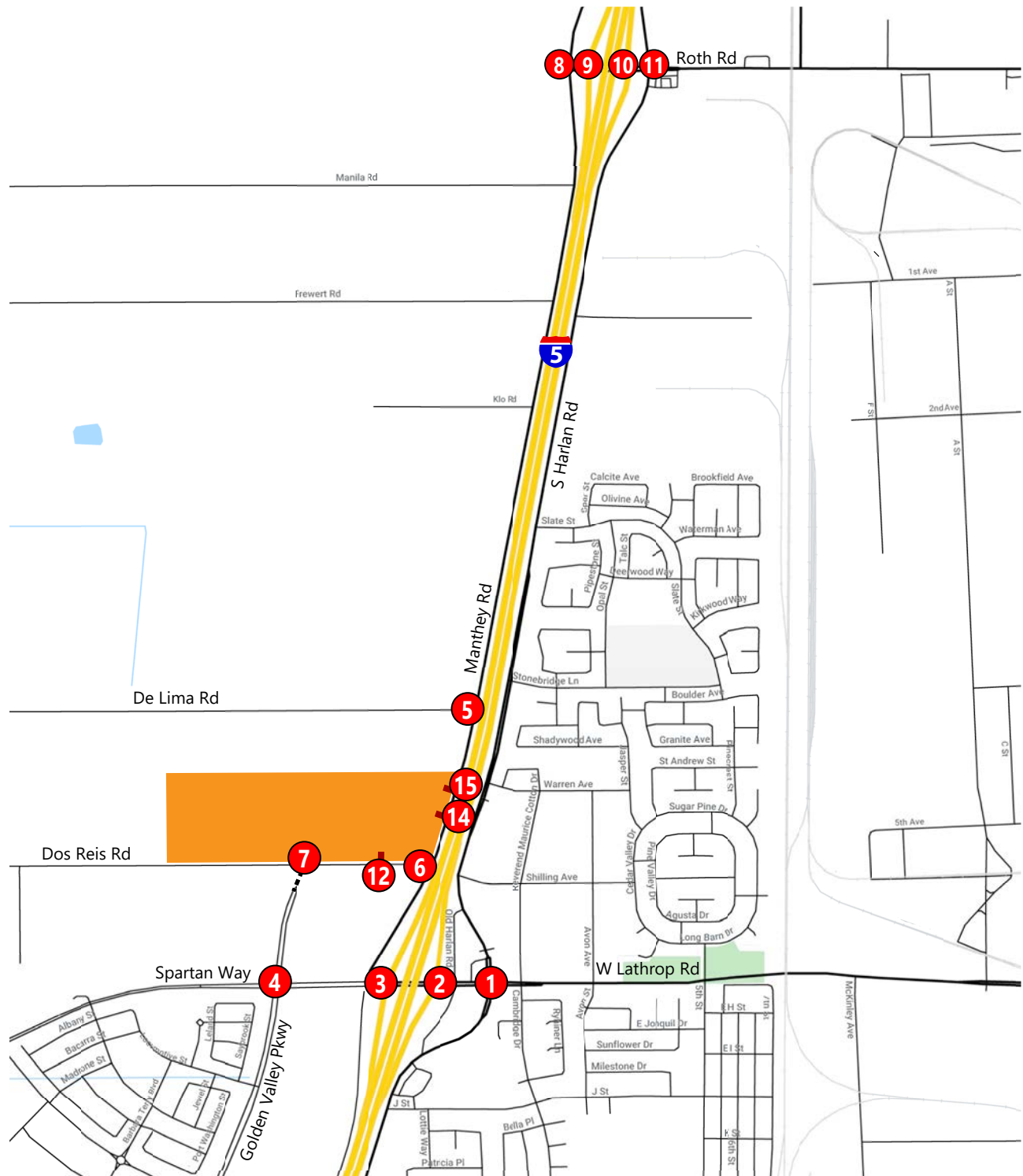
1. Interstate 5, north of Roth Road (northbound and southbound directions)
2. Interstate 5, between Roth Road and Lathrop Road (northbound and southbound directions)
3. Interstate 5, south of Lathrop Road (northbound and southbound directions)

### **1.5 ANALYSIS SCENARIOS**

This study addresses the following five traffic scenarios:

- Existing Conditions;
- Existing plus Approved Projects (Baseline);
- Baseline plus Ashley Furniture Project;
- Cumulative Conditions; and
- Cumulative plus Ashely Furniture Project.

Figure 1: Vicinity Map

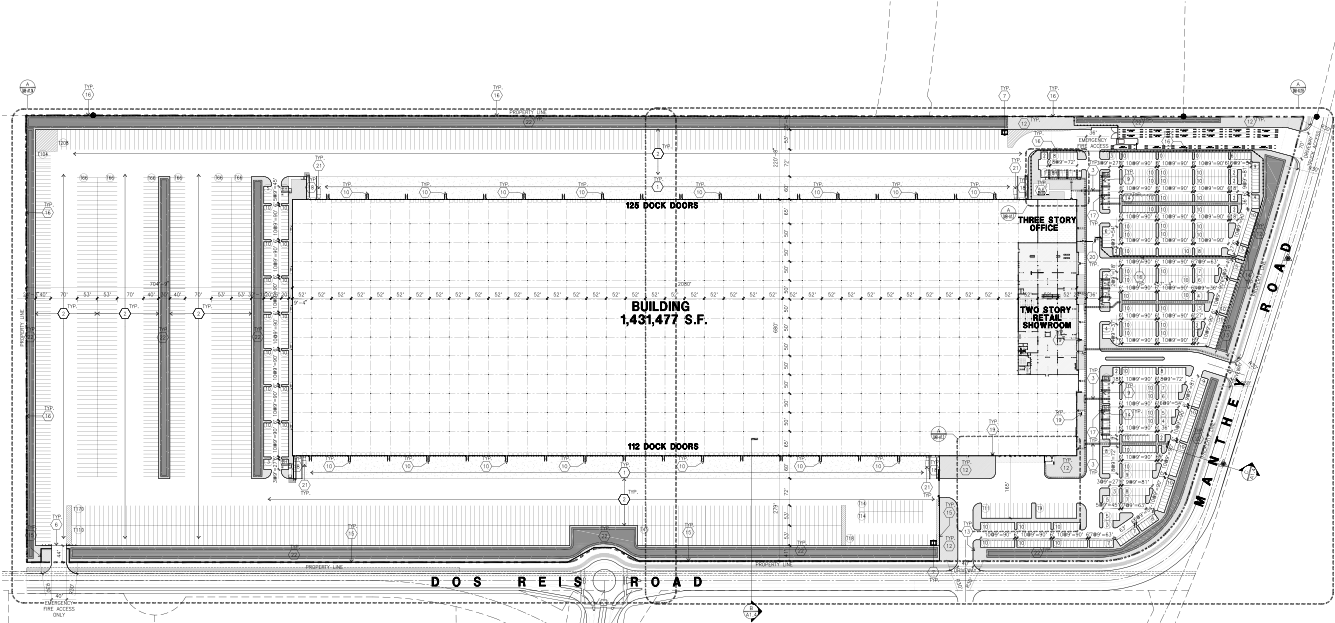


LEGEND

- Project Site
- Project Driveway
- X Study Intersection
- Future Road



Figure 2: Site Plan





## 2.0 STUDY METHODOLOGY

Traffic impacts related to the proposed project were evaluated for both compliance with applicable regulatory documents and environmental significance as defined in the California Environmental Quality Act (CEQA). In accordance with the *Technical Advisory* published by the Governor's Office of Planning and Research (OPR), a qualitative VMT analysis forms the basis of the CEQA analysis for the proposed project. As of July 1, 2020, intersection level of service (LOS) can no longer be used to determine significant impacts for CEQA purposes. The City of Lathrop adopted VMT thresholds and screening criteria on September 14, 2020.

### 2.1 VEHICLE MILES TRAVELED

This study includes a quantitative analysis of VMT generated by the proposed project. SB 743 is intended to reduce greenhouse gas emissions and particulates, encourage infill development and a diversity of uses instead of sprawl; and promote multi-modal transportation networks.

The San Joaquin COG 2018 RTP Model was used to evaluate changes in VMT due to land use developments. For the purposes of this study, the screening guidelines and significance thresholds that are contained in the City's VMT guidelines are utilized. If a project does not meet any screening criteria, the draft guidelines specify use of the San Joaquin COG RTP Travel Demand Model to identify the appropriate project VMT.

#### City of Lathrop Screening Criteria

The adopted guidelines include the following screening criteria for identifying projects that can be presumed to have a less-than-significant impact:

- Small projects;
- Projects located in low VMT areas;
- Projects in proximity to a major transit stop;
- Affordable housing
- Local serving retail; and
- Transportation projects

#### Significance Standards

The state of California provides lead agencies latitude in adopting standards of significance for evaluating VMT impacts associated with land use projects. For this project, the San Joaquin County Transportation Analysis Guidelines were used to analyze the proposed project since the City of Lathrop VMT guidelines do not specify VMT thresholds.

### 2.2 LEVEL OF SERVICE ANALYSIS METHODOLOGY

Level of Service (LOS) is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The LOS generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience and safety. The operational LOS are given letter designations from A to F, with A representing the free-flow operating conditions and F representing the severely congested flow with high delays.

Typically, LOS C is considered as an ideal condition as it represents stable flow and efficient use of the transportation facility. Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets. The following sections provide detailed study methodology based on the type of intersections.

**Signalized Intersections**

The study intersections under traffic signal control were analyzed using the Highway Capacity Manual (HCM 6<sup>th</sup> Edition) methodology for signalized intersections described in Chapter 19. This methodology determines LOS based on average control delay per vehicle for the overall intersection during peak hour intersection operating conditions. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 1** summarizes the relationship between the control delay and LOS for signalized intersections. The LOS assessment under all scenarios is based on current traffic controls and optimized signal timing unless otherwise noted. The LOS methodology for Signalized intersections is described in detail in **Appendix A**.

**Table 1: Level of Service Definitions for Signalized Intersections**

<b>Level of Service</b>	<b>Description</b>
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: Highway Capacity Manual 6<sup>th</sup> Edition

**Stop-Controlled Intersections**

The study intersections under one/two-way stop control and all-way stop control were analyzed using the HCM 6<sup>th</sup> Edition Operations Methodology described in Chapter 20 and 21, respectively. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At one- or two-way stop controlled intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The weighted average delay for the entire intersections is presented for all-way stop controlled intersections. **Table 2** summarizes the relationship between delay and LOS for stop-controlled intersections. The delay ranges for unsignalized intersections are lower than for signalized intersections, as drivers expect less delay at stop-controlled intersections.

Each of the study intersections was analyzed using *Synchro* software and HCM 6<sup>th</sup> Edition. The LOS assessment under all scenarios is based on current traffic controls unless otherwise noted. The LOS methodology for stop-controlled intersections is described in detail in **Appendix A**.

**Table 2: Level of Service Definitions for Stop Controlled Intersections**

<i>Level of Service</i>	<i>Description</i>
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: Highway Capacity Manual 6<sup>th</sup> Edition

**2.3 LEVEL OF SERVICE STANDARDS**

Although level of service is no longer used for identifying impacts under CEQA, level of service analysis is still used for determining consistency with adopted agency plans and standards. Where standards refer to significant environmental impacts, this analysis instead identifies these as significant inconsistencies with adopted plans.

**Signalized and Stop Controlled Intersections**

The City of Lathrop LOS standard is LOS D. Intersections that are expected to operate below LOS D are considered as impacted and should be considered for improvement.

While the City of Lathrop does not have specific impact criteria for intersections, a project impact would be considered substantial if:

- The project traffic added to existing conditions would result in the level of service deteriorating below the City standard. The City’s current level of service standard is LOS D.
- For intersections that already operate at unacceptable levels of service (E or F), project impacts can be considered substantial if the project trips result in an increase in delay by 5.0 seconds or more.

**Caltrans Facilities**

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on all State highway facilities. Based on standard industry practice, the project is considered to trigger a substantial impact to Caltrans Facilities if the project would:

- Result in a facility that will operate at an acceptable LOS in the base (pre-project or no project) condition to deteriorate to unacceptable LOS in the “Plus Project” condition; or
- Project traffic increases the density by five percent or more at a facility that will operate at an unacceptable LOS in the base (pre-project or no project) condition.

**Table 3** summarizes the HCM 6<sup>th</sup> Edition LOS criteria for basic freeway segments. *Highway Capacity Software* (HCS7) was used to calculate the level of service along freeway segments for all scenarios. For this analysis, LOS D is the acceptable threshold.

**Table 3: LOS Criteria for Basic Freeway Segments**

<i>Freeway Facility LOS</i>	<i>Freeway Facility Density (pc/mi/ln)</i>
A	≤11
B	>11-18
C	>18-26
D	>26-35
E	>35-45
F	>45 or v/c > 1.0

Source: HCM 6<sup>th</sup> Edition

**2.4 QUEUING ANALYSIS**

The 95<sup>th</sup> percentile queue lengths were simulated at study intersections by running the Synchro traffic model in SimTraffic. Queuing results were based on five one-hour runs (four 15-minute intervals), with one 15-minute seeding interval. Existing queue storage consists of either turn bay lengths (not including taper) or the distance to the physical area of the next upstream intersection or freeway mainline. Queue lengths were reported for dedicated turn lanes and freeway exit ramps, at intersections that are associated with the I-5/Roth Road and I-5/Lathrop Road interchanges. As shown in **Figure 1**, this consists of Intersections #1-4 and #8-11. Queue spillbacks were identified at all intersections, defined as queue lengths that exceed the available storage length and may affect upstream traffic

## 3.0 EXISTING CONDITIONS

This section describes existing conditions in the immediate project site vicinity, including roadway facilities, bicycle and pedestrian facilities, and available transit service. In addition, existing traffic volumes and operations are presented for the study intersections, including the results of LOS calculations and simulation.

### 3.1 EXISTING SETTING AND ROADWAY SYSTEM

Access to the proposed project is provided via Lathrop Road/Spartan Way, Manthey Road, Golden Valley Parkway, Dos Reis Road and De Lima Road.

**Lathrop Road/Spartan Way** is primarily a four to six lane divided arterial from its western terminus at Barbara Terry Boulevard and its eastern terminus at Austin Road in Manteca. In the project vicinity, the majority of land uses will be primarily single family homes and educational facilities. The posted speed limit on Lathrop Road/Spartan Way is 35 miles per hour (mph).

**Manthey Road** is primarily a two lane undivided, rural road from Lathrop Road/Spartan Way to Carolyn Weston Boulevard in south Stockton. In the immediate project vicinity, the majority of land uses are open space/agricultural with a few single family home along the roadway. The posted speed limit ranges from 40-45 mph.

**Golden Valley Parkway** is primarily a six lane divided arterial from Spartan Way to its southern terminus at Brookhurst Boulevard. Golden Valley Parkway will primarily serve as the primary north-south arterial for residents in Central Lathrop. While much of the land surrounding Golden Valley Parkway is undeveloped, Golden Valley Parkway provides access to single family homes and Lathrop Marketplace. In the project vicinity, the posted speed limit is 45 mph.

**Dos Reis Road** is a two lane rural road from Manthey Road to its western terminus at the San Joaquin River. Dos Reis Road will provide access driveways to the proposed project. Most of the land uses are open space/agriculture. However, there is access to the athletic facilities of Lathrop High School. The speed limit on Dos Reis Road is 35 mph.

**De Lima Road** is a two lane rural road from Manthey Road to its western terminus at the San Joaquin River. De Lima Road will also provide access driveways to the proposed project. The land uses surrounded De Lima Road are mostly open space and agricultural. The speed limit along De Lima Road is 35 mph.

### 3.2 EXISTING PEDESTRIAN FACILITIES

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal “walkable” community includes wide sidewalks, a mix of land uses such as residential, employment, and shopping opportunities, a limited number of conflict points with vehicle traffic, easy access to transit facilities and services and a network of pedestrian facilities.

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access the destinations such as institutions, businesses, public transportation, and recreation facilities.

Near the proposed project site, the approximate width of the sidewalk is eight feet. This sidewalk width applies to segments of Spartan Way. There are currently no sidewalks along Golden Valley Parkway (north of Spartan Way), Dos Reis Road, Manthey Road, and De Lima Road. The project proposes to develop sidewalks along Dos Reis Road and the west side of Manthey Road.

The signalized intersections provide marked crosswalks and pedestrian push buttons and signal heads.

The existing pedestrian facilities in the study area are shown in **Figure 3**.

### 3.3 EXISTING BICYCLE FACILITIES

The 1995 City of Lathrop Bicycle Transportation Plan outlines policies and objectives to improve the current active bicycle facilities. The various bicycle facilities are described below. Existing bicycle facilities are illustrated in **Figure 3**.

- **Class I Bikeways (Bike Paths or Shared-Use Path):** Class I Bikeways provides a completely separated right of way for bicycles and pedestrians with minimal crossflow by motorized vehicles. Bike paths provide a recreational opportunity or can serve as commute routes. In the project area, there are no Class I facilities.
- **Class II Bike Lanes:** Class II bike lanes are striped bike lanes immediately adjacent to a traffic lane. Bike lanes provide a separate pavement area from vehicular traffic and improve conditions for bicycles on roadways. In the project vicinity, Class II Bike Lanes are provided on Lathrop Road and Harlan Road.
- **Class III Bike Routes:** Class III Bike Routes provide shared use of the roadway, designated by signs or permanent markings and shared with other vehicular traffic. There are no Class III Bike Routes in the project vicinity.
- **Class IV Separated Bikeways or Cycle Tracks:** Cycle tracks are separated bikeways for the exclusive use of bicycles. Cycle tracks are usually located along the roadway, but require separation from the vehicular travel lane in the form of grade separation, planters, flexible posts, or on-street parking. There are no Class IV bikeways in the project vicinity.

### 3.4 EXISTING TRANSIT FACILITIES

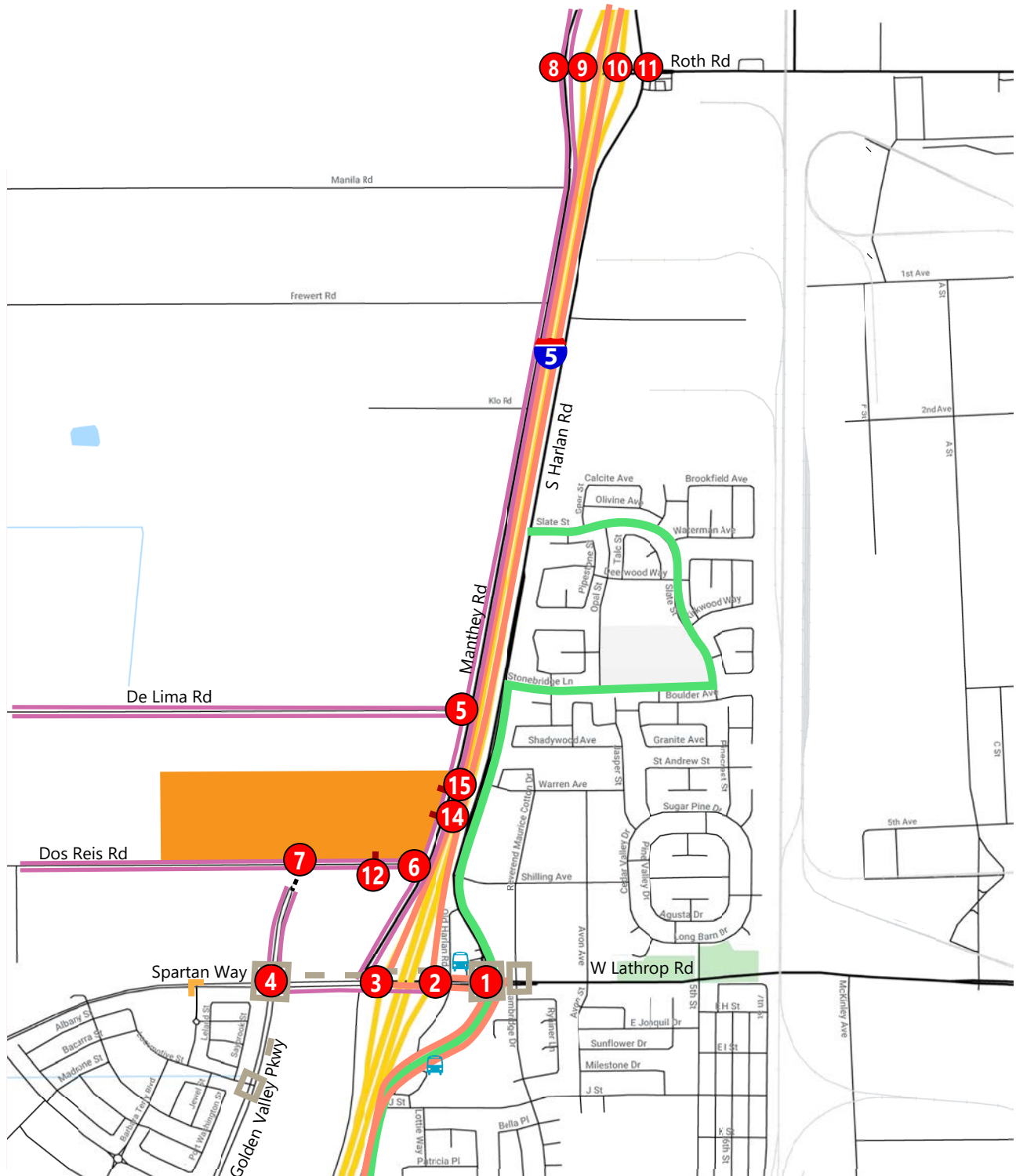
San Joaquin Regional Transit District (RTD) provides transit service throughout the San Joaquin County. **Table 4** summarizes the existing San Joaquin RTD Transit service and **Figure 3** illustrates the existing transit facilities in the study area.

**Table 4: Existing San Joaquin RTD Transit Service**

<i>Route</i>	<i>From</i>	<i>To</i>	<i>Weekdays</i>		<i>Weekends</i>	
			<i>Operating Hours</i>	<i>Headway (hours)</i>	<i>Operating Hours</i>	<i>Headway (minutes)</i>
90	Tracy Transit Station	Stockton Downtown Transit Center	9:20 a.m. – 5:11 p.m.	6	N/A	N/A

Source: San Joaquin RTD Transit Website

Figure 3: Existing Pedestrian, Bicycle, and Transit Facilities



LEGEND

- Project Site
- Project Driveway
- Class II Bike Lane
- Sidewalk Gap
- Study Intersection
- Future Road
- Route 90
- Striped Crosswalk
- Bus Stop
- Striped School Crosswalk



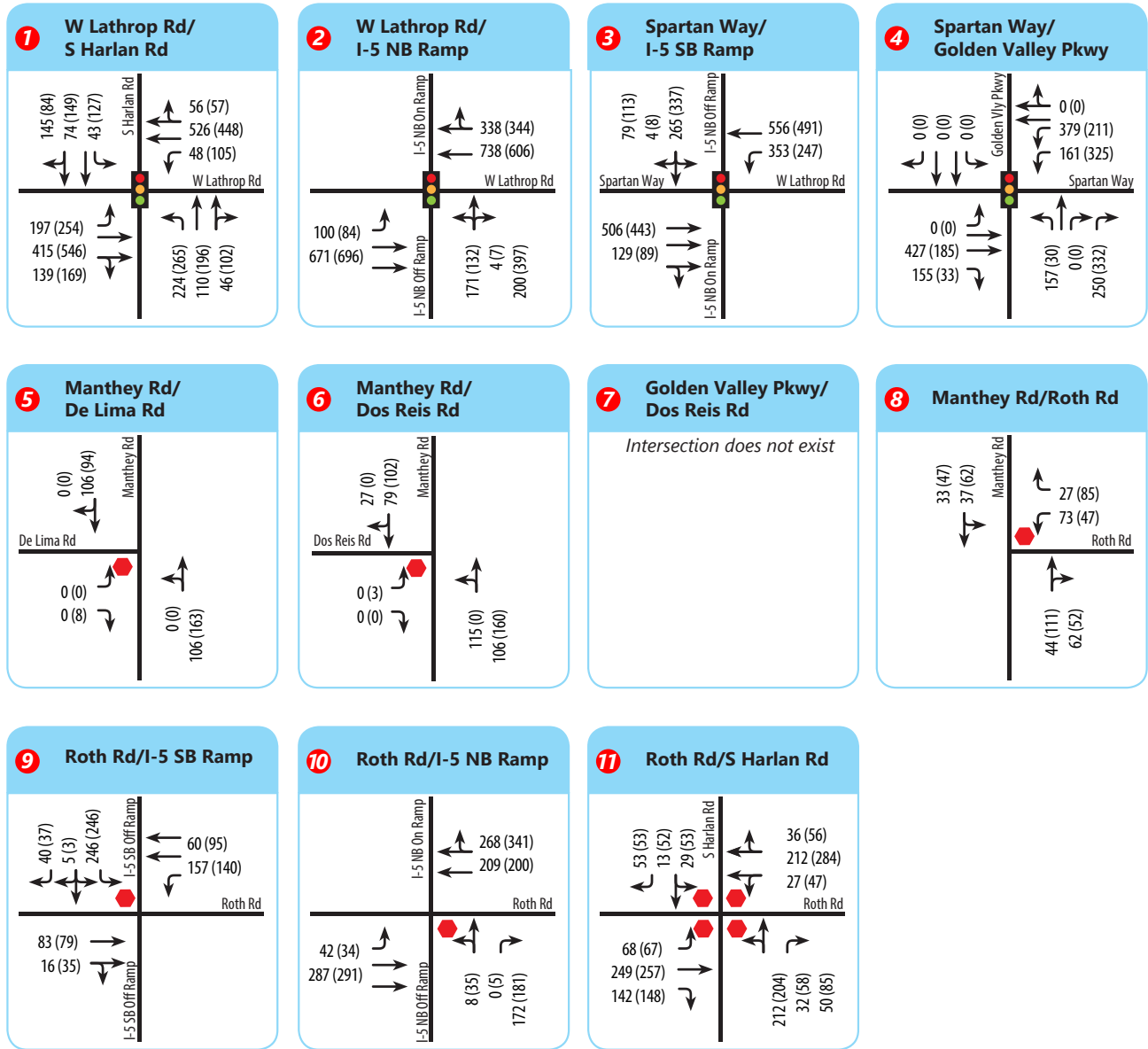


### 3.5 EXISTING PEAK HOUR TRAFFIC VOLUMES AND LANE CONFIGURATIONS

The existing operations of the study intersections were evaluated for the highest one-hour volumes during weekday morning and evening peak periods. Due to COVID-19 conditions, the ability to collect accurate new traffic counts is limited. The City of Lathrop approved the use of the projected 2020 intersection turning movement counts from the *2018 Traffic Monitoring Program for The City of Lathrop* for the existing conditions scenario. 2020 freeway mainline volumes were obtained from Caltrans Performance Measurement System (PeMS).

**Figure 4** illustrates the existing lane geometry, traffic controls, and volumes at the study intersections. **Figure 5** illustrates the existing a.m. and p.m. peak hour freeway mainline volumes.

Figure 4: Existing Lane Geometry, Traffic Controls, and Volumes

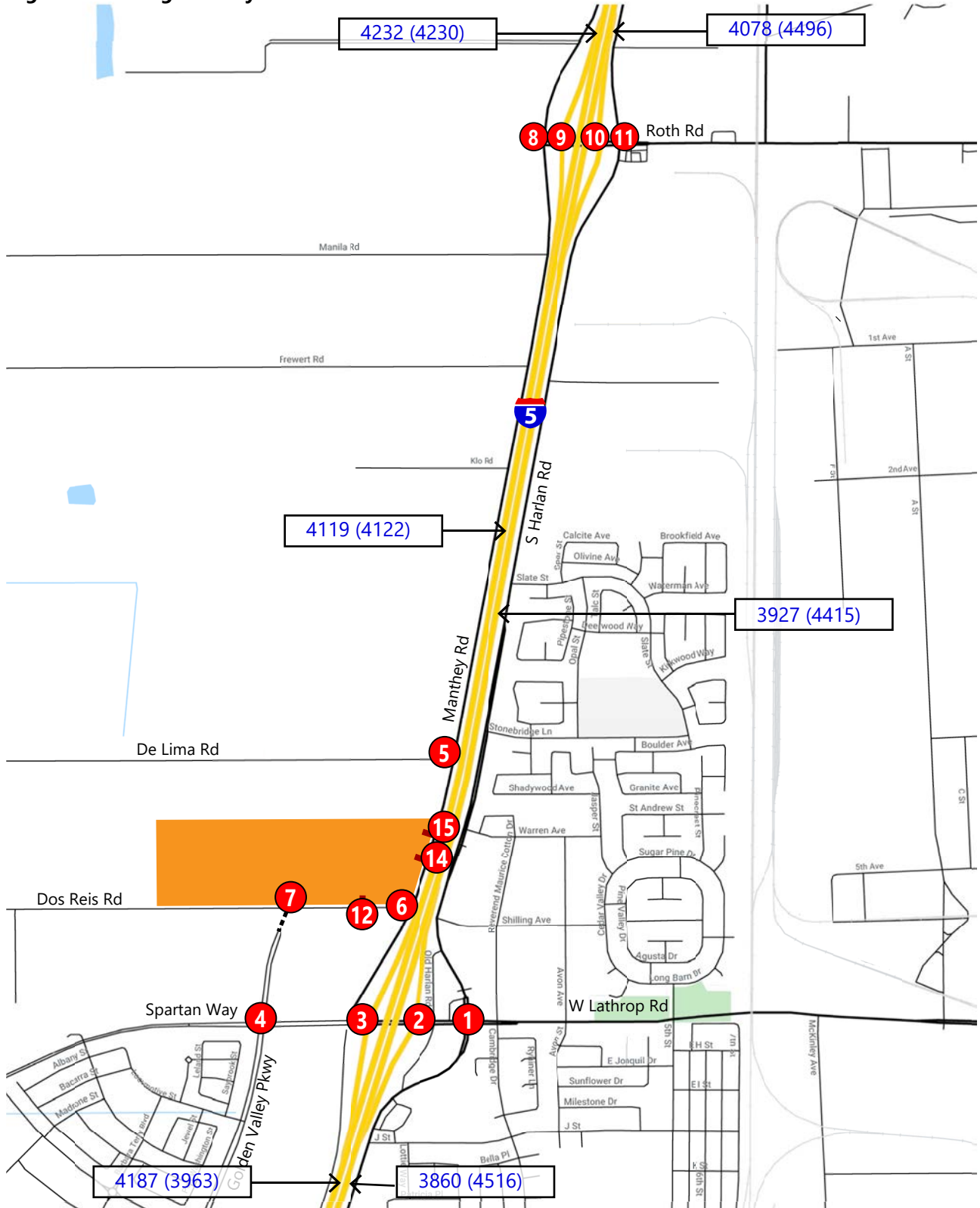


LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- 🚦 Traffic Signal



Figure 5: Existing Freeway Mainline Volumes



LEGEND

- Project Site
- Project Driveway
- Future Road
- XXXX AM Volume
- (XXXX) PM Volume
- X Study Intersection



### 3.6 INTERSECTION LEVEL OF SERVICE ANALYSIS – EXISTING CONDITIONS

Existing intersection lane configurations and turning movement volumes are used to calculate the level of service for the study intersections during each peak hour. Existing signal timings at the signalized study intersections were used. The results of the level of service analysis using the Synchro software program for Existing Conditions are summarized in **Table 5**. LOS worksheets are provided in **Appendix B**.

Under this scenario, all of the study intersections operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour.

**Table 5: Intersection Level of Service Analysis – Existing Conditions**

#	Intersection	Control	Peak Hour <sup>1</sup>	Existing Conditions Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	30.6	C
			PM	40.0	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	23.9	C
			PM	26.5	C
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	29.7	C
			PM	17.3	B
4	Spartan Way/Golden Valley Parkway	Signal	AM	15.5	B
			PM	13.8	B
5	Manthey Rd/De Lima Rd	One-Way	AM	0.0	A
		Stop	PM	8.8	A
6	Manthey Rd/Dos Reis Rd	One-Way	AM	7.7	A
		Stop	PM	10.1	B
7	Golden Valley Rd/Dos Reis Rd	-	AM	N/A	N/A
			PM	N/A	N/A
8	Manthey Rd/Roth Rd	One-Way	AM	11.0	B
		Stop	PM	11.7	B
9	Roth Rd/I-5 SB Ramps	One-Way	AM	18.4	C
		Stop	PM	19.1	C
10	Roth Rd/I-5 NB Ramps	One-Way	AM	13.0	B
		Stop	PM	13.4	B
11	Roth Rd/Harlan Rd	All-Way	AM	16.5	C
		Stop	PM	21.1	C
12	Dos Reis Rd/Ashley Dwy #1	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
14	Manthey Rd/Ashley Dwy #3	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
15	Manthey Rd/Ashley Dwy #4	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A

Notes:

1. AM – morning peak hour, PM – evening peak hour

2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.

3. LOS – Level of Service. **Bold** indicates unacceptable LOS and Delay.

3.7 INTERSECTION QUEUING – EXISTING CONDITIONS

Under this scenario, simulation showed queue spillback at three of the eight intersections studied, during one or both peak hours. Queue lengths exceeded the available storage at Lathrop Road/Harlan Road (Intersection #1), Lathrop Road-Spartan Way/I-5 Southbound Ramps (Intersection #3), and Roth Road/I-5 Southbound Ramps (Intersection #9). At Intersections #1 and #9, this involved turning queues spilling back from the turn pockets into the turn lane taper and potentially the adjacent through lane. At Intersection #3 the queue would extend into the upstream intersection. No queue spillbacks would affect the freeway mainline at either interchange.

**Table 6: Intersection Queuing – Existing Conditions**

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Queue Length (ft.)
1	Lathrop Rd/Harlan Rd	Signal	Eastbound	Left	300	AM	288
				Left	240	PM	<b>323</b>
			Westbound	Left	240	AM	72
				Left	220	PM	133
			Southbound	Left	100	AM	<b>256</b>
					PM	<b>335</b>	
2	Lathrop Rd/I-5 NB Ramps	Signal	Eastbound	Left	420*	AM	111
				Left	420*	PM	98
			Northbound	L/Th/R	1600*	AM	250
				L/Th/R	1600*	PM	338
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	Westbound	Left	420*	AM	<b>447</b>
				Left	420*	PM	215
			Southbound	L/Th/R	1520*	AM	239
					PM	334	
4	Spartan Way/Golden Valley Parkway	Signal	Eastbound	Left	305	AM	-
				Left	305	PM	-
			Right	Right	125	AM	90
				Right	125	PM	44
			Westbound	Left	470	AM	70
				Left	470	PM	92
			Northbound	Left	1100*	AM	146
					PM	40	
Southbound	Left	200	AM	-			
	Left	200	PM	-			
	Right	200	AM	-			
					PM	-	
8	Manthey Rd/Roth Rd	One-Way Stop	Westbound	Left	195*	AM	50
				Left	195*	PM	41
				Right	195*	AM	-
				Right	195*	PM	-
9	Roth Rd/I-5 SB Ramps	One-Way Stop	Westbound	Left	370*	AM	40
				Left	370*	PM	37
			Southbound	Left	520	AM	<b>557</b>
					PM	<b>902</b>	

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Queue Length (ft.)
				L/Th/R	1370*	AM	581
						PM	924
10	Roth Rd/I-5 NB Ramps	One-Way Stop	Eastbound	Left	370*	AM	28
						PM	22
			Northbound	L/Th	1360*	AM	23
						PM	39
				Right	630	AM	21
						PM	42
11	Roth Rd/Harlan Rd	All-Way Stop	Eastbound	Left	100	AM	58
						PM	59
				Right	140*	AM	52
						PM	55
			Northbound	Right	100	AM	41
						PM	49

Notes:

\* Indicates that available storage extends to upstream intersection or freeway mainline

- Indicates no queue reported by SimTraffic. Zero volume assigned.

**Bold** indicates that required storage exceeds existing storage.

### 3.8 FREEWAY MAINLINE LEVEL OF SERVICE – EXISTING CONDITIONS

The results of the freeway mainline segments level of service along Interstate 5 is summarized in **Table 6**. HCS7 freeway segment reports are attached in **Appendix C**. Under Existing Conditions, all freeway mainline segments operate at LOS D or better during both peak hours.

**Table 7: Freeway Segment Level of Service Analysis – Existing Conditions**

#	Segment Name	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-5 Northbound					
1	North of Roth Rd	24.4	C	26.6	D
2	Between Roth Rd and Lathrop Rd	24.0	C	27.5	D
3	South of Lathrop Rd	23.1	C	27.5	D
I-5 Southbound					
1	North of Roth Rd	25.4	C	25.9	C
2	Between Roth Rd and Lathrop Rd	24.2	C	23.8	C
3	South of Lathrop Rd	25.4	C	24.9	C

## 4.0 BASELINE CONDITIONS

This section presents the results of the level of service calculations under Baseline Conditions without the project. Level of service analysis at the study intersections were conducted for Baseline Conditions to establish a baseline to evaluate the impacts due to the addition of traffic from the proposed project. Baseline volumes for the study intersections were referenced from the *2018 Traffic Monitoring Program for The City of Lathrop*. The expected growth in the City of Lathrop between the year 2020 and the year 2022 includes:

- 1,210 new single family residences
- 2,790,350 additional square feet of warehouse/distribution facilities
- 196 hotel rooms
- 326,195 additional square feet of commercial uses

Figure 6 illustrates the Baseline Conditions intersection volumes.

### 4.1 INTERSECTION LEVEL OF SERVICE ANALYSIS – BASELINE CONDITIONS

The intersection LOS analysis results for Baseline Conditions are summarized in **Table 7**. Detailed calculation sheets for Baseline Conditions are contained in **Appendix D**.

All of the study intersections are projected to operate within the applicable jurisdictional standards during the a.m. and p.m. peak hour except for Lathrop Rd/I-5 NB Ramps during the p.m. peak hour, which is projected to operate at LOS E.

**Table 8: Intersection Level of Service – Baseline Conditions**

#	Intersection	Control	Peak Hour <sup>1</sup>	Baseline Conditions Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	32.5	C
			PM	53.5	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	40.4	D
			PM	<b>70.4</b>	<b>E</b>
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	48.3	D
			PM	44.3	D
4	Spartan Way/Golden Valley Parkway	Signal	AM	31.0	C
			PM	37.8	D
5	Manthey Rd/De Lima Rd	One-Way Stop	AM	0.0	A
			PM	9.7	A
6	Manthey Rd/Dos Reis Rd	One-Way Stop	AM	10.7	B
			PM	13.0	B
7	Golden Valley Rd/Dos Reis Rd	-	AM	9.3	A
			PM	16.3	C
8	Manthey Rd/Roth Rd	One-Way Stop	AM	11.1	B
			PM	13.4	B
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM	17.8	C
			PM	19.9	C
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM	10.8	B
			PM	11.4	B
11	Roth Rd/Harlan Rd	All-Way Stop	AM	19.0	C
			PM	24.7	C

#	Intersection	Control	Peak Hour <sup>1</sup>	Baseline Conditions	
				Delay <sup>2</sup>	LOS <sup>3</sup>
12	Dos Reis Rd/Ashley Dwy #1	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
14	Manthey Rd/Ashley Dwy #3	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
15	Manthey Rd/Ashley Dwy #4	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A

Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable LOS and Delay.

#### 4.2 INTERSECTION QUEUING – BASELINE CONDITIONS

Under this scenario, simulation showed queue spillback at five of the eight intersections studied, during one or both peak hours. Queue lengths exceeded the available storage at Lathrop Road/Harlan Road (Intersection #1), Lathrop Road-Spartan Way/I-5 Southbound Ramps (Intersection #3), Spartan Way/Golden Valley Parkway (Intersection #4), Roth Road/I-5 Southbound Ramps (Intersection #9), and Roth Road/Harlan Road (Intersection #11). At Intersections #1, #4, and #9, this involved turning queues spilling back from the turn pockets into the turn lane taper and potentially adjacent through lane. At Intersections #3 and #11, the queues would extend into the upstream intersection. No queue spillbacks would affect the freeway mainline at either interchange.

**Table 9: Intersection Queuing – Baseline Conditions**

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Queue Length (ft.)
1	Lathrop Rd/Harlan Rd	Signal	Eastbound	Left	300	AM	230
				Left	240	PM	<b>351</b>
			Westbound	Left	240	AM	150
				Left	220	PM	<b>286</b>
			Southbound	Left	100	AM	<b>327</b>
PM	<b>277</b>						
2	Lathrop Rd/I-5 NB Ramps	Signal	Eastbound	Left	420*	AM	140
				Left	1600*	PM	205
			Northbound	L/Th/R	1600*	AM	426
				L/Th/R	1600*	PM	705
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	Westbound	Left	420*	AM	<b>484</b>
				Left	1520*	PM	235
			Southbound	L/Th/R	1520*	AM	270
				L/Th/R	1520*	PM	619
4	Spartan Way/Golden Valley Parkway	Signal	Eastbound	Left	305	AM	56
				Left	125	PM	112
				Right	125	AM	<b>155</b>
			Westbound	Left	470	PM	50
				Left	470	AM	92
PM	117						



#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Queue Length (ft.)
			Northbound	Left	1100*	AM	179
				Right			PM
			Southbound	Left	200	AM	68
				Right	200	PM	<b>296</b>
8	Manthey Rd/Roth Rd	One-Way Stop	Westbound	Left	195*	AM	49
				Right	195*	PM	49
			Eastbound	Left		AM	-
				Right		PM	8
9	Roth Rd/I-5 SB Ramps	One-Way Stop	Westbound	Left	370*	AM	34
				Right		PM	37
			Southbound	Left	520	AM	<b>673</b>
				Right		PM	<b>978</b>
			L/Th/R	1370*	AM	680	
					PM	990	
10	Roth Rd/I-5 NB Ramps	One-Way Stop	Eastbound	Left	370*	AM	118
				Right		PM	28
			Northbound	L/Th	1360*	AM	20
				Right	630	PM	39
					AM	266	
					PM	449	
11	Roth Rd/Harlan Rd	All-Way Stop	Eastbound	Left	100	AM	52
				Right		PM	65
			Northbound	Right	140*	AM	140
				Left		PM	<b>188</b>
					AM	43	
					PM	55	

Notes:

\* Indicates that available storage extends to upstream intersection or freeway mainline

- Indicates no queue reported by SimTraffic. Zero volume assigned.

**Bold** indicates that required storage exceeds existing storage.

### 4.3 FREEWAY MAINLINE LEVEL OF SERVICE – BASELINE CONDITIONS

To project the freeway volumes for Baseline Conditions, TJKM used the San Joaquin Council of Governments (SJCOG) Travel Demand Model to develop a.m. and p.m. peak hour growth rates along Interstate 5 in the project vicinity. The growth rates were applied to Existing mainline volumes to project Baseline Conditions. **Figure 7** illustrates the freeway mainline volumes for Baseline Conditions.

The results of the freeway mainline segments levels of service along Interstate 5 are summarized in **Table 8**. HCS7 freeway segment reports are attached in **Appendix E**. Under Baseline Conditions, all freeway mainline segments operate at LOS D or better during both peak hours.

**Table 10: Freeway Segment Level of Service Analysis – Baseline Conditions**

#	Segment Name	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS

---

---

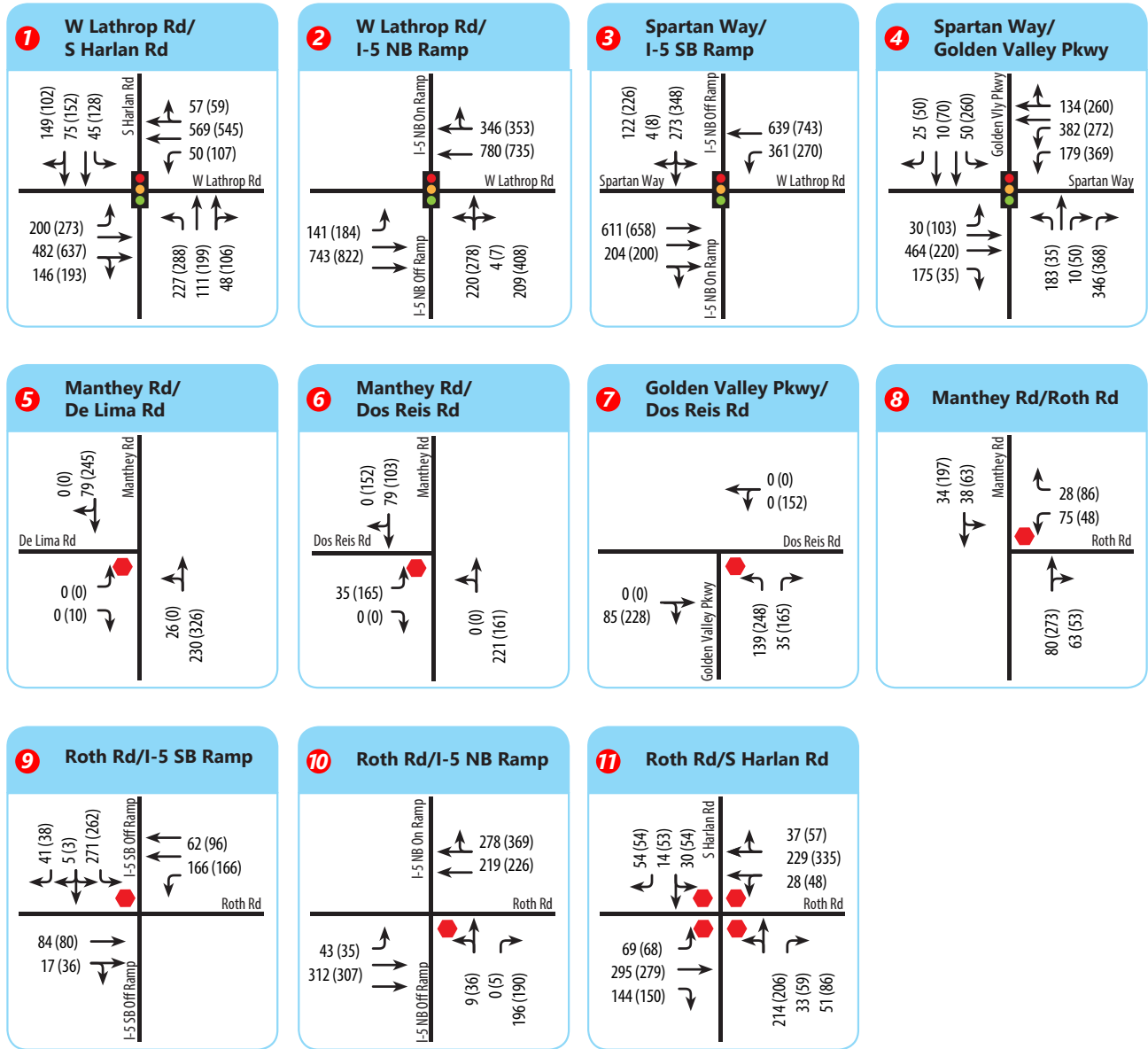
I-5 Northbound					
1	North of Roth Rd	25.3	C	27.3	D
2	Between Roth Rd and Lathrop Rd	25.0	C	28.2	D
3	South of Lathrop Rd	24.0	C	28.3	D

---

I-5 Southbound					
1	North of Roth Rd	26.5	D	26.6	D
2	Between Roth Rd and Lathrop Rd	25.1	C	24.4	C
3	South of Lathrop Rd	26.4	D	25.6	C

---

Figure 6: Baseline Conditions Lane Geometry, Traffic Controls, and Volumes

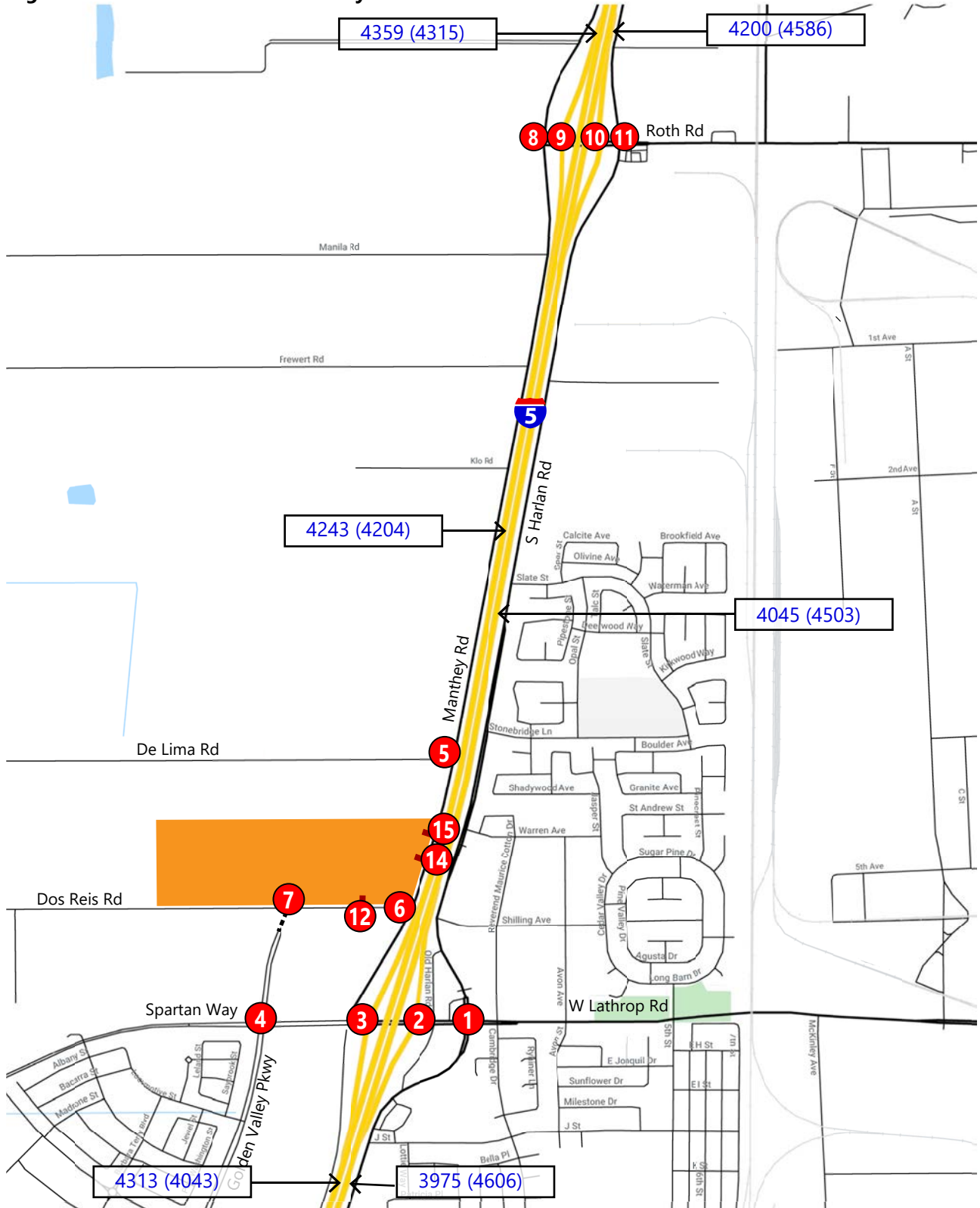


LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal



Figure 7: Baseline Conditions Freeway Mainline Volumes



LEGEND

- Project Site
- Project Driveway
- Future Road
- X Study Intersection
- xxxx AM Volume
- (xxxx) PM Volume



## 5.0 BASELINE PLUS PROJECT CONDITIONS

This section describes the operational impacts of the proposed project on the transportation system in the immediate project site vicinity. Baseline plus Project Conditions consist of baseline traffic volumes and roadway facilities, plus new traffic generated by the proposed project.

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process.

- Trip Generation – Estimates the amount of traffic added to the roadway network,
- Trip Distribution – Estimates the direction of travel to and from the project site,
- Trip Assignment – The new trips are assigned to specific street segments and intersection turning movements.

### 5.1 PROJECT TRIP GENERATION

To determine the amount of peak hour and daily trips generated by the Ashley Furniture Homestore, 24 hour driveway counts were conducted at an existing Ashley Furniture facility located at 18290 S. Harlan Road in Lathrop. The two driveways are exclusively used by customers, employees, and delivery trucks of the Ashley furniture facility. **Appendix F** contains the traffic data collection sheets. **Tables 9** and **10** summarize the trips by passenger vehicles/heavy trucks and the inbound/outbound splits for the existing Ashley facility, respectively.

**Table 11: Driveway Counts Summary**

<i>Time Period</i>	<i>Cars</i>			<i>Heavy Trucks</i>		
	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
AM Peak Hour	43	28	71	5	28	33
PM Peak Hour	38	51	89	11	5	16
Daily	488	491	979	122	116	238

**Table 12: Driveway Inbound/Outbound Splits**

<i>Time Period</i>	<i>Cars</i>		<i>Trucks</i>	
	<i>In</i>	<i>Out</i>	<i>In</i>	<i>Out</i>
AM Peak Hour	61%	39%	15%	85%
PM Peak Hour	43%	57%	69%	31%
Daily	50%	50%	51%	49%

The approximate square footage of the existing Ashley facility is 525,000 square foot. With this information and data collection, approximate trip rates were developed for passenger vehicles and heavy trucks. **Table 11** summarizes the daily, a.m. peak hour, and p.m. peak hour trip rates for passenger vehicles. **Table 12** summarizes the daily a.m. peak hour, and p.m. peak hour trip rates for heavy trucks.

**Table 13: Passenger Vehicle Trip Rates**

<i>Time Period</i>	<i>Rate (Trips/1000 s.f.)</i>
Daily Passenger Vehicles	1.865
AM Peak Hour Passenger Vehicles	0.135
PM Peak Hour Passenger Vehicles	0.170

**Table 14: Heavy Vehicle Trip Rates**

<i>Time Period</i>	<i>Rate (Trips/1000 s.f.)</i>
Daily Heavy Trucks	0.453
AM Peak Hour Heavy Trucks	0.063
PM Peak Hour Heavy Trucks	0.030

The proposed Ashley Furniture is projected to generate 2,798 daily passenger vehicles, 203 a.m. peak hour passenger vehicles, and 255 p.m. peak hour passenger vehicles. The proposed Ashley Furniture is projected to generate 680 daily heavy trucks, 95 a.m. peak hour trucks, and 45 p.m. peak hour trucks. It should be noted that the current plan is to restrict heavy truck operations by requiring trucks to use the Roth Road interchange at all times. **Table 13** and **Table 14** summarizes the trip generation for passenger vehicles and heavy trucks, respectively.

**Table 15: Project Trip Generation for Passenger Vehicles**

	Size	Daily		A.M. Peak				P.M. Peak					
		Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
<b>Proposed Uses</b>													
Ashley Furniture	1,500 ksf	1.87	2,798	0.135	61:39	124	79	203	0.170	43:57	110	145	255
<b>Net Trips</b>			<b>2,798</b>			<b>124</b>	<b>79</b>	<b>203</b>			<b>110</b>	<b>145</b>	<b>255</b>

**Table 16: Project Trip Generation for Heavy Trucks**

Land Use	Size	Daily		A.M. Peak				P.M. Peak					
		Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
<b>Proposed Uses</b>													
Ashley Furniture	1,500 ksf	0.453	680	0.063	15:85	14	81	95	0.030	69:31	31	14	45
<b>Net Trips</b>			<b>680</b>			<b>14</b>	<b>81</b>	<b>95</b>			<b>31</b>	<b>14</b>	<b>45</b>

## 5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution is a process of developing study assumptions that estimates the direction vehicular trips will arrive and depart the study site. Trip assignment estimates specific streets and turning movements at study intersections for project-related or site traffic. Trip distribution assumptions for the proposed project are developed based existing travel patterns and knowledge of the study area. **Figure 8** and **Figure 9** illustrate the trip distribution and trip assignment for passenger vehicles, respectively. **Figure 10** and **Figure 11** illustrate the trip distribution and trip assignment for heavy trucks, respectively.

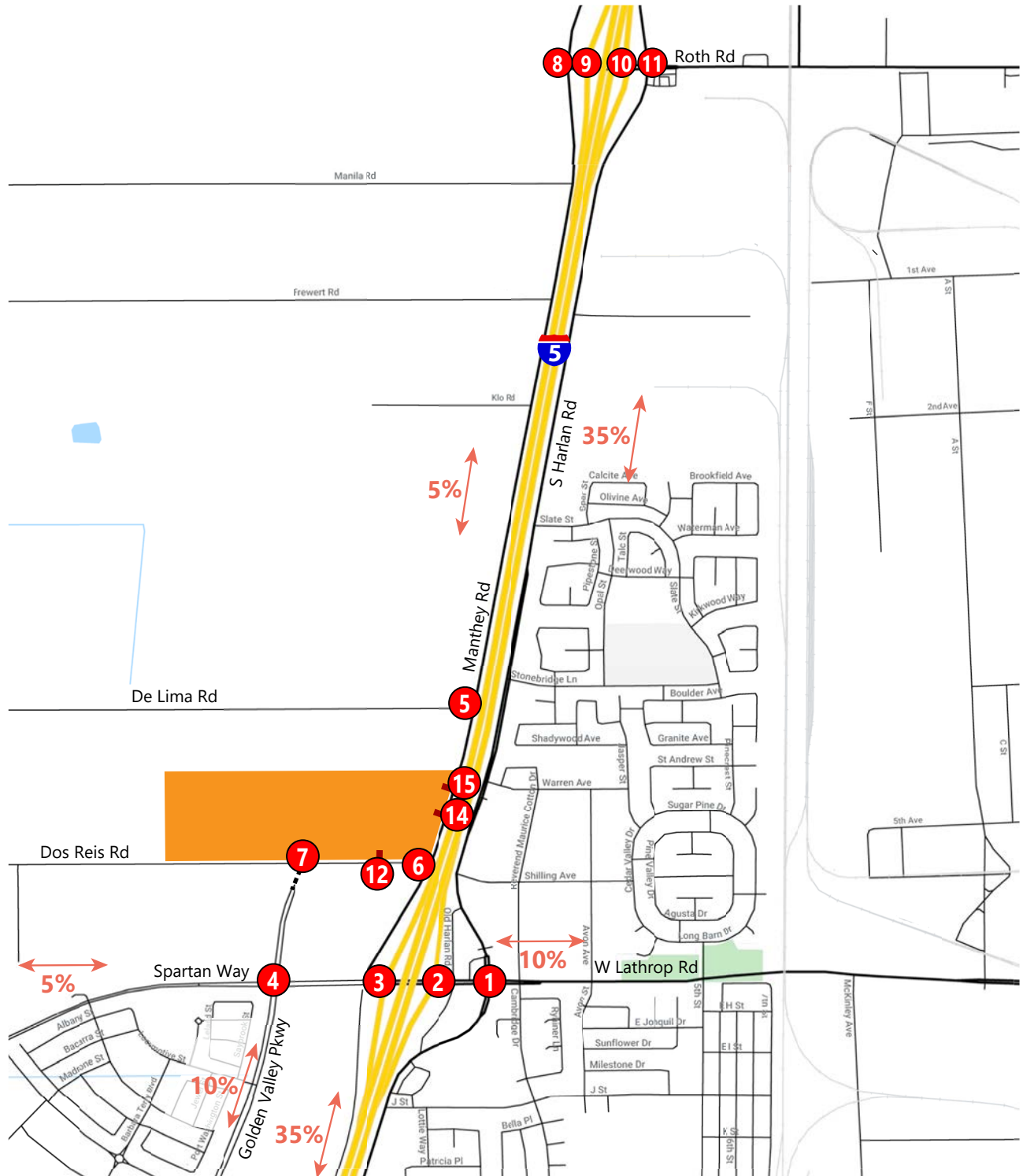
Trip distribution for passenger vehicles is as follows:

- 35 percent to/from Interstate 5, south of Lathrop Road;
- 35 percent to/from Interstate 5 north of Lathrop Road;
- 10 percent to/from Lathrop Road, east of Interstate 5;
- 10 percent to/from Golden Valley Parkway, south of Spartan Way;
- 5 percent to/from Spartan Way, west of Golden Valley Parkway; and
- 5 percent to/from Manthey Road, north of project site.

Trip distribution for heavy trucks is as follows:

- 45 percent to/from Interstate 5, north of Roth Road;
- 45 percent to/from Interstate 5, south of Roth Road; and
- 10 percent to/from Roth Road, east of Interstate 5.

Figure 8: Passenger Vehicle Project Trip Distribution



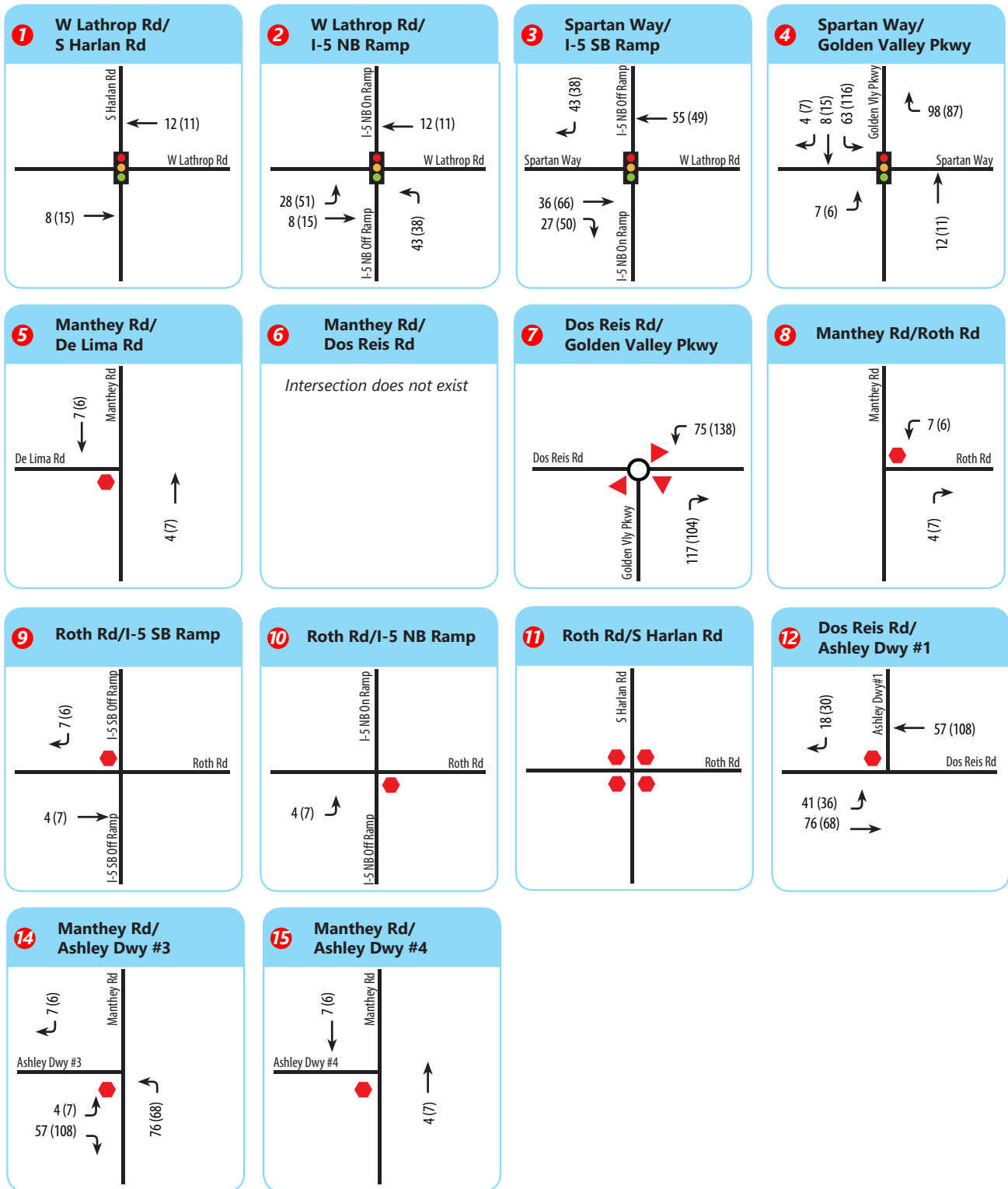
LEGEND

- Project Site
- Project Driveway
- Study Intersection
- Future Road
- XX%** Trip Distribution





Figure 9: Passenger Vehicle Trip Assignment



LEGEND

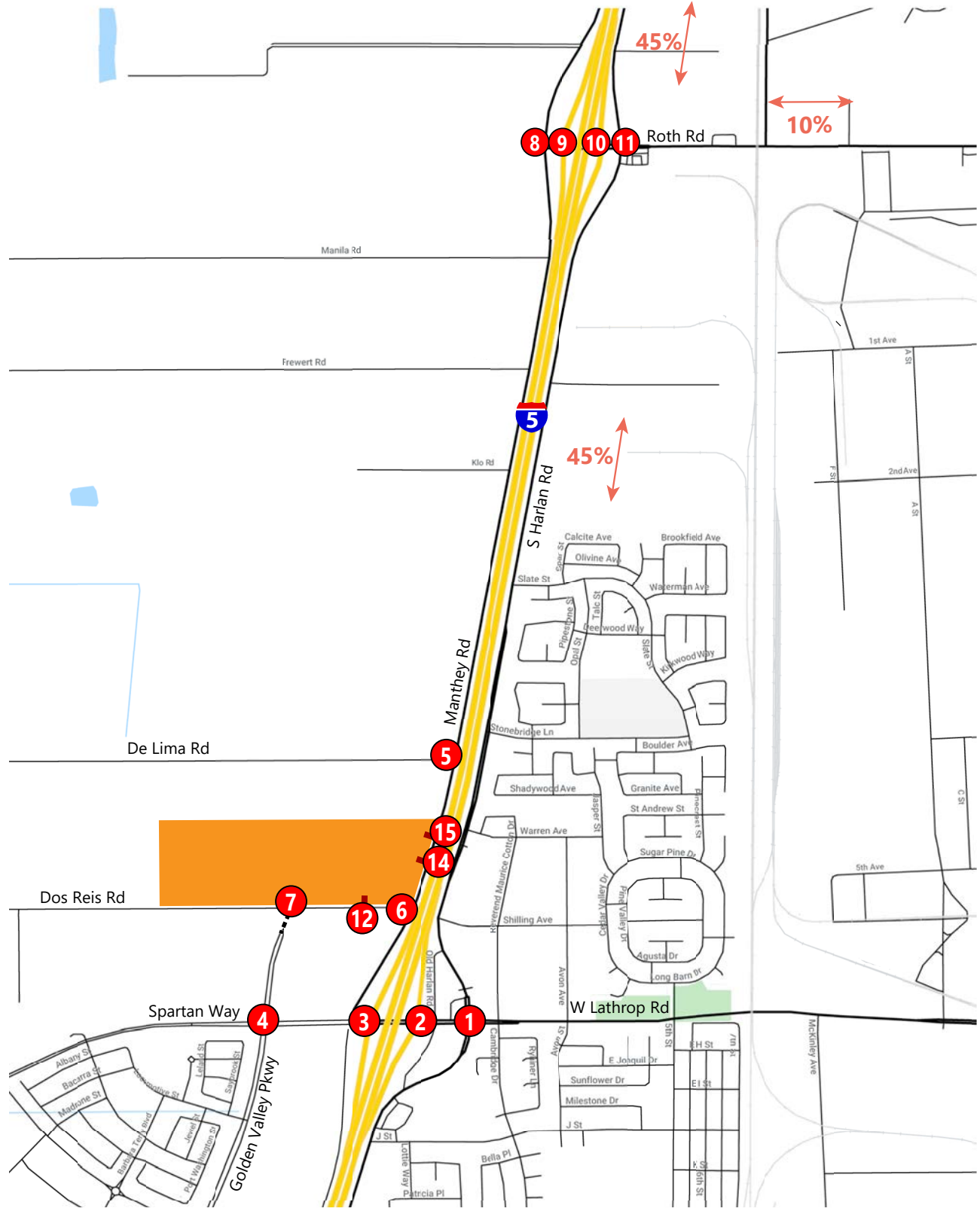
xx AM Peak Hour Volume  
 (xx) PM Peak Hour Volume

● Stop Sign  
 ● Traffic Signal

▼ Yield Sign



Figure 10: Heavy Vehicle Project Trip Distribution

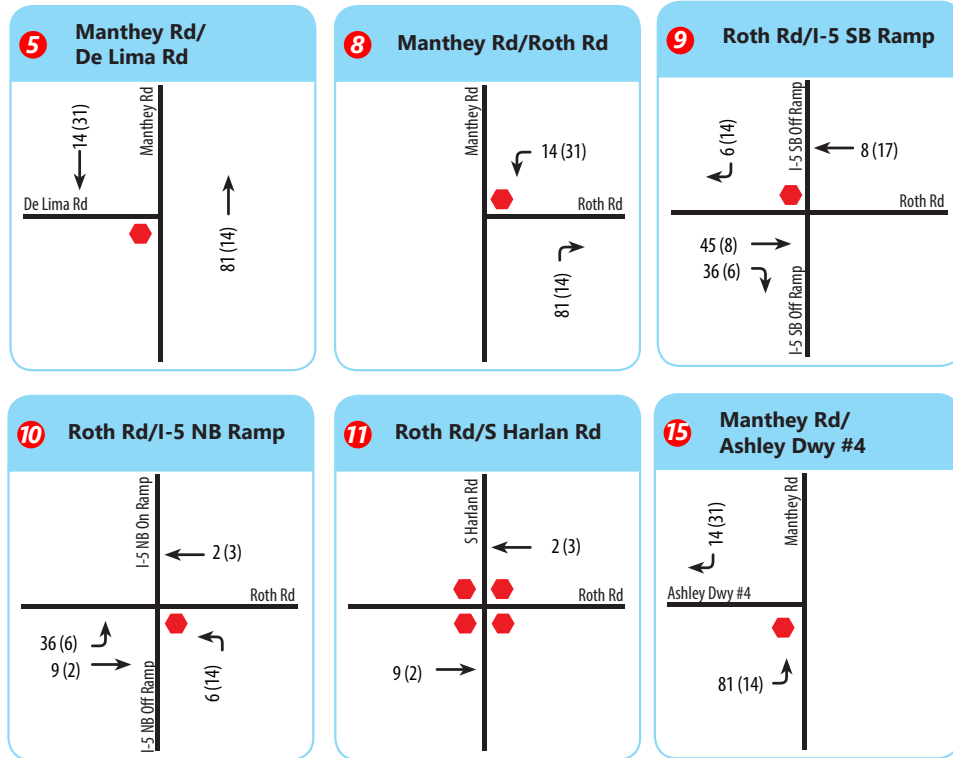


LEGEND

- Project Site
- Project Driveway
- Study Intersection
- Future Road
- XX% Trip Distribution



Figure 11: Heavy Vehicle Trip Assignment



LEGEND

xx AM Peak Hour Volume  
 (xx) PM Peak Hour Volume

⬮ Stop Sign  
 🚦 Traffic Signal



### 5.3 INTERSECTION LEVEL OF SERVICE ANALYSIS – BASELINE PLUS PROJECT CONDITIONS

The intersection level of service analysis results for Baseline plus Project Conditions are summarized in **Table 15**. The results for Baseline Conditions are included for comparison purposes. Detailed calculation sheets for Baseline Plus Project Conditions are contained in **Appendix G. Figure 12** displays projected peak hour turning movement volumes at all of the study intersections for Baseline plus Project Conditions.

Under this scenario, all but three of the study intersections would continue to operate at acceptable service levels (LOS D or better) during the a.m. and p.m. peak hour. The following intersection already operates at unacceptable level of service without the addition of project traffic.

- Lathrop Rd/I-5 NB Ramps (Intersection #2) degrades to LOS F in the p.m. peak hour, with an increase in average delay of 19.1 seconds.

The following two intersections would degrade from acceptable to unacceptable level of service with the addition of project traffic:

- Lathrop Rd-Spartan Way/I-5 SB Ramps (Intersection #3) would degrade from LOS D to LOS E in the a.m. and p.m. peak hour, a *substantial degradation*.
- Spartan Way/Golden Valley Pkwy (Intersection #4) would degrade from LOS C to LOS E in the a.m. peak hour and LOS D to LOS F in the p.m. peak hour, a *substantial degradation*.

At the three intersections listed above, added project traffic would either degrade the level of service from acceptable to unacceptable, or increase average delay by more than 5.0 seconds, constituting *inconsistencies* with the City of Lathrop standards.

**Table 17: Intersection Level of Service Analysis – Baseline plus Project Conditions**

#	Study Intersections	Control	Peak Hour <sup>1</sup>	Baseline Conditions		Baseline Plus Project Conditions	
				Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	32.5	C	32.8	C
			PM	53.5	D	54.1	D
2	Lathrop Rd/I-5 NB Ramps <i>Improvement: widen off-ramp</i>	Signal	AM	40.4	D	53.1	D
			PM	<b>70.4</b>	<b>E</b>	<b>89.5</b>	<b>F</b>
		Signal	AM			20.2	C
			PM			34.8	C
3	Lathrop Rd-Spartan Way/I-5 SB Ramps <i>Improvement: signal timing adjustments</i>	Signal	AM	48.3	D	<b>60.5</b>	<b>E</b>
			PM	44.3	D	<b>55.3</b>	<b>E</b>
		Signal	AM			54.5	D
			PM			54.9	D
4	Spartan Way/Golden Valley Parkway <i>Improvement: restriping</i>	Signal	AM	31.0	C	<b>70.2</b>	<b>E</b>
			PM	37.8	D	<b>172.7</b>	<b>F</b>
		Signal	AM			48.5	D
			PM			52.9	D
5	Manthey Rd/De Lima Rd	One-Way Stop	AM	0.0	A	0.0	A
			PM	9.7	A	10.0	B
6	Manthey Rd/Dos Reis Rd	One-Way Stop /Does not Exist with Project	AM	10.7	B	N/A	N/A
			PM	13.0	B	N/A	N/A
7	Golden Valley Rd/Dos Reis Rd	One-Way Stop/Roundabout	AM	9.3	A	2.0	A
			PM	16.3	C	4.6	A
8	Manthey Rd/Roth Rd	One-Way Stop	AM	11.1	B	12.8	B
			PM	13.4	B	17.2	C
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM	17.8	C	19.2	C
			PM	19.9	C	20.6	C
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM	10.8	B	11.4	B
			PM	11.4	B	12.1	B
11	Roth Rd/Harlan Rd	All-Way Stop	AM	19.0	C	19.6	C
			PM	24.7	C	25.0	C
12	Dos Reis Rd/Ashley Dwy #1	One-Way Stop	AM	N/A	N/A	9.1	A
			PM	N/A	N/A	10.8	B
14	Manthey Rd/Ashley Dwy #3	One-Way Stop	AM	N/A	N/A	9.3	A
			PM	N/A	N/A	11.2	B
15	Manthey Rd/Ashley Dwy #4	One-Way Stop	AM	N/A	N/A	14.5	B
			PM	N/A	N/A	17.4	C

Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable Level of Service.

### **5.3.1 Baseline plus Project Recommended Improvements**

The City of Lathrop is in the process of planning the improvement of the Lathrop Road/I-5 Interchange by widening Lathrop Road to three lanes in each direction, constructing new southbound loop on-ramps, and widening off-ramps with new signalized intersections. This major improvement project is not funded or scheduled at this time, although it is included in the current Capital Improvement Plan (CIP). The Ashley project is expected to fund its fair share of the project by payment of local and regional development fees, as discussed further in Section 7.1.1, consistent with the City of Lathrop General Plan and the City's efforts to achieve an acceptable level of service at the Lathrop Road/I-5 Interchange.

While the Lathrop Road Interchange project can be considered a cumulative improvement, the City of Lathrop is considering widening the northbound off-ramp to provide an additional turn lane as an interim measure as of the 2022 Transportation Monitoring Plan (TMP). For the Lathrop Road/I-5 NB Ramps, the addition of a separate right-turn lane for the off-ramp and signal timing optimization will improve the intersection operation to LOS C in the a.m. and p.m. peak hours, which is consistent with the City of Lathrop General Plan. Based on 95<sup>th</sup> percentile queue lengths, the new lane should provide at least 400 ft. of storage.

In order to assess the feasibility of widening the northbound off-ramp as proposed, TJKM reviewed the future configuration of the Lathrop Road interchange as shown in the current CIP. Based on the CIP, it appears that although the southbound ramps would be repositioned and reconfigured, the northbound off-ramp would only be widened. It may be possible to construct an interim widening of this ramp, as proposed here and in the TMP, while remaining consistent with the ultimate configuration.

For the Lathrop Road/I-5 SB Ramps, signal timing adjustments will improve the intersection operation to LOS D in the a.m. and p.m. peak hour, which is consistent with the City of Lathrop General Plan and the City's efforts to achieve an acceptable level of service at the Lathrop Road/I-5 Interchange. Widening is not necessary for Baseline plus Project Conditions at the southbound off-ramp, although it is recommended in the 2022 TMP.

For Spartan Way/Golden Valley Parkway, the following lane geometry is recommended:

- NB approach: one left-turn lane, one through lane, two right-turn lanes.
- SB approach: two left-turn lanes, two through lanes, one right-turn lane.
- EB approach: one left-turn lane, two through lanes, one right-turn lane.
- WB approach: two left-turn lanes, two through lanes, one right-turn lane.

These changes can be accomplished through restriping existing pavement. Also, optimizing the signal timings at the intersection is projected to improve operations to LOS D in the a.m. and p.m. peak hours, with a delay of 48.5 seconds and 52.9 seconds, respectively, which is consistent with the City of Lathrop General Plan. The intersection LOS sheets with recommendations are included in **Appendix G**.

5.4 INTERSECTION QUEUING – BASELINE PLUS PROJECT CONDITIONS

Under this scenario, simulation showed queue spillback at five of the eight intersections studied, during one or both peak hours. Queue lengths exceeded the available storage at Lathrop Road/Harlan Road (Intersection #1), Lathrop Road-Spartan Way/I-5 Southbound Ramps (Intersection #3), Spartan Way/Golden Valley Parkway (Intersection #4), Roth Road/I-5 Southbound Ramps (Intersection #9), and Roth Road/Harlan Road (Intersection #11). At Intersections #1, #4, and #9, this involved turning queues spilling back from the turn pockets into the turn lane taper and potentially adjacent through lane. At Intersections #3 and 11, the queues would extend into the upstream intersection. The proposed project (with mitigations) would not generate any new queue spillbacks, although it does add to some spillbacks present under Baseline Conditions. No queue spillbacks would affect the freeway mainline at either interchange.

**Table 18: Intersection Queuing – Baseline plus Project Conditions with Mitigations**

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Baseline Queue Length (ft.)	Baseline plus Project Queue Length (ft.)	
1	Lathrop Rd/Harlan Rd	Signal	Eastbound	Left	300	AM	230	245	
							PM	<b>351</b>	<b>306</b>
				Westbound	Left	240	AM	150	125
							PM	<b>286</b>	210
			Northbound	Left	220	AM	<b>327</b>	<b>308</b>	
							PM	<b>277</b>	<b>328</b>
				Southbound	Left	100	AM	74	67
								PM	<b>126</b>
2	Lathrop Rd/I-5 NB Ramps	Signal	Eastbound	Left	420*	AM	140	204	
							PM	205	191
			Northbound	L/Th/R	1600*	AM	426	223	
				Mit.: L/Th		PM	705	260	
				Mit: Right		AM	-	102	
							PM	-	179
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	Westbound	Left	420*	AM	<b>484</b>	<b>512</b>	
							PM	235	255
			Southbound	L/Th/R	1520*	AM	270	327	
							PM	619	855
4	Spartan Way/Golden Valley Parkway	Signal	Eastbound	Left	305	AM	56	300	
							PM	112	241
				Right	125	AM	<b>155</b>	<b>157</b>	
							PM	50	44
			Westbound	Left	470	AM	92	127	
							PM	117	145
			Northbound	Left	1100*	AM	179	310	
							PM	57	64
			Southbound	Left	200	AM	68	191	
							PM	<b>296</b>	<b>251</b>
Right		200		AM	35	46			
					PM	41	46		
8	Manthey Rd/Roth Rd	One-Way Stop	Westbound	Left	195*	AM	49	69	
							PM	49	103
			Right			AM	-	-	
							PM	8	18

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Baseline Queue Length (ft.)	Baseline plus Project Queue Length (ft.)
9	Roth Rd/I-5 SB Ramps	One-Way Stop	Westbound	Left	370*	AM	34	53
				PM	37	41		
			Southbound	Left	520	AM	<b>673</b>	<b>1026</b>
				L/Th/R	1370*	PM	<b>978</b>	<b>886</b>
10	Roth Rd/I-5 NB Ramps	One-Way Stop	Eastbound	Left	370*	AM	118	319
				PM	28	33		
			Northbound	L/Th	1360*	AM	20	41
				Right	630	PM	39	65
			Eastbound	Left	100	AM	52	63
				Right	140*	PM	65	64
Northbound	Right	100	AM	140	86			
	PM	43	59	37	53			

Notes:

\* Indicates that available storage extends to upstream intersection or freeway mainline

- Indicates no queue reported by SimTraffic. Zero volume assigned.

**Bold** indicates that required storage exceeds existing storage.

### 5.5 FREEWAY MAINLINE LEVEL OF SERVICE – BASELINE PLUS PROJECT CONDITIONS

The results of the freeway mainline segments level of service along Interstate 5 is summarized in **Table 16**. HCS7 freeway segment reports are attached in **Appendix H. Figure 13** illustrates the Baseline plus Project freeway mainline volumes. Under Baseline plus Project Conditions, all freeway mainline segments operate at LOS D or better during both peak hours.

**Table 19: Freeway Segment Level of Service Analysis – Baseline plus Project Conditions**

#	Segment Name	Baseline Conditions				Baseline plus Project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-5 Northbound									
1	North of Roth Rd	24.4	C	26.6	D	25.8	C	27.8	D
2	Between Roth Rd and Lathrop Rd	24.0	C	27.5	D	25.2	C	28.8	D
3	South of Lathrop Rd	23.1	C	27.5	D	24.3	C	28.7	D
I-5 Southbound									
1	North of Roth Rd	25.4	C	25.9	C	26.8	D	26.9	D



**Ashley Furniture Traffic Impact Analysis**

---

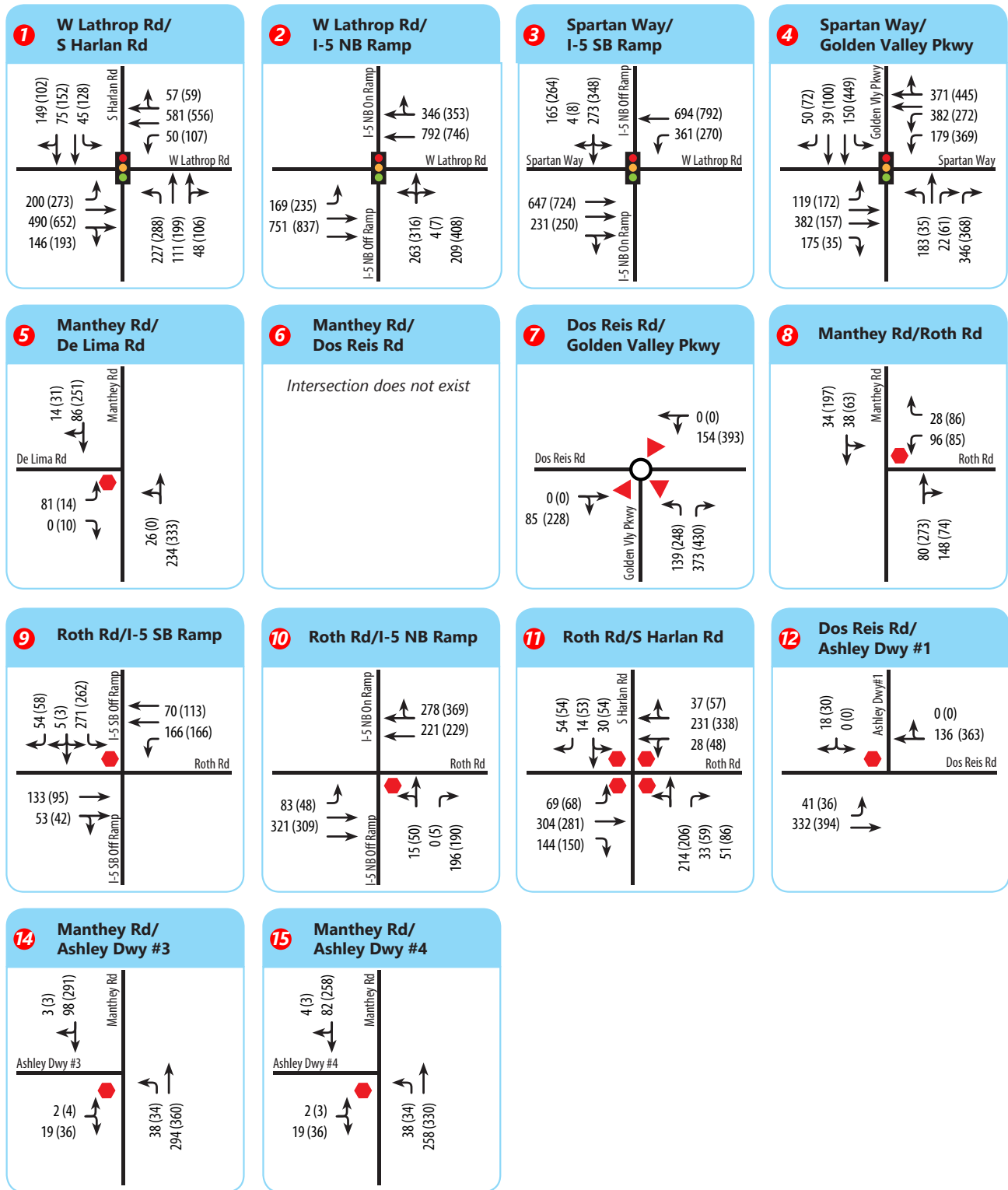
---

2	Between Roth Rd and Lathrop Rd	24.2	C	23.8	C	25.7	C	24.7	C
3	South of Lathrop Rd	25.4	C	24.9	C	26.9	D	26.0	C

---

---

Figure 12: Baseline Plus Project Lane Geometry, Traffic Controls, and Volumes

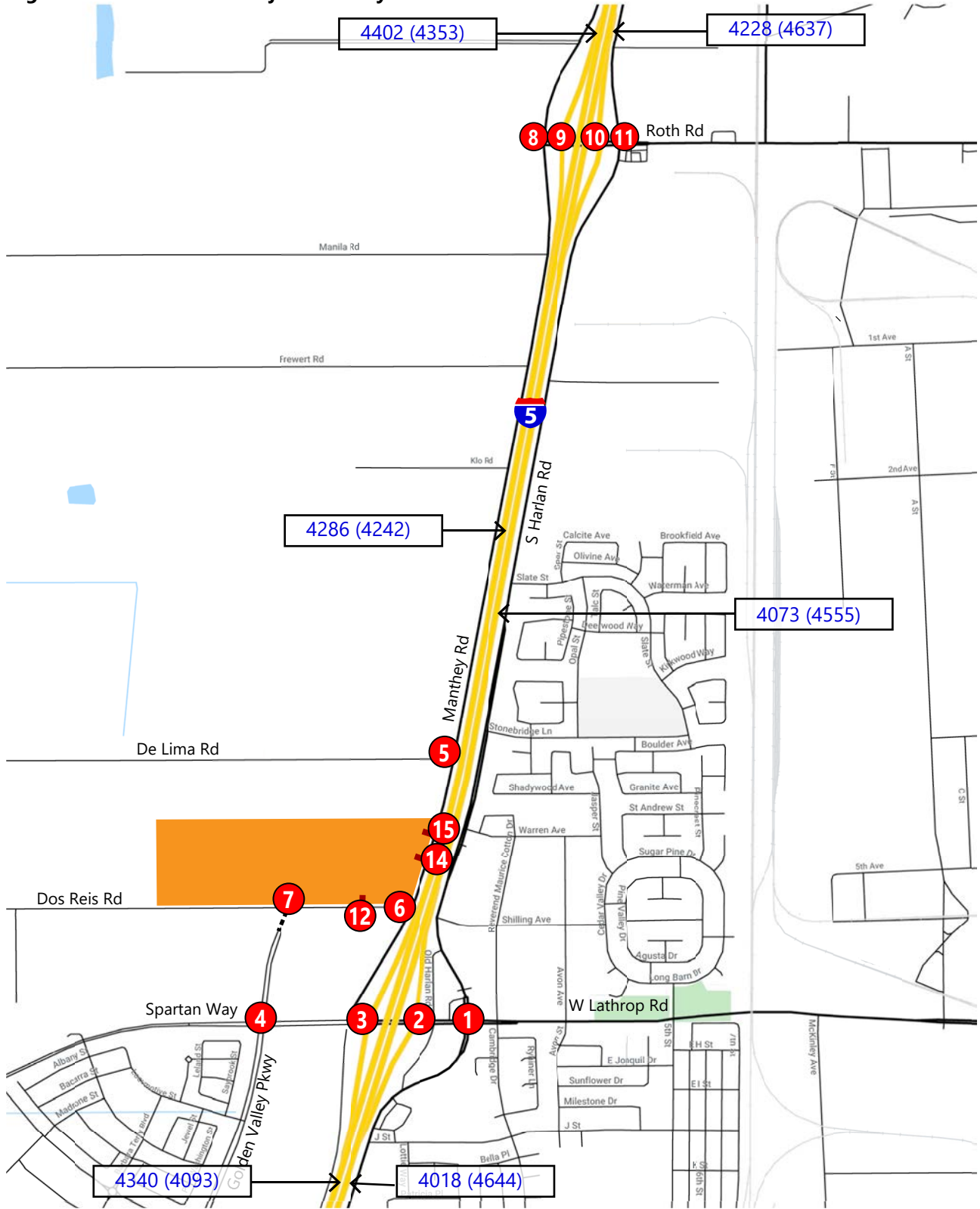


LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal
- ▼ Yield Sign



Figure 13: Baseline Plus Project Freeway Mainline Volumes



LEGEND

- Project Site
- Project Driveway
- Future Road
- x Study Intersection
- xxxx AM Volume
- (xxxx) PM Volume



## 6.0 CUMULATIVE CONDITIONS

This section presents the results of the level of service calculations under Cumulative Conditions without the project. Cumulative plus Project Conditions traffic volumes were modeled by Fehr & Peers as part of the *Roth Road Improvement Study*, currently in progress, in coordination with City of Lathrop staff. The volumes from the *Roth Road Improvement Study* accounted for future conditions with the construction of the Ashley project. As such, Project trips were deducted to estimate Cumulative (no project) Conditions. Cumulative Conditions represent estimated 2040 traffic volumes. Although improvements are planned on Roth Road and Lathrop Road, for the purposes of this analysis, lane geometry, traffic controls, and other parameters are identical to Baseline Conditions. A peak hour factor of 1.0 is assumed for all intersections.

### 6.1 INTERSECTION LEVEL OF SERVICE ANALYSIS – CUMULATIVE CONDITIONS

The intersection LOS analysis results for Cumulative Conditions are summarized in **Table 17**. Detailed calculation sheets for Baseline Conditions are contained in **Appendix I**. **Figure 14** displays projected peak hour turning movement volumes at all of the study intersections for Cumulative Conditions.

Under this scenario, seven of the study intersections are projected to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours.

Table 20: Intersection Level of Service – Baseline Conditions

#	Intersection	Control	Peak Hour <sup>1</sup>	Cumulative Conditions Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	45.6	D
			PM	48.1	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	<b>135.5</b>	<b>F</b>
			PM	<b>160.1</b>	<b>F</b>
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	<b>170.3</b>	<b>F</b>
			PM	<b>206.2</b>	<b>F</b>
4	Spartan Way/Golden Valley Parkway	Signal	AM	<b>382.4</b>	<b>F</b>
			PM	<b>643.7</b>	<b>F</b>
5	Manthey Rd/De Lima Rd	One-Way	AM	8.8	A
		Stop	PM	9.4	A
6	Manthey Rd/Dos Reis Rd	One-Way	AM	8.6	A
		Stop	PM	9.3	A
7	Golden Valley Rd/Dos Reis Rd	-	AM	10.4	B
			PM	10.2	B
8	Manthey Rd/Roth Rd	One-Way	AM	19.1	C
		Stop	PM	<b>102.7</b>	<b>F</b>
9	Roth Rd/I-5 SB Ramps	One-Way	AM	<b>528.2</b>	<b>F</b>
		Stop	PM	<b>890.1</b>	<b>F</b>
10	Roth Rd/I-5 NB Ramps	One-Way	AM	28.6	D
		Stop	PM	<b>229.9</b>	<b>F</b>
11	Roth Rd/Harlan Rd	All-Way	AM	<b>127.3</b>	<b>F</b>
		Stop	PM	<b>365.3</b>	<b>F</b>
12	Dos Reis Rd/Ashley Dwy #1	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
14	Manthey Rd/Ashley Dwy #3	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A
15	Manthey Rd/Ashley Dwy #4	One-Way	AM	N/A	N/A
		Stop	PM	N/A	N/A

Notes:

1. AM – morning peak hour, PM – evening peak hour

2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.

3. LOS – Level of Service. **Bold** indicates unacceptable LOS and Delay.

## 6.2 INTERSECTION QUEUING – CUMULATIVE CONDITIONS

Under this scenario, simulation showed queue spillback at six of the eight intersections studied, during one or both peak hours. Queue lengths exceeded the available storage at Lathrop Road/Harlan Road (Intersection #1), Lathrop Road/I-5 Northbound Ramps (Intersection #2), Lathrop Road-Spartan Way/I-5 Southbound Ramps (Intersection #3), Spartan Way/Golden Valley Parkway (Intersection #4), Roth Road/I-5 Southbound Ramps (Intersection #9), and Roth Road/Harlan Road (Intersection #11). At Intersections #1, #4, and #9, this involved turning queues spilling back from the turn pockets into the turn lane taper and potentially adjacent through lane. At Intersections #2, #3 and #11, the queues would extend into the upstream intersection. No queue spillbacks would affect the freeway mainline at either interchange.

It should be noted that both interchanges are planned for reconstruction before 2040, as discussed above, and as such these projected queuing conditions are unlikely to occur.

Table 21: Intersection Queuing – Existing Conditions

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Queue Length (ft.)
1	Lathrop Rd/Harlan Rd	Signal	Eastbound	Left	300	AM	247
				PM	<b>339</b>		
			Westbound	Left	240	AM	129
				PM	175		
			Northbound	Left	220	AM	<b>272</b>
PM	<b>266</b>						
Southbound	Left	100	AM	93			
	PM	<b>159</b>					
2	Lathrop Rd/I-5 NB Ramps	Signal	Eastbound	Left	420*	AM	<b>630</b>
				PM	<b>546</b>		
			Northbound	L/Th/R	1600*	AM	654
				PM	638		
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	Westbound	Left	420*	AM	<b>506</b>
				PM	269		
			Southbound	L/Th/R	1520*	AM	999
				PM	937		
4	Spartan Way/Golden Valley Parkway	Signal	Eastbound	Left	305	AM	-
				PM	-		
			Right	AM	<b>274</b>		
				PM	<b>274</b>		
			Westbound	Left	470	AM	<b>526</b>
				PM	<b>527</b>		
			Northbound	Left	1100*	AM	<b>1113</b>
				PM	1016		
Southbound	Left	200	AM	<b>281</b>			
	PM	<b>254</b>					
Right	AM	7					
	PM	-					
8	Manthey Rd/Roth Rd	One-Way Stop	Westbound	Left	195*	AM	72
				PM	145		
			Right	AM	-		
				PM	22		
9	Roth Rd/I-5 SB Ramps	One-Way Stop	Westbound	Left	370*	AM	<b>588</b>
				PM	312		
			Southbound	Left	520	AM	<b>787</b>
				PM	<b>778</b>		
			L/Th/R	1370*	AM	776	
PM	782						
10	Roth Rd/I-5 NB Ramps	One-Way Stop	Eastbound	Left	370*	AM	120
				PM	353		
			Northbound	L/Th	1360*	AM	735
				PM	470		
			Right	630	AM	33	
PM	319						
11	Roth Rd/Harlan Rd	All-Way Stop	Eastbound	Left	100	AM	74
				PM	<b>205</b>		
			Right	140*	AM	87	
PM	<b>331</b>						

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Queue Length (ft.)
			Northbound	Right	100	AM	41
						PM	91

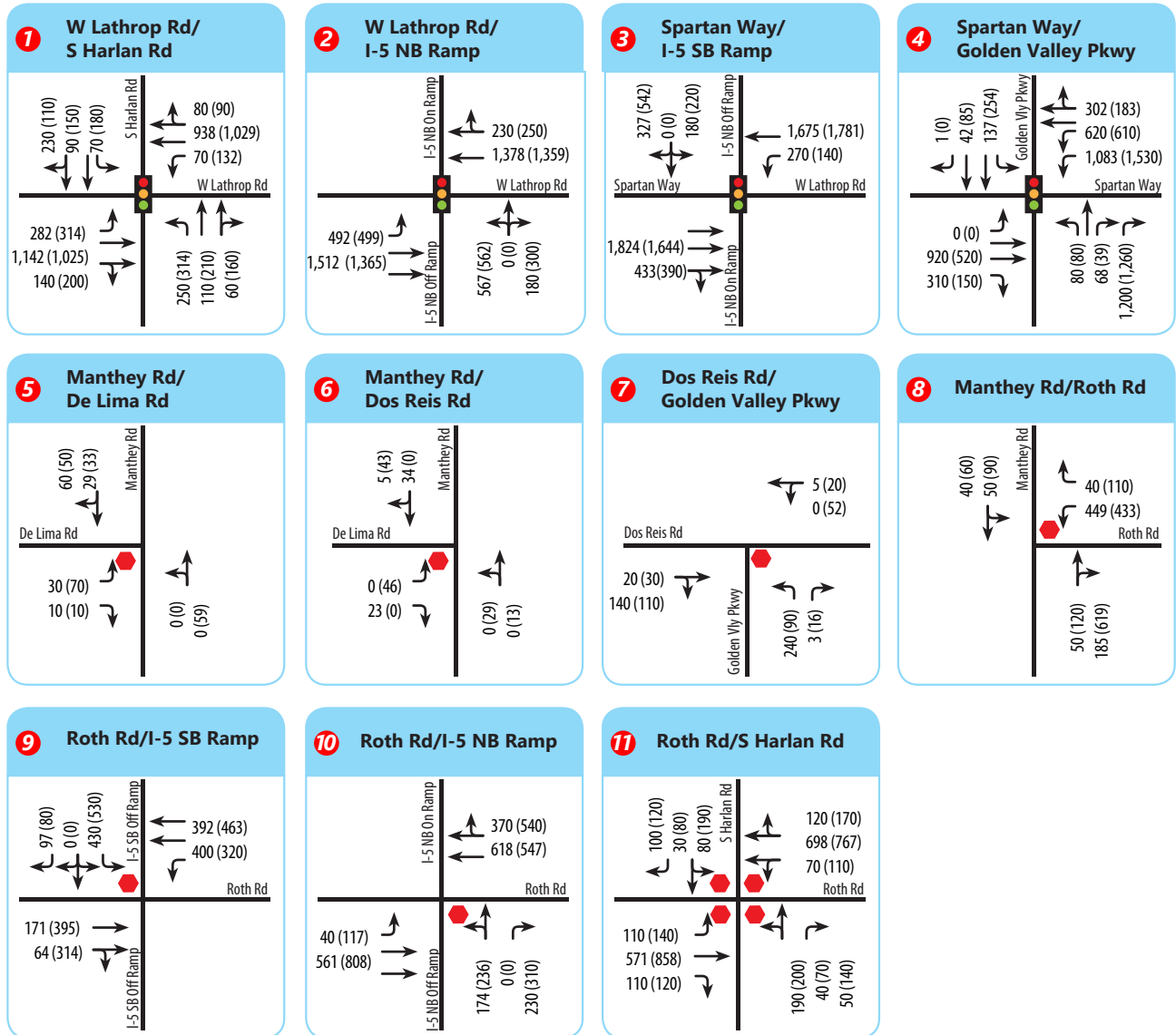
Notes:

\* Indicates that available storage extends to upstream intersection or freeway mainline

- Indicates no queue reported by SimTraffic. Zero volume assigned.

**Bold** indicates that required storage exceeds existing storage.

Figure 14: Cumulative Conditions, Lane Geometry, Traffic Controls, and Volumes



LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal





## 7.0 CUMULATIVE PLUS PROJECT CONDITIONS

This section presents the results of the level of service calculations under Cumulative Conditions. Cumulative plus Project Conditions traffic volumes were modeled by Fehr & Peers as part of the *Roth Road Improvement Study*, currently in progress, in coordination with City of Lathrop staff. Although improvements are planned on Roth Road and Lathrop Road, for the purposes of this analysis, lane geometry, traffic controls, and other parameters are identical to Baseline Conditions. A peak hour factor of 1.0 is assumed for all intersections.

### 7.1 INTERSECTION LEVEL OF SERVICE ANALYSIS – CUMULATIVE PLUS PROJECT CONDITIONS

The intersection level of service analysis results for Cumulative plus Project Conditions are summarized in **Table 18**. The results for Cumulative Conditions are included for comparison purposes. Detailed calculation sheets for Cumulative Plus Project Conditions are contained in **Appendix J. Figure 15** displays projected peak hour turning movement volumes at all of the study intersections for Cumulative plus Project Conditions.

Under this scenario, seven of the study intersections are projected to continue to operate below applicable jurisdictional standards during one or both peak hours. Three intersections at or near the Lathrop Road/I-5 interchange and four intersections at or near the Roth Road/I-5 interchange would operate at LOS F during one or both peak hours. The remaining intersections would operate within applicable standards during the a.m. and p.m. peak hours.

At the seven intersections operating below jurisdictional standards, added project traffic would either degrade the level of service from acceptable to unacceptable, or increase average delay by more than 5.0 seconds, constituting *inconsistencies* with the City of Lathrop standards.

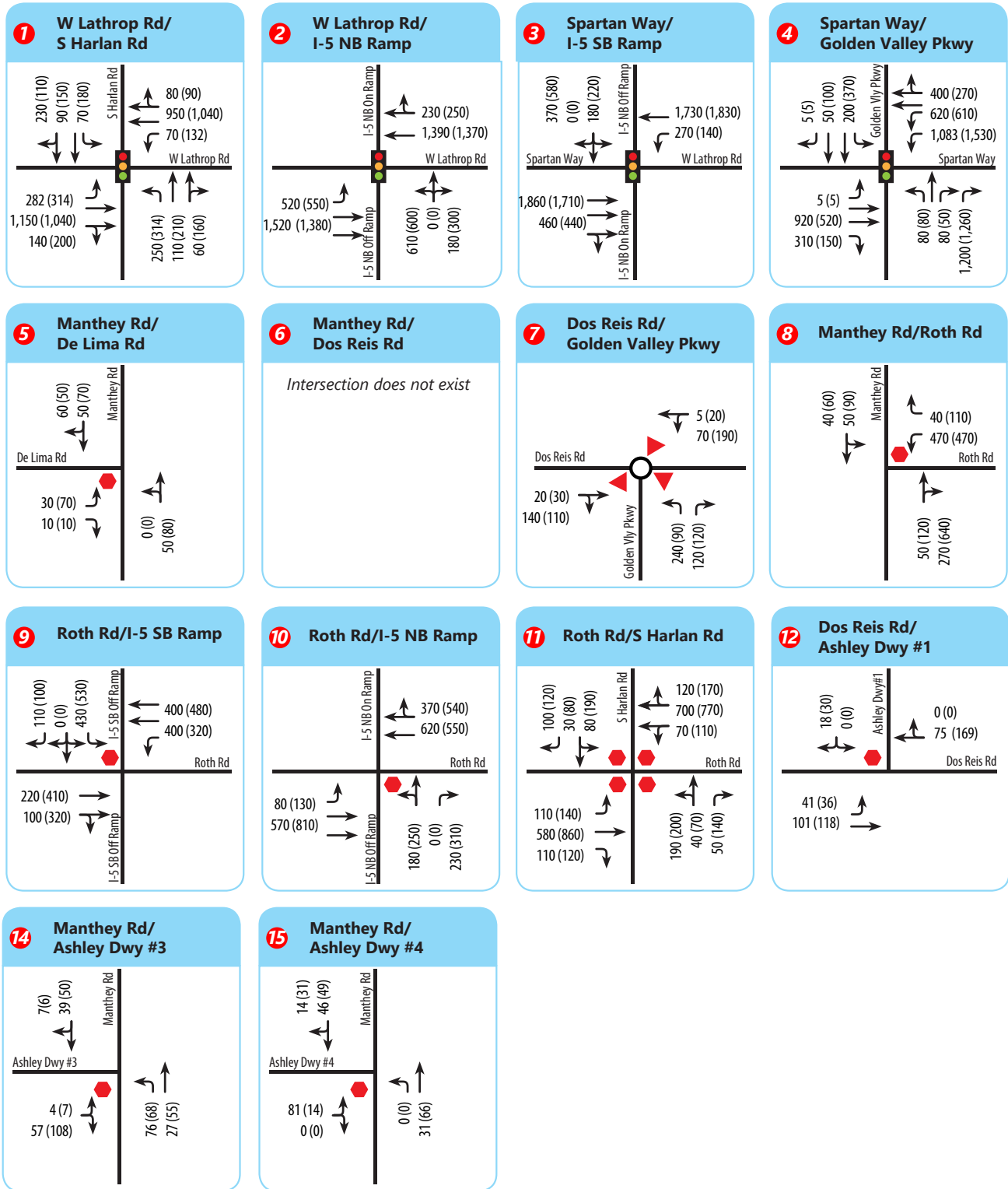
Table 22: Intersection Level of Service Analysis – Cumulative plus Project Conditions

#	Study Intersections	Control	Peak Hour <sup>1</sup>	Cumulative Conditions		Cumulative Plus Project Conditions	
				Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1	Lathrop Rd/Harlan Rd	Signal	AM	45.6	D	46.2	D
			PM	48.1	D	48.7	D
2	Lathrop Rd/I-5 NB Ramps	Signal	AM	<b>135.5</b>	<b>F</b>	<b>147.5</b>	<b>F</b>
			PM	<b>160.1</b>	<b>F</b>	<b>176.7</b>	<b>F</b>
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	AM	<b>170.3</b>	<b>F</b>	<b>207.1</b>	<b>F</b>
			PM	<b>206.2</b>	<b>F</b>	<b>226.7</b>	<b>F</b>
4	Spartan Way/Golden Valley Parkway	Signal	AM	<b>382.4</b>	<b>F</b>	<b>379.3</b>	<b>F</b>
			PM	<b>643.7</b>	<b>F</b>	<b>684.5</b>	<b>F</b>
5	Manthey Rd/De Lima Rd	One-Way Stop	AM	8.8	A	9.2	A
			PM	9.4	A	9.7	A
6	Manthey Rd/Dos Reis Rd	One-Way Stop /Does not Exist with Project	AM	8.6	A	N/A	N/A
			PM	9.3	A	N/A	N/A
7	Golden Valley Rd/Dos Reis Rd	One-Way Stop/Roundabout	AM	10.4	B	3.3	A
			PM	10.2	B	3.3	A
8	Manthey Rd/Roth Rd	One-Way Stop	AM	19.1	C	23.4	C
			PM	<b>102.7</b>	<b>F</b>	<b>148.6</b>	<b>F</b>
9	Roth Rd/I-5 SB Ramps	One-Way Stop	AM	<b>528.2</b>	<b>F</b>	<b>584.9</b>	<b>F</b>
			PM	<b>890.1</b>	<b>F</b>	<b>934.9</b>	<b>F</b>
10	Roth Rd/I-5 NB Ramps	One-Way Stop	AM	28.6	D	<b>52.2</b>	<b>F</b>
			PM	<b>229.9</b>	<b>F</b>	<b>310.4</b>	<b>F</b>
11	Roth Rd/Harlan Rd	All-Way Stop	AM	<b>127.3</b>	<b>F</b>	<b>130.9</b>	<b>F</b>
			PM	<b>365.3</b>	<b>F</b>	<b>367.1</b>	<b>F</b>
12	Dos Reis Rd/Ashley Dwy #1	One-Way Stop	AM	N/A	N/A	8.7	A
			PM	N/A	N/A	9.3	A
14	Manthey Rd/Ashley Dwy #3	One-Way Stop	AM	N/A	N/A	8.8	A
			PM	N/A	N/A	9.1	A
15	Manthey Rd/Ashley Dwy #4	One-Way Stop	AM	N/A	N/A	10.6	B
			PM	N/A	N/A	10.4	B

## Notes:

1. AM – morning peak hour, PM – evening peak hour
2. Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
3. LOS – Level of Service. **Bold** indicates unacceptable Level of Service.

Figure 15: Cumulative plus Project Lane Geometry, Traffic Controls, and Volumes



LEGEND

- xx AM Peak Hour Volume
- (xx) PM Peak Hour Volume
- Stop Sign
- Traffic Signal
- ▼ Yield Sign



**7.1.1 Fair Share Analysis**

The City of Lathrop is in the process of planning the improvement of both the Lathrop Road/I-5 Interchange and the Roth Road/I-5 Interchange. These interchange projects consist of Intersections #1-4 and 8-11, respectively.

At the direction of City of Lathrop staff, a fair share analysis was conducted for impacted intersections and intersections that are part of both interchange projects. “Fair Share” is defined as the percent contribution of project traffic to the growth from Existing Conditions to Cumulative plus Project Conditions. **Table 19** shows the fair share for a.m. plus p.m. peak hour volumes at these eight intersections. As it is expected that interchange improvements will be identified and funded prior to 2040, no interim improvement measures are recommended at those locations for this scenario.

At the Lathrop Road/I-5 interchange, individual intersection fair share percentages range from one percent to six percent (5.1 percent overall). At the Roth Road/I-5 interchange, individual intersection fair share percentages range from one percent to nine percent (4.5 percent overall).

The Ashley project is expected to fund its fair share of the interchange project costs by payment of local and regional development fees, consistent with the City of Lathrop General Plan policies and the City’s efforts to achieve an acceptable level of service.

**Table 23: Fair Share Analysis**

#	Study Intersections	Existing A	Project Trips B	Cumulative plus Project C	Cumulative Growth D = C-A	Fair Share B/D
1	Lathrop Rd/ Harlan Rd	4,525	46	7,422	2,897	1.6%
2	Lathrop Rd/ I-5 NB Ramps	4,488	206	8,900	4,412	4.7%
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	3,620	364	9,790	6,170	5.9%
4	Spartan Way/Golden Valley Parkway	2,645	434	9,903	7,258	6.0%
<b>Lathrop Rd/I-5 Interchange (Total)</b>		<b>15,278</b>	<b>1,050</b>	<b>36,015</b>	<b>20,737</b>	<b>5.1%</b>
8	Manthey Rd/ Roth Rd	680	164	2,410	1,730	9.5%
9	Roth Rd/ I-5 SB Ramps	1,242	164	3,820	2,578	6.4%
10	Roth Rd/ I-5 NB Ramps	2,073	89	4,640	2,567	3.5%
11	Roth Rd/ Harlan Rd	2,487	16	5,150	2,663	0.6%
<b>Roth Rd/I-5 Interchange (Total)</b>		<b>6,482</b>	<b>433</b>	<b>16,020</b>	<b>9,538</b>	<b>4.5%</b>

**7.2 INTERSECTION QUEUING – CUMULATIVE PLUS PROJECT CONDITIONS**

Under this scenario, simulation showed queue spillback at six of the eight intersections studied, during one or both peak hours. Queue lengths exceeded the available storage at Lathrop Road/Harlan Road

(Intersection #1), Lathrop Road/I-5 Northbound Ramps (Intersection #2), Lathrop Road-Spartan Way/I-5 Southbound Ramps (Intersection #3), Spartan Way/Golden Valley Parkway (Intersection #4), Roth Road/I-5 Southbound Ramps (Intersection #9), and Roth Road/Harlan Road (Intersection #11). At Intersections #1, #4, and #9, this involved turning queues spilling back from the turn pockets into the turn lane taper and potentially adjacent though lane. At Intersections #2, #3 and #11, the queues would extend into the upstream intersection. The proposed project would generate one new queue spillback at Intersection #1, although this queue length can be fully accommodated within the taper without affecting the adjacent through lane. No queue spillbacks would affect the freeway mainline at either interchange.

It should be noted that both interchanges are planned for reconstruction before 2040, as discussed above, and as such these projected queuing conditions are unlikely to occur.

**Table 24: Intersection Queuing – Cumulative plus Project Conditions**

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Cumulative Queue Length (ft.)	Cumulative plus Project Queue Length (ft.)
1	Lathrop Rd/Harlan Rd	Signal	Eastbound	Left	300	AM	247	280
				PM	<b>339</b>	286		
			Westbound	Left	240	AM	129	147
				PM	175	140		
			Northbound	Left	220	AM	<b>272</b>	<b>271</b>
PM	<b>266</b>	<b>272</b>						
	Southbound	Left	AM	93	<b>108**</b>			
			PM	<b>159</b>	<b>176</b>			
2	Lathrop Rd/I-5 NB Ramps	Signal	Eastbound	Left	420*	AM	<b>630</b>	<b>590</b>
				PM	<b>546</b>	<b>529</b>		
			Northbound	L/Th/R	1600*	AM	654	642
				PM	638	643		
3	Lathrop Rd-Spartan Way/I-5 SB Ramps	Signal	Westbound	Left	420*	AM	<b>506</b>	<b>474</b>
				PM	269	330		
			Southbound	L/Th/R	1520*	AM	999	1027
				PM	937	935		
4	Spartan Way/Golden Valley Parkway	Signal	Eastbound	Left	305	AM	-	-
				PM	-	86		
			Westbound	Right	125	AM	<b>274</b>	<b>284</b>
				PM	<b>274</b>	<b>265</b>		
				Left	470	AM	<b>526</b>	<b>523</b>
				PM	<b>527</b>	<b>529</b>		
			Northbound	Left	1100*	AM	<b>1113</b>	1087
				PM	1016	979		
			Southbound	Left	200	AM	<b>281</b>	<b>261</b>
				PM	<b>254</b>	<b>259</b>		
	Right	AM	200	7	13			
		PM	-	10				
8	Manthey Rd/Roth Rd	One-Way Stop	Westbound	Left	195*	AM	72	82
				PM	145	160		
			Right	AM	-	-		
				PM	22	17		
9	Roth Rd/I-5 SB Ramps	One-Way Stop	Westbound	Left	370*	AM	<b>588</b>	<b>503</b>
						PM	312	77

#	Intersection	Control	Direction	Movement	Existing Storage (ft.)	Peak Hour <sup>1</sup>	Cumulative Queue Length (ft.)	Cumulative plus Project Queue Length (ft.)
			Southbound	Left	520	AM	<b>787</b>	<b>776</b>
						PM	<b>778</b>	<b>785</b>
				L/Th/R	1370*	AM	776	779
						PM	782	781
10	Roth Rd/I-5 NB Ramps	One-Way Stop	Eastbound	Left	370*	AM	120	285
						PM	353	359
			Northbound	L/Th	1360*	AM	735	647
						PM	470	125
				Right	630	AM	33	426
						PM	319	535
11	Roth Rd/Harlan Rd	All-Way Stop	Eastbound	Left	100	AM	74	71
						PM	<b>205</b>	<b>203</b>
				Right	140*	AM	87	<b>184</b>
						PM	<b>331</b>	<b>258</b>
			Northbound	Right	100	AM	41	33
						PM	91	93

Notes:

\* Indicates that available storage extends to upstream intersection or freeway mainline

\*\* Excess queue can be accommodated in taper.

- Indicates no queue reported by SimTraffic. Zero volume assigned.

**Bold** indicates that required storage exceeds existing storage.

## 8.0 ADDITIONAL ANALYSES

The following sections provide additional analyses of other transportation issues associated with the project site, including:

- Vehicle Miles Traveled,
- Site Access,
- On-site Circulation,
- Truck Operations,
- Parking, and
- Pedestrian, Bicycle, and Transit Impacts

Unlike the LOS impact methodology, the analyses in these sections are generally based on professional judgment in accordance with the standards and methods employed by traffic engineers. However, Vehicle miles traveled (VMT) is evaluated as a CEQA impact. Although operational issues are not considered CEQA impacts, they do describe traffic conditions that are relevant to the project environment.

### 8.1 VEHICLE MILES TRAVELED (VMT)

As previously mentioned, the San Joaquin County Transportation Analysis Guidelines (September 2020) were used. On page 14, the guidelines recommend that the estimated VMT for a proposed project be obtained by inserting the proposed project into the San Joaquin COG 2018 RTP Model. Since the project is not screened out from the maps in the SJ County Transportation Analysis guidelines, a base year plus project model run was performed.

The Ashley Furniture project is located in TAZ #1744 of the SJCOG model. Currently, TAZ #1744 has five employees coded. The project will add a total of 1,295 employees. There are three types of employment in this project; warehouse, office, and retail. From the project’s Site Plan, there are 1,400,000 square feet of warehouse, 25,000 square feet of office, and 100,000 square feet of retail. The Southern California Council of Governments (SCAG) employment density study finds that there are a median of 1,225 square feet per employee for warehouses, 466 square feet per employee for offices, and 1,023 square feet per employee for regional retail. Thus, it is expected that 1,143 new employees will come from the warehouse, 98 employees from the office, and 54 employees for the retail portion. **Table 20** shows the land use changes for the base year with project model run.

**Table 25: Land Use Changes for Base Year**

<i>TAZ</i>	<i>Employees (Industrial Land Use)</i>	<i>Employees (Office Land Use)</i>	<i>Employees (Retail Land Use)</i>	<i>Total Employees</i>
1744	+1,143	+98	+54	+1,295

1,295 employees in the industrial land use category (which is what the SJCOG model uses for warehouses) was added in TAZ #1744 and the project year traffic model was rerun. The results are summarized in **Table 21**.

**Table 26: VMT per Employee Comparison**

<b>TAZ</b>	<b>Base Year Average Daily VMT per Employee (per SJCOG Model)</b>	<b>Regional Average (per SJCOG Model)</b>	<b>15% Below Regional Average (per SJCOG Model)</b>	<b>Base Year Plus Project Average Daily VMT per Resident (per Model run)</b>
1744	10.48	19.1	16.2	15.43

The base year average daily VMT per employee for TAZ #1744 is 10.48. Adding in the project’s 1,295 employees brought the daily VMT per employee to 15.43, an increase of 4.95. These numbers are reasonable since the project’s location is in relative close proximity to the residential districts of Lathrop, and also brings much needed jobs into an area that has very little employment.

The project’s 15.43 daily VMT per employee is lower than the San Joaquin County VMT threshold of 16.2. VMT impacts for the Ashley Furniture Homestore project are found to be **less-than-significant** for the base year, and thus no mitigation is required for VMT impacts attributable to this project.

**8.2 SITE ACCESS**

The project site plan dated March 29, 2023 is shown in **Figure 2**. The proposed Ashley Furniture includes various drive aisles that allow for circulation throughout the development. Drive aisles for the passenger vehicle parking spaces are approximately 26-36 feet wide. Drive aisles for heavy trucks (larger than SU-30) are 60-72 feet wide, according to the project site plan. The south driveway (Intersection #12) is a full access driveway, 40 feet wide, which accommodates two-way entry. The driveway for Intersection #14 is a full access driveway, approximately 40 feet wide. The driveway for Intersection #15 is also a full access driveway, however this driveway is dedicated for truck traffic only and would be approximately 70 feet wide. Heavy trucks will be restricted to only using this driveway on Manthey Road and would generally be restricted to using the I-5/Roth Road interchange.

The site plan includes the proposed lane geometry on Manthey Road and Dos Reis Road, including the installation of raised medians. Based on overall project design, driveway locations and access restrictions are appropriate. Any proposed landscaping should be maintained in order to maintain sight distance to and from the driveways. The proposed driveway locations, design, and sight distance are all **adequate**.

**8.3 ON-SITE CIRCULATION**

As shown in **Figure 2**, the project site plan includes multiple drive aisles. These drive aisles connect to individual parking areas located throughout the project site. Sight lines appear to be clear at internal intersections. Landscaping should be maintained periodically to provide adequate sight distance.

Drive aisles in the parking areas are typically 26-36 feet wide, with two-way travel and perpendicular parking throughout the site. Drive aisles can accommodate emergency vehicles throughout the site. Trash enclosures are located to the north and south of the site.

The site plan shows all proposed pedestrian facilities on the project frontage and connectivity from Manthey Road to the retail showroom entrance. The project site plan does show four crosswalks connecting the



passenger vehicle parking lot to the retail showroom. The site plan shows two bike rack locations, one on the south side of the building and one on the east side.

The internal circulation for the project is considered **adequate**.

#### 8.4 TRUCK OPERATIONS

The proposed Ashley furniture is proposing to restrict heavy trucks (larger than SU-30) from using the Lathrop Road/I-5 interchange at all times to alleviate potential congestion at those intersections. Instead, trucks will be using the Roth Road/I-5 interchange and head south on Manthey Road to access the Ashley Furniture site via the northernmost driveway only. Only local delivery trucks would be permitted on Dos Reis Boulevard and Golden Valley Parkway. Based on the level of service analysis, additional truck traffic on the Roth Road intersections is not expected to degrade the LOS to unacceptable operations.

#### 8.5 PARKING

According to the City of Lathrop Municipal code (Chapter 17.76 Off-Street Parking and Loading), the project is required to provide the following parking spaces:

- One space per 400 square feet of floor area for office uses.
- One space per 600 square feet of floor area for retail stores that primarily handle bulky merchandise such as furniture.
- One space per 2,000 square feet of floor area for warehouse uses.

Based on the City requirements, the project is required to provide 60 stalls for office uses, 184 stalls for retail uses, and 649 stalls for warehouse uses. This amounts to a total of 893 stalls of parking the project is required to provide. For parking lots providing 501-1000 parking spaces, the Americans with Disabilities Act (ADA) requires that at least two percent must be accessible. The project is proposing to provide a total of 942 stalls, including 20 total accessible spaces. A breakdown is as follows:

- 722 standard spaces (9'x20');
- 19 accessible spaces (9'x20');
- Six van accessible spaces (12'x20');
- 145 electric vehicle (EV) capable spaces (9'x20');
- 38 electric vehicle charging station (EVCS) standard spaces (9'x20');
- Two EVCS van accessible spaces (12'x20');
- Five EVCS standard accessible spaces (9'x20'); and
- Five EVCS ambulatory spaces (10'x20').

The project is also providing 1,104 trailer stalls (ranging from 12' x 30' to 12' x 53') for its own operations. The proposed project satisfies the City and ADA parking requirements.

#### 8.6 PEDESTRIAN, BICYCLE, AND TRANSIT IMPACTS

##### **Pedestrian Access**

Pedestrian access to the project site is facilitated by new sidewalks along Dos Reis Road and Manthey Road, paved walkway within the parking lot and crosswalks. The proposed development project does not conflict

with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is **less than significant**.

**Bicycle Access**

As shown in **Figure 3**, there are no existing bicycle facilities on De Lima Road, Manthey Road and Dos Reis Road. If the project proposes bicycle facilities, it should show them on future site plans. The project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is **less than significant**.

**Transit Access**

The project site is within a 3/4 mile of two San Joaquin RTD bus stops, located on the northwest corner of Lathrop Road/Harlan Road and in front of the Save Mart. Due to the lack of development north of Spartan Way, there are sidewalk gaps from the proposed project site to the bus stops. As development in the area increases, sidewalks should be installed to close the gap in pedestrian facilities. Impacts to transit service are expected to be **less than significant**.

## Appendix A –Level of Service Methodology



## TECHNICAL MEMORANDUM

**Subject: Highway Capacity Manual – Level of Service Definitions**

The purpose of this memorandum is to define level of service (LOS) and the procedures for its calculation.

LOS is commonly used as a measure of effectiveness (MOE) / quality of service (QOS) for traffic. The procedures for LOS determination and calculation are found within the Transportation Research Board’s (TRB) *Highway Capacity Manual* (HCM), 6<sup>th</sup> Edition. MOE / QOS generally consist of quantitative metrics to characterize operational conditions within a traffic stream. LOS is a measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each facility type that has procedures available. Alphabetical letters designated each grade from A to F. LOS A represents the best operating conditions; LOS F represents the worst operating conditions. Each LOS represents a range of operating conditions and drivers’ perceptions of those conditions. Safety is not included in the measure to establish service level.

A general description of LOS for every types of roadway facilities is shown in **Table 1**.

**Table 1: General LOS by Facility Type**

	Uninterrupted Flow	Interrupted Flow
<b>Facility Example Types</b>		
	Freeways	Signalized intersections
	Multi-lane highways	Two-way stop controlled intersections
	Two-lane highways	All-way stop controlled intersections
	Urban Streets	Roundabouts
<b>LOS Character</b>		
A	Free flow.	Very low delay.
B	Stable flow. Presence of other users noticeable.	Low delay.
C	Stable flow. Comfort and convenience starts to decline.	Moderate delay
D	High density stable flow.	Acceptable delay
E	Unstable flow.	Limit of acceptable delay,
F	Forced or breakdown flow.	Unacceptable delay.

## Signalized Intersections

Signalized intersection LOS is based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection, and control delay experienced by each vehicle. LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach; control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control; it is also a surrogate measure of driver discomfort and fuel consumption. The v/c ratio quantifies the degree to which a phase's capacity is utilized by a lane group. A v/c ratio of 1.0 or more indicates cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 sec/veh represents failure from a delay perspective). The detailed methodology for determining LOS at signalized intersection is presented in Chapter 19 of the HCM. The LOS for signalized intersections are defined in **Table 2**.

**Table 2: Signalized LOS Summary**

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Very low control delay. This level is typically assigned when the v/c ratio is low and either progression is exceptionally favorable or the cycle length is short. Most vehicles arrive during the green phase. Many vehicles do not stop at all.	≤ 10	≤ 1.0
B	The v/c ratio is low. There is good progression, short cycle lengths, or both. More vehicles stop, causing higher levels of delay.	≤ 20	≤ 1.0
C	Higher delays occur in favorable progression or a due to a moderate cycle length, or both. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during a given cycle) may begin to appear. The number of vehicles stopping is still considered low-to-moderate, though many vehicles still pass through the intersection without stopping.	≤ 35	≤ 1.0
D	The influence of congestion becomes more apparent. Longer delays may result from some combination of a high v/c ratio, ineffective progression, long cycle length, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	≤ 55	≤ 1.0
E	Typically considered the limit of acceptable delay. High delays usually indicate a very high v/c ratio, poor progression, long cycle lengths, and high volumes. Most cycles fail to clear the queue.	≤ 80	≤ 1.0
F	Delays are unacceptable to most drivers. Conditions are considered oversaturated. Arrival flow rates exceed the capacity of the intersection (v/c in excess of 1.0). Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.	> 80	> 1.0

## Two-Way Stop Controlled Intersections

At two-way stopped controlled (TWSC) intersections, LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons:

1. The major-street through and right-turning traffic are assumed to experience zero delay as traffic progression operates unimpeded;
2. The disproportionate number of major-street through traffic at a typical TWSC intersection skews the weighted average of all movements, resulting in very low overall average delay for all vehicles, and
3. The resulting low delay can mask LOS deficiencies for minor movements.

The LOS for the minor street and the mainline left-turn traffic are dependent on the volume and capacity of the available lanes, and the number and frequency of acceptable gaps in the major street traffic to make a conflicting turn. The LOS grade is provided for all conflicting movements at an intersection and is based on the total average control delay experienced by each vehicle and the lane group volume-to-capacity (v/c) ratios. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection. The detailed methodology for determining LOS at TWSC intersection is presented in Chapter 20 of the HCM. The TWSC LOS descriptions are provided in **Table 3**.

**Table 3: TWSC LOS Summary**

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0

## All-Way Stop Controlled and Roundabout Intersections

All-way stopped controlled (AWSC) intersections and roundabout intersections are based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection, and control delay. LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach; control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection. A v/c ratio of 1.0 represents failure from a capacity perspective (just as delay in excess of 80 sec/veh represents failure from a delay perspective).

The detailed methodology for determining LOS at AWSC and roundabout intersection are presented in Chapter 21 and Chapter 22 respectively in the HCM. The AWSC and roundabout LOS descriptions are shared and are provided in **Table 4**.

**Table 4: AWSC and Roundabout LOS Summary**

LOS	Definition	Control Delay Range (s/veh)	v/c Range
A	Usually no conflicting traffic. Drivers can easily find gaps in traffic to maneuver. v/c is low.	≤ 10	≤ 1.0
B	Occasionally some delay due to conflicting traffic. Drivers can find gaps in traffic. v/c is low.	≤ 15	≤ 1.0
C	There is some noticeable delay due to conflicting traffic. Drivers are still able to find gaps in traffic.	≤ 25	≤ 1.0
D	Drivers experience delay due to less gaps in traffic to maneuver. Lane group v/c creeps closer to 1.0.	≤ 35	≤ 1.0
E	Delay approaches driver tolerance levels. Drivers will occasionally find gaps in traffic to maneuver. Lane group v/c approaches 1.0.	≤ 50	≤ 1.0
F	Delay exceed driver tolerance levels or v/c exceeds 1.0 or both.	> 50	> 1.0

## Appendix B – Existing Conditions Level of Service Sheets



HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	197	415	139	48	526	56	224	110	46	43	74	145
Future Volume (veh/h)	197	415	139	48	526	56	224	110	46	43	74	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	253	532	178	55	598	64	299	147	61	54	94	184
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.75	0.75	0.75	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	945	315	81	818	87	341	714	284	113	284	253
Arrive On Green	0.17	0.36	0.36	0.05	0.25	0.25	0.19	0.29	0.29	0.06	0.16	0.16
Sat Flow, veh/h	1781	2618	872	1781	3239	346	1781	2483	987	1781	1777	1585
Grp Volume(v), veh/h	253	360	350	55	328	334	299	103	105	54	94	184
Grp Sat Flow(s),veh/h/ln	1781	1777	1713	1781	1777	1808	1781	1777	1693	1781	1777	1585
Q Serve(g_s), s	10.2	12.1	12.2	2.3	12.5	12.6	12.1	3.3	3.5	2.2	3.5	8.2
Cycle Q Clear(g_c), s	10.2	12.1	12.2	2.3	12.5	12.6	12.1	3.3	3.5	2.2	3.5	8.2
Prop In Lane	1.00		0.51	1.00		0.19	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	298	641	618	81	449	457	341	511	487	113	284	253
V/C Ratio(X)	0.85	0.56	0.57	0.68	0.73	0.73	0.88	0.20	0.21	0.48	0.33	0.73
Avail Cap(c_a), veh/h	360	718	693	360	718	731	360	718	684	360	718	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	19.0	19.0	34.9	25.4	25.4	29.2	20.0	20.1	33.6	27.7	29.6
Incr Delay (d2), s/veh	15.5	0.9	1.0	11.2	2.8	2.7	20.7	0.2	0.3	3.8	0.8	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	4.7	4.6	1.2	5.3	5.4	6.8	1.3	1.3	1.0	1.4	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	20.0	20.1	46.0	28.2	28.2	49.8	20.2	20.3	37.3	28.5	34.4
LnGrp LOS	D	B	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		963			717			507			332	
Approach Delay, s/veh		26.7			29.5			37.7			33.2	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	30.8	19.2	15.8	16.4	22.7	9.7	25.3				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	4.3	14.2	14.1	10.2	12.2	14.6	4.2	5.5				
Green Ext Time (p_c), s	0.1	4.6	0.1	1.7	0.3	4.2	0.1	1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				30.6								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↕				
Traffic Volume (veh/h)	100	671	0	0	738	338	171	4	200	0	0	0
Future Volume (veh/h)	100	671	0	0	738	338	171	4	200	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	139	932	0	0	811	371	228	5	267			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	174	1966	0	0	955	435	248	5	291			
Arrive On Green	0.10	0.55	0.00	0.00	0.40	0.40	0.33	0.33	0.33			
Sat Flow, veh/h	1781	3647	0	0	2465	1081	762	17	893			
Grp Volume(v), veh/h	139	932	0	0	607	575	500	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1676	1672	0	0			
Q Serve(g_s), s	5.8	12.0	0.0	0.0	23.5	23.7	21.8	0.0	0.0			
Cycle Q Clear(g_c), s	5.8	12.0	0.0	0.0	23.5	23.7	21.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.65	0.46		0.53			
Lane Grp Cap(c), veh/h	174	1966	0	0	715	675	544	0	0			
V/C Ratio(X)	0.80	0.47	0.00	0.00	0.85	0.85	0.92	0.00	0.00			
Avail Cap(c_a), veh/h	470	1966	0	0	820	773	771	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	33.5	10.3	0.0	0.0	20.6	20.6	24.6	0.0	0.0			
Incr Delay (d2), s/veh	3.2	0.2	0.0	0.0	7.4	8.1	10.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	4.0	0.0	0.0	10.2	9.8	9.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	10.4	0.0	0.0	27.9	28.7	34.9	0.0	0.0			
LnGrp LOS	D	B	A	A	C	C	C	A	A			
Approach Vol, veh/h		1071			1182			500				
Approach Delay, s/veh		13.8			28.3			34.9				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.5			11.4	35.1		29.3				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+1), s		14.0			7.8	25.7		23.8				
Green Ext Time (p_c), s		6.1			0.0	4.9		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					23.9							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Existing Conditions  
 Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	506	129	353	556	0	0	0	0	265	4	79
Future Volume (veh/h)	0	506	129	353	556	0	0	0	0	265	4	79
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	816	208	484	762	0				308	5	92
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	1183	299	479	1148	0				346	6	103
Arrive On Green	0.00	0.29	0.29	0.27	0.61	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	4230	1028	1781	1870	0				1318	21	394
Grp Volume(v), veh/h	0	683	341	484	762	0				405	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1685	1781	1870	0				1734	0	0
Q Serve(g_s), s	0.0	13.2	13.4	20.0	19.8	0.0				16.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.2	13.4	20.0	19.8	0.0				16.7	0.0	0.0
Prop In Lane	0.00		0.61	1.00		0.00				0.76		0.23
Lane Grp Cap(c), veh/h	0	992	491	479	1148	0				455	0	0
V/C Ratio(X)	0.00	0.69	0.69	1.01	0.66	0.00				0.89	0.00	0.00
Avail Cap(c_a), veh/h	0	1601	793	479	1148	0				815	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	23.4	23.4	27.2	9.4	0.0				26.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.6	43.9	1.4	0.0				2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.0	5.2	13.7	6.7	0.0				6.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.2	25.0	71.1	10.8	0.0				28.8	0.0	0.0
LnGrp LOS	A	C	C	F	B	A				C	A	A
Approach Vol, veh/h		1024			1246						405	
Approach Delay, s/veh		24.5			34.2						28.8	
Approach LOS		C			C						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	34.0	26.3		24.1		50.3						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+D), s	22.0	15.4		18.7		21.8						
Green Ext Time (p_c), s	0.0	6.3		0.8		4.1						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											29.7	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary  
4: Golden Valley Pkwy & Spartan Way

Existing Conditions  
Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘↗	↑↑		↘	↑	↗↘	↘	↑↑	↗
Traffic Volume (veh/h)	0	427	155	161	379	0	157	0	250	0	0	0
Future Volume (veh/h)	0	427	155	161	379	0	157	0	250	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	776	282	260	611	0	285	0	455	0	0	0
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1266	565	445	2031	0	353	418	624	3	7	3
Arrive On Green	0.00	0.36	0.36	0.13	0.57	0.00	0.20	0.00	0.22	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3647	0	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	776	282	260	611	0	285	0	455	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	0	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	9.6	7.4	3.8	4.7	0.0	8.1	0.0	8.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.6	7.4	3.8	4.7	0.0	8.1	0.0	8.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	1266	565	445	2031	0	353	418	624	3	7	3
V/C Ratio(X)	0.00	0.61	0.50	0.58	0.30	0.00	0.81	0.00	0.73	0.00	0.00	0.00
Avail Cap(c_a), veh/h	335	3340	1490	650	3340	0	670	1758	2622	335	2672	1192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	14.1	13.4	21.8	5.9	0.0	20.4	0.0	19.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.7	1.2	0.1	0.0	4.4	0.0	1.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	2.1	1.4	1.2	0.0	3.2	0.0	2.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.6	14.1	23.1	6.0	0.0	24.8	0.0	20.8	0.0	0.0	0.0
LnGrp LOS	A	B	B	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		1058			871			740				0
Approach Delay, s/veh		14.5			11.1			22.3				0.0
Approach LOS		B			B			C				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	24.1	15.1	2.6	0.0	35.5	0.0	17.7				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+1), s	11.6	11.6	10.1	0.0	0.0	6.7	0.0	10.0				
Green Ext Time (p_c), s	0.3	7.4	0.6	0.0	0.0	4.6	0.0	1.9				

Intersection Summary

HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	106	106	0
Future Vol, veh/h	0	0	0	106	106	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	115	115	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	230	115	115	0	-	0
Stage 1	115	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	758	937	1474	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	758	937	1474	-	-	-
Mov Cap-2 Maneuver	758	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1474	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	115	106	79	27
Future Vol, veh/h	0	0	115	106	79	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	125	115	86	29

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	466	101	115	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	555	954	1474	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	504	954	1474	-	-	-
Mov Cap-2 Maneuver	504	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1474	-	-	-	-	-
HCM Lane V/C Ratio	0.085	-	-	-	-	-
HCM Control Delay (s)	7.7	0	0	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Traffic Vol, veh/h	0	0	0	142	0	0
Future Vol, veh/h	0	0	0	142	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	154	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1	0	155
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	154
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1622	-	836
Stage 1	-	-	-	-	1022
Stage 2	-	-	-	-	874
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1622	-	836
Mov Cap-2 Maneuver	-	-	-	-	836
Stage 1	-	-	-	-	1022
Stage 2	-	-	-	-	874

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1622	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Existing Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	4.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	73	27	44	62	37	33
Future Vol, veh/h	73	27	44	62	37	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	59	59	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	106	39	75	105	46	41

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	261	128	0	0	180
Stage 1	128	-	-	-	-
Stage 2	133	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	728	922	-	-	1396
Stage 1	898	-	-	-	-
Stage 2	893	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	703	922	-	-	1396
Mov Cap-2 Maneuver	703	-	-	-	-
Stage 1	898	-	-	-	-
Stage 2	863	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	703	922	1396
HCM Lane V/C Ratio	-	-	0.15	0.042	0.033
HCM Control Delay (s)	-	-	11	9.1	7.7
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	0.1



HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Existing Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	83	16	157	60	0	0	0	0	246	5	40
Future Vol, veh/h	0	83	16	157	60	0	0	0	0	246	5	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	88	88	88	92	92	92	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	114	22	178	68	0	0	0	0	276	6	45

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	136	0	0		481	560	34
Stage 1	-	-	-	-	-	-		424	424	-
Stage 2	-	-	-	-	-	-		57	136	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1446	-	0		514	436	1032
Stage 1	0	-	-	-	-	0		628	585	-
Stage 2	0	-	-	-	-	0		959	783	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1446	-	-		451	0	1032
Mov Cap-2 Maneuver	-	-	-	-	-	-		451	0	-
Stage 1	-	-	-	-	-	-		628	0	-
Stage 2	-	-	-	-	-	-		841	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.7	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1446	-	451	490	1032
HCM Lane V/C Ratio	-	-	0.123	-	0.409	0.23	0.029
HCM Control Delay (s)	-	-	7.8	-	18.4	14.5	8.6
HCM Lane LOS	-	-	A	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.4	-	2	0.9	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Existing Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	42	287	0	0	209	268	8	0	172	0	0	0
Future Vol, veh/h	42	287	0	0	209	268	8	0	172	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	94	94	94	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	322	0	0	227	291	9	0	183	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	518	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1044	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1044	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.1	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	457	855	1044	-	-	-
HCM Lane V/C Ratio	0.019	0.214	0.045	-	-	-
HCM Control Delay (s)	13	10.4	8.6	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	0.8	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	16.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	68	249	142	27	212	36	212	32	50	29	13	53
Future Vol, veh/h	68	249	142	27	212	36	212	32	50	29	13	53
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.90	0.90	0.90	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	277	158	30	238	40	236	36	56	36	16	65
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	16.1	14.3	20.9	12.3
HCM LOS	C	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	87%	0%	100%	0%	0%	20%	0%	69%	0%
Vol Thru, %	13%	0%	0%	100%	0%	80%	75%	31%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	244	50	68	249	142	133	142	42	53
LT Vol	212	0	68	0	0	27	0	29	0
Through Vol	32	0	0	249	0	106	106	13	0
RT Vol	0	50	0	0	142	0	36	0	53
Lane Flow Rate	271	56	76	277	158	149	160	52	65
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.613	0.108	0.165	0.566	0.292	0.328	0.337	0.127	0.141
Departure Headway (Hd)	8.136	6.983	7.877	7.367	6.652	7.896	7.609	8.807	7.736
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	442	512	455	490	538	454	471	406	462
Service Time	5.897	4.743	5.638	5.127	4.412	5.665	5.378	6.586	5.514
HCM Lane V/C Ratio	0.613	0.109	0.167	0.565	0.294	0.328	0.34	0.128	0.141
HCM Control Delay	23	10.6	12.2	19.4	12.2	14.5	14.2	12.9	11.8
HCM Lane LOS	C	B	B	C	B	B	B	B	B
HCM 95th-tile Q	4	0.4	0.6	3.5	1.2	1.4	1.5	0.4	0.5

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Existing Conditions  
 Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘		↗	↗↘	
Traffic Volume (veh/h)	254	546	169	105	448	57	265	196	102	127	149	84
Future Volume (veh/h)	254	546	169	105	448	57	265	196	102	127	149	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	267	575	178	124	527	67	427	316	165	137	160	90
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.62	0.62	0.62	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	825	255	162	752	95	383	554	283	177	286	153
Arrive On Green	0.18	0.31	0.31	0.09	0.24	0.24	0.21	0.24	0.24	0.10	0.13	0.13
Sat Flow, veh/h	1781	2673	825	1781	3173	402	1781	2276	1162	1781	2237	1195
Grp Volume(v), veh/h	267	382	371	124	294	300	427	245	236	137	125	125
Grp Sat Flow(s),veh/h/ln	1781	1777	1722	1781	1777	1798	1781	1777	1661	1781	1777	1655
Q Serve(g_s), s	10.1	13.2	13.3	4.7	10.6	10.7	15.0	8.5	8.7	5.2	4.6	5.0
Cycle Q Clear(g_c), s	10.1	13.2	13.3	4.7	10.6	10.7	15.0	8.5	8.7	5.2	4.6	5.0
Prop In Lane	1.00		0.48	1.00		0.22	1.00		0.70	1.00		0.72
Lane Grp Cap(c), veh/h	315	548	531	162	421	426	383	432	404	177	227	212
V/C Ratio(X)	0.85	0.70	0.70	0.77	0.70	0.70	1.12	0.57	0.58	0.77	0.55	0.59
Avail Cap(c_a), veh/h	383	764	740	383	764	773	383	764	714	383	764	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	21.2	21.3	31.0	24.4	24.4	27.4	23.2	23.3	30.7	28.6	28.7
Incr Delay (d2), s/veh	14.5	1.9	2.0	8.8	2.5	2.6	81.1	1.4	1.6	8.3	2.5	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	5.3	5.2	2.3	4.4	4.5	14.4	3.4	3.3	2.5	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	23.2	23.3	39.8	26.9	27.0	108.5	24.6	24.9	39.0	31.1	31.8
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		1020			718			908			387	
Approach Delay, s/veh		28.2			29.2			64.2			34.1	
Approach LOS		C			C			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	25.5	20.0	12.9	16.3	20.5	11.9	21.0				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	6.7	15.3	17.0	7.0	12.1	12.7	7.2	10.7				
Green Ext Time (p_c), s	0.2	4.8	0.0	1.5	0.3	3.9	0.2	3.1				

Intersection Summary												
HCM 6th Ctrl Delay				40.0								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Existing Conditions  
 Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑			↑↑			↕				
Traffic Volume (veh/h)	84	696	0	0	606	344	132	7	397	0	0	0
Future Volume (veh/h)	84	696	0	0	606	344	132	7	397	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	94	782	0	0	705	400	142	8	427			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	121	1788	0	0	838	475	152	9	456			
Arrive On Green	0.07	0.50	0.00	0.00	0.38	0.38	0.38	0.38	0.38			
Sat Flow, veh/h	1781	3647	0	0	2280	1238	402	23	1208			
Grp Volume(v), veh/h	94	782	0	0	573	532	577	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1647	1633	0	0			
Q Serve(g_s), s	4.0	10.8	0.0	0.0	22.6	22.7	26.2	0.0	0.0			
Cycle Q Clear(g_c), s	4.0	10.8	0.0	0.0	22.6	22.7	26.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.75	0.25		0.74			
Lane Grp Cap(c), veh/h	121	1788	0	0	681	632	616	0	0			
V/C Ratio(X)	0.78	0.44	0.00	0.00	0.84	0.84	0.94	0.00	0.00			
Avail Cap(c_a), veh/h	462	1788	0	0	807	748	742	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	35.3	12.2	0.0	0.0	21.6	21.6	23.1	0.0	0.0			
Incr Delay (d2), s/veh	4.0	0.2	0.0	0.0	6.8	7.4	16.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.8	3.8	0.0	0.0	9.8	9.2	11.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	12.3	0.0	0.0	28.4	29.0	39.3	0.0	0.0			
LnGrp LOS	D	B	A	A	C	C	D	A	A			
Approach Vol, veh/h		876			1105			577				
Approach Delay, s/veh		15.2			28.7			39.3				
Approach LOS		B			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.4			9.2	34.1		33.7				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+1), s		12.8			6.0	24.7		28.2				
Green Ext Time (p_c), s		5.1			0.0	4.9		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					26.5							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Existing Conditions  
 Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	443	89	247	491	0	0	0	0	337	8	113
Future Volume (veh/h)	0	443	89	247	491	0	0	0	0	337	8	113
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	503	101	301	599	0				383	9	128
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	915	180	355	912	0				435	10	145
Arrive On Green	0.00	0.21	0.21	0.20	0.49	0.00				0.34	0.34	0.34
Sat Flow, veh/h	0	4451	841	1781	1870	0				1274	30	426
Grp Volume(v), veh/h	0	398	206	301	599	0				520	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1719	1781	1870	0				1730	0	0
Q Serve(g_s), s	0.0	5.6	5.8	8.8	13.0	0.0				15.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.6	5.8	8.8	13.0	0.0				15.2	0.0	0.0
Prop In Lane	0.00		0.49	1.00		0.00				0.74		0.25
Lane Grp Cap(c), veh/h	0	727	367	355	912	0				591	0	0
V/C Ratio(X)	0.00	0.55	0.56	0.85	0.66	0.00				0.88	0.00	0.00
Avail Cap(c_a), veh/h	0	2216	1119	663	1218	0				1126	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.8	18.9	20.7	10.4	0.0				16.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.2	2.2	0.7	0.0				1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	2.1	3.4	4.2	0.0				5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.4	20.1	22.9	11.1	0.0				18.4	0.0	0.0
LnGrp LOS		A	B	C	C	B	A			B	A	A
Approach Vol, veh/h		604			900					520		
Approach Delay, s/veh		19.7			15.1					18.4		
Approach LOS		B			B					B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.7	16.1		23.0		30.8						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+10), s	10.8	7.8		17.2		15.0						
Green Ext Time (p_c), s	0.1	3.7		1.1		3.5						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				17.3								
HCM 6th LOS				B								

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Existing Conditions  
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑	↗	↙↗	↑↑		↙	↑	↗↙	↙	↑↑	↗
Traffic Volume (veh/h)	0	185	33	325	211	0	30	0	332	0	0	0
Future Volume (veh/h)	0	185	33	325	211	0	30	0	332	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	250	45	378	245	0	33	0	361	0	0	0
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	820	366	570	1796	0	95	439	655	4	256	114
Arrive On Green	0.00	0.23	0.23	0.16	0.51	0.00	0.05	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3647	0	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	250	45	378	245	0	33	0	361	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	0	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	2.4	0.9	4.3	1.5	0.0	0.7	0.0	4.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	0.9	4.3	1.5	0.0	0.7	0.0	4.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	820	366	570	1796	0	95	439	655	4	256	114
V/C Ratio(X)	0.00	0.30	0.12	0.66	0.14	0.00	0.35	0.00	0.55	0.00	0.00	0.00
Avail Cap(c_a), veh/h	425	4236	1889	824	4236	0	849	2230	3326	425	3389	1512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.3	12.8	16.4	5.5	0.0	19.2	0.0	14.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.1	1.3	0.0	0.0	2.2	0.0	0.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.3	1.5	0.4	0.0	0.3	0.0	1.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.6	12.9	17.8	5.5	0.0	21.3	0.0	14.8	0.0	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	C	A	B	A	A	A
Approach Vol, veh/h	295			623			394			0		
Approach Delay, s/veh	13.5			13.0			15.4			0.0		
Approach LOS	B			B			B					
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.5	14.8	6.8	8.8	0.0	26.3	0.0	15.7				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+1), s	10.0	4.4	2.7	0.0	0.0	3.5	0.0	6.8				
Green Ext Time (p_c), s	0.5	1.8	0.0	0.0	0.0	1.6	0.0	1.4				

### Intersection Summary

HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	163	94	0
Future Vol, veh/h	0	8	0	163	94	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	177	102	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	279	102	102	0	-	0
Stage 1	102	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	711	953	1490	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	711	953	1490	-	-	-
Mov Cap-2 Maneuver	711	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	854	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1490	-	-	953	-	-
HCM Lane V/C Ratio	-	-	-	0.009	-	-
HCM Control Delay (s)	0	-	0	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-



HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↵	↵		↵	↵	
Traffic Vol, veh/h	3	0	0	160	102	0
Future Vol, veh/h	3	0	0	160	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	174	111	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	285	111	111	0	-	0
Stage 1	111	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	705	942	1479	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	705	942	1479	-	-	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1479	-	705	-	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-	-
HCM Control Delay (s)	0	-	10.1	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Traffic Vol, veh/h	3	0	0	0	0	0
Future Vol, veh/h	3	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	3	0	4
Stage 1	-	-	-	-	3
Stage 2	-	-	-	-	1
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1619	-	1018
Stage 1	-	-	-	-	1020
Stage 2	-	-	-	-	1022
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1619	-	1018
Mov Cap-2 Maneuver	-	-	-	-	1018
Stage 1	-	-	-	-	1020
Stage 2	-	-	-	-	1022

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1619	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Existing Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	4.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	47	85	111	52	62	47
Future Vol, veh/h	47	85	111	52	62	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	84	84	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	102	132	62	77	58

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	375	163	0	0	194	0
Stage 1	163	-	-	-	-	-
Stage 2	212	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	626	882	-	-	1379	-
Stage 1	866	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	590	882	-	-	1379	-
Mov Cap-2 Maneuver	590	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	4.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	590	882	1379
HCM Lane V/C Ratio	-	-	0.096	0.116	0.056
HCM Control Delay (s)	-	-	11.7	9.6	7.8
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.4	0.2

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Existing Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	79	35	140	95	0	0	0	0	246	3	37
Future Vol, veh/h	0	79	35	140	95	0	0	0	0	246	3	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	83	83	83	92	92	92	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	101	45	169	114	0	0	0	0	280	3	42

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	146	0	0		503	598	57
Stage 1	-	-	-	-	-	-		452	452	-
Stage 2	-	-	-	-	-	-		51	146	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1434	-	0		498	414	997
Stage 1	0	-	-	-	-	0		608	569	-
Stage 2	0	-	-	-	-	0		965	775	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1434	-	-		439	0	997
Mov Cap-2 Maneuver	-	-	-	-	-	-		439	0	-
Stage 1	-	-	-	-	-	-		608	0	-
Stage 2	-	-	-	-	-	-		851	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.7	16.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1434	-	439	474	997
HCM Lane V/C Ratio	-	-	0.118	-	0.425	0.233	0.028
HCM Control Delay (s)	-	-	7.8	-	19.1	14.9	8.7
HCM Lane LOS	-	-	A	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.4	-	2.1	0.9	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Existing Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	34	291	0	0	200	341	35	5	181	0	0	0
Future Vol, veh/h	34	291	0	0	200	341	35	5	181	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	95	95	95	88	88	88	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	327	0	0	211	359	40	6	206	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	570	0	0
Stage 1	-	-	403
Stage 2	-	-	106
Critical Hdwy	4.14	-	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	3.52
Pot Cap-1 Maneuver	999	0	494
Stage 1	-	0	644
Stage 2	-	0	907
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	999	-	475
Mov Cap-2 Maneuver	-	-	475
Stage 1	-	-	620
Stage 2	-	-	907

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	475	852	999	-	-	-
HCM Lane V/C Ratio	0.096	0.241	0.038	-	-	-
HCM Control Delay (s)	13.4	10.6	8.7	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0.9	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	21.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	67	257	148	47	284	56	204	58	85	53	52	53
Future Vol, veh/h	67	257	148	47	284	56	204	58	85	53	52	53
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	71	271	156	53	319	63	217	62	90	58	57	58
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	20	20.1	26.4	15.5
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	78%	0%	100%	0%	0%	25%	0%	50%	0%
Vol Thru, %	22%	0%	0%	100%	0%	75%	72%	50%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	28%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	262	85	67	257	148	189	198	105	53
LT Vol	204	0	67	0	0	47	0	53	0
Through Vol	58	0	0	257	0	142	142	52	0
RT Vol	0	85	0	0	148	0	56	0	53
Lane Flow Rate	279	90	71	271	156	212	222	114	58
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.703	0.2	0.176	0.636	0.335	0.514	0.518	0.308	0.14
Departure Headway (Hd)	9.086	7.968	8.978	8.463	7.742	8.715	8.382	9.719	8.734
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	399	450	400	427	464	414	429	370	410
Service Time	6.838	5.72	6.73	6.214	5.493	6.468	6.134	7.481	6.495
HCM Lane V/C Ratio	0.699	0.2	0.177	0.635	0.336	0.512	0.517	0.308	0.141
HCM Control Delay	30.8	12.7	13.6	24.9	14.4	20.4	19.8	16.8	12.9
HCM Lane LOS	D	B	B	C	B	C	C	C	B
HCM 95th-tile Q	5.2	0.7	0.6	4.3	1.5	2.8	2.9	1.3	0.5

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4728	4705	4603	4614	4581	4644
Vehs Exited	4770	4764	4606	4611	4581	4667
Starting Vehs	139	144	112	135	140	129
Ending Vehs	97	85	109	138	140	109
Travel Distance (mi)	2334	2332	2250	2289	2205	2282
Travel Time (hr)	136.0	126.9	128.9	156.7	173.1	144.3
Total Delay (hr)	62.6	53.7	58.2	84.9	103.6	72.6
Total Stops	7088	6860	6672	6851	6711	6837
Fuel Used (gal)	105.8	103.8	101.4	108.4	110.5	106.0

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1083	1056	1037	1048	1006	1048
Vehs Exited	1108	1113	1057	1071	1024	1076
Starting Vehs	139	144	112	135	140	129
Ending Vehs	114	87	92	112	122	100
Travel Distance (mi)	527	531	515	529	499	520
Travel Time (hr)	30.2	25.7	25.7	27.5	25.2	26.9
Total Delay (hr)	13.4	9.0	9.6	10.9	9.6	10.5
Total Stops	1638	1476	1494	1523	1437	1516
Fuel Used (gal)	24.1	23.0	22.7	23.1	21.8	22.9

**Interval #2 Information Recording 2**

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1626	1521	1491	1560	1578	1554
Vehs Exited	1504	1432	1403	1465	1483	1458
Starting Vehs	114	87	92	112	122	100
Ending Vehs	236	176	180	207	217	202
Travel Distance (mi)	758	733	697	764	748	740
Travel Time (hr)	50.0	43.6	45.6	47.0	50.5	47.3
Total Delay (hr)	26.2	20.7	23.5	23.2	27.1	24.1
Total Stops	2477	2176	2111	2374	2402	2311
Fuel Used (gal)	35.5	33.1	32.2	35.0	35.4	34.2

**Interval #3 Information Recording 3**

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	977	1092	1043	1014	1040	1035
Vehs Exited	1120	1138	1131	1061	1105	1111
Starting Vehs	236	176	180	207	217	202
Ending Vehs	93	130	92	160	152	120
Travel Distance (mi)	544	551	536	511	500	529
Travel Time (hr)	31.6	30.6	32.4	32.6	43.9	34.2
Total Delay (hr)	14.6	13.1	15.6	16.5	27.9	17.5
Total Stops	1548	1680	1644	1491	1610	1596
Fuel Used (gal)	24.6	24.8	24.8	23.7	26.3	24.9

**Interval #4 Information Recording 4**

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1042	1036	1032	992	957	1008
Vehs Exited	1038	1081	1015	1014	969	1023
Starting Vehs	93	130	92	160	152	120
Ending Vehs	97	85	109	138	140	109
Travel Distance (mi)	506	517	502	485	458	493
Travel Time (hr)	24.2	27.0	25.2	49.6	53.5	35.9
Total Delay (hr)	8.4	10.8	9.4	34.3	39.0	20.4
Total Stops	1425	1528	1423	1463	1262	1419
Fuel Used (gal)	21.6	22.8	21.7	26.5	27.0	23.9



Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	325	350	341	86	277	328	263	332	222	82	102	132
Average Queue (ft)	145	97	129	35	111	173	143	76	48	32	41	52
95th Queue (ft)	288	256	253	72	226	284	256	244	152	70	81	106
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)		0			0	1		2				
Queuing Penalty (veh)		1			0	0		0				
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	4	0			0		10			0	1	
Queuing Penalty (veh)	10	0			0		6			0	0	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	155	314	299	498	534	314
Average Queue (ft)	52	99	102	190	284	146
95th Queue (ft)	111	222	219	423	512	250
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)				0	1	
Queuing Penalty (veh)				1	6	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B12	B12	WB	WB	SB
Directions Served	T	T	TR	T	T	L	T	LTR
Maximum Queue (ft)	166	236	246	22	53	484	373	286
Average Queue (ft)	43	90	105	1	3	219	151	143
95th Queue (ft)	113	174	197	12	26	447	303	239
Link Distance (ft)	168	168	168	969	969	491	491	903
Upstream Blk Time (%)	0	2	3			1	0	
Queuing Penalty (veh)	1	7	11			6	0	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	TR	L	R	R
Maximum Queue (ft)	168	196	119	116	124	147	162	202	120	50
Average Queue (ft)	53	81	40	23	53	53	64	69	45	23
95th Queue (ft)	121	154	90	70	93	110	127	146	91	44
Link Distance (ft)	584	584			969	969	969	1196	1196	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			125	470						300
Storage Blk Time (%)		2	0							
Queuing Penalty (veh)		5	0							

Intersection: 5: Manthey Rd & De Lima Rd

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Manthey Rd & Dos Reis Rd

Movement	NB
Directions Served	LT
Maximum Queue (ft)	52
Average Queue (ft)	8
95th Queue (ft)	32
Link Distance (ft)	1022
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	NB	SB
Directions Served	L	TR	LT
Maximum Queue (ft)	61	4	32
Average Queue (ft)	28	0	3
95th Queue (ft)	50	3	18
Link Distance (ft)	146	985	898
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	EB	WB	SB	SB	SB
Directions Served	T	TR	L	L	LTR	R
Maximum Queue (ft)	6	16	52	337	380	50
Average Queue (ft)	0	0	14	137	170	10
95th Queue (ft)	4	4	40	557	581	40
Link Distance (ft)	146	146	420	761	761	
Upstream Blk Time (%)				12	12	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)						25
Storage Blk Time (%)					46	1
Queuing Penalty (veh)					9	1

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	NB	NB
Directions Served	L	LT	R
Maximum Queue (ft)	29	33	50
Average Queue (ft)	7	6	3
95th Queue (ft)	28	23	21
Link Distance (ft)	420	490	490
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	LT	R	LT	R
Maximum Queue (ft)	76	107	62	65	70	112	45	73	55
Average Queue (ft)	28	52	34	26	30	52	21	23	29
95th Queue (ft)	58	88	52	47	56	86	41	50	54
Link Distance (ft)		155	155	260	260	596		564	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100						100		25
Storage Blk Time (%)	0	0				1		4	2
Queuing Penalty (veh)	0	0				0		2	1

Network Summary

Network wide Queuing Penalty: 68
----------------------------------

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:45	3:45	3:45	3:45	3:45	3:45
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5038	4796	4972	4839	4996	4929
Vehs Exited	5060	4739	4907	4802	4975	4898
Starting Vehs	150	127	111	132	141	130
Ending Vehs	128	184	176	169	162	162
Travel Distance (mi)	2395	2280	2327	2262	2403	2334
Travel Time (hr)	169.6	290.6	212.5	292.1	183.2	229.6
Total Delay (hr)	94.3	219.5	139.6	221.4	107.9	156.5
Total Stops	7515	7115	7235	7003	7533	7281
Fuel Used (gal)	116.8	140.3	123.8	140.2	119.4	128.1

Interval #0 Information Seeding

Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	4:00
End Time	4:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1164	1183	1220	1163	1114	1166
Vehs Exited	1189	1148	1204	1117	1143	1161
Starting Vehs	150	127	111	132	141	130
Ending Vehs	125	162	127	178	112	138
Travel Distance (mi)	577	559	567	524	532	552
Travel Time (hr)	31.8	33.1	32.2	39.1	27.7	32.8
Total Delay (hr)	13.8	15.7	14.3	22.7	10.9	15.5
Total Stops	1742	1706	1789	1657	1614	1701
Fuel Used (gal)	26.3	25.7	25.8	26.5	23.7	25.6

**Interval #2 Information Recording 2**

Start Time	4:15
End Time	4:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1447	1329	1414	1388	1427	1403
Vehs Exited	1382	1256	1344	1322	1354	1330
Starting Vehs	125	162	127	178	112	138
Ending Vehs	190	235	197	244	185	201
Travel Distance (mi)	677	609	639	651	655	646
Travel Time (hr)	48.4	63.1	46.4	68.8	51.5	55.6
Total Delay (hr)	27.3	44.3	26.6	48.7	30.8	35.5
Total Stops	2143	1864	2078	1948	2178	2042
Fuel Used (gal)	32.7	33.9	31.3	36.3	33.2	33.5

**Interval #3 Information Recording 3**

Start Time	4:30
End Time	4:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1207	1175	1153	1140	1272	1187
Vehs Exited	1236	1173	1174	1205	1301	1216
Starting Vehs	190	235	197	244	185	201
Ending Vehs	161	237	176	179	156	181
Travel Distance (mi)	585	552	555	544	616	570
Travel Time (hr)	51.2	91.6	64.3	86.2	56.6	70.0
Total Delay (hr)	32.8	74.2	46.9	69.0	37.3	52.0
Total Stops	1797	1758	1696	1768	1966	1798
Fuel Used (gal)	30.5	39.0	32.8	37.9	32.8	34.6

**Interval #4 Information Recording 4**

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1220	1109	1185	1148	1183	1171
Vehs Exited	1253	1162	1185	1158	1177	1185
Starting Vehs	161	237	176	179	156	181
Ending Vehs	128	184	176	169	162	162
Travel Distance (mi)	556	560	566	543	600	565
Travel Time (hr)	38.2	102.9	69.6	97.9	47.4	71.2
Total Delay (hr)	20.5	85.3	51.9	81.0	28.9	53.5
Total Stops	1833	1787	1672	1630	1775	1739
Fuel Used (gal)	27.3	41.7	34.0	39.6	29.8	34.5

Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	327	325	336	147	299	336	270	446	412	154	162	128
Average Queue (ft)	193	149	176	74	107	191	223	289	177	75	70	47
95th Queue (ft)	323	268	281	133	233	305	335	574	402	132	130	93
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)					0	1		51	0			
Queuing Penalty (veh)					0	0		0	0			
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	3	0		0	0		55	0		5	2	
Queuing Penalty (veh)	9	0		0	0		57	0		4	3	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	125	286	274	465	518	411
Average Queue (ft)	50	101	102	194	328	202
95th Queue (ft)	98	209	204	423	530	338
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)				0	1	
Queuing Penalty (veh)				0	4	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	SB
Directions Served	T	T	TR	L	T	LTR
Maximum Queue (ft)	112	146	163	268	343	426
Average Queue (ft)	27	74	84	123	141	183
95th Queue (ft)	72	126	141	215	266	334
Link Distance (ft)	168	168	168	491	491	903
Upstream Blk Time (%)	0	0	0			
Queuing Penalty (veh)	0	0	0			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

**Intersection: 4: Golden Valley Pkwy & Spartan Way**

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	L	T	TR	L	R	R
Maximum Queue (ft)	63	113	52	118	127	91	102	53	78	55
Average Queue (ft)	26	50	18	45	67	38	36	17	42	26
95th Queue (ft)	53	88	44	92	107	69	77	40	67	48
Link Distance (ft)	584	584			969	969	969	1196	1196	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			125	470						300
Storage Blk Time (%)		0								
Queuing Penalty (veh)		0								

**Intersection: 5: Manthey Rd & De Lima Rd**

Movement	EB
Directions Served	R
Maximum Queue (ft)	34
Average Queue (ft)	7
95th Queue (ft)	30
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	25
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

**Intersection: 6: Manthey Rd & Dos Reis Rd**

Movement	EB
Directions Served	L
Maximum Queue (ft)	17
Average Queue (ft)	2
95th Queue (ft)	13
Link Distance (ft)	1420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0



Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	NB	SB
Directions Served	L	TR	LT
Maximum Queue (ft)	42	12	40
Average Queue (ft)	20	0	8
95th Queue (ft)	41	9	30
Link Distance (ft)	146	985	898
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	WB	SB	SB	SB
Directions Served	TR	L	L	LTR	R
Maximum Queue (ft)	12	44	479	519	42
Average Queue (ft)	1	12	337	375	10
95th Queue (ft)	8	37	902	924	39
Link Distance (ft)	146	420	761	761	
Upstream Blk Time (%)			22	39	
Queuing Penalty (veh)			0	0	
Storage Bay Dist (ft)					25
Storage Blk Time (%)				67	1
Queuing Penalty (veh)				12	1

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	WB	NB	NB
Directions Served	L	TR	LT	R
Maximum Queue (ft)	28	4	46	66
Average Queue (ft)	5	0	19	9
95th Queue (ft)	22	3	39	42
Link Distance (ft)	420	155	490	490
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	LT	R	LT	R
Maximum Queue (ft)	77	108	67	87	121	115	68	90	51
Average Queue (ft)	30	52	33	29	49	56	29	40	30
95th Queue (ft)	59	89	55	54	93	94	49	69	55
Link Distance (ft)		155	155	260	260	596		564	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100						100		25
Storage Blk Time (%)	0	0				1	0	14	3
Queuing Penalty (veh)	0	0				1	0	8	3

Network Summary

Network wide Queuing Penalty: 102
-----------------------------------

## Appendix C – Existing Conditions Freeway Level of Service Sheets

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4078	Heavy Vehicle Adjustment Factor (fHV)	0.871
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1660
Total Trucks, %	14.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3860	Heavy Vehicle Adjustment Factor (fHV)	0.860
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1592
Total Trucks, %	16.30	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	23.1
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3927	Heavy Vehicle Adjustment Factor (fHV)	0.848
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1642
Total Trucks, %	17.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.3
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4232	Heavy Vehicle Adjustment Factor (fHV)	0.876
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1713
Total Trucks, %	14.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4187	Heavy Vehicle Adjustment Factor (fHV)	0.867
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1713
Total Trucks, %	15.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4119	Heavy Vehicle Adjustment Factor (fHV)	0.885
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1650
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4496	Heavy Vehicle Adjustment Factor (fHV)	0.900
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1771
Total Trucks, %	11.10	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c <sub>adj</sub> ), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.6
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS <sub>adj</sub> ), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4516	Heavy Vehicle Adjustment Factor (fHV)	0.881
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1818
Total Trucks, %	13.50	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.76
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.5
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4415	Heavy Vehicle Adjustment Factor (fHV)	0.863
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1814
Total Trucks, %	15.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.76
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.5
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4230	Heavy Vehicle Adjustment Factor (fHV)	0.864
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1736
Total Trucks, %	15.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3963	Heavy Vehicle Adjustment Factor (fHV)	0.833
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1687
Total Trucks, %	20.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2021
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4122	Heavy Vehicle Adjustment Factor (fHV)	0.898
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1628
Total Trucks, %	11.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	23.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

## Appendix D – Baseline Conditions Level of Service Sheets



HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕		↖	↕		↖	↕	
Traffic Volume (veh/h)	200	482	146	50	569	57	227	111	48	45	75	149
Future Volume (veh/h)	200	482	146	50	569	57	227	111	48	45	75	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	618	187	57	647	65	303	148	64	57	95	189
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.75	0.75	0.75	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	1000	302	81	857	86	341	707	292	113	286	255
Arrive On Green	0.17	0.37	0.37	0.05	0.26	0.26	0.19	0.29	0.29	0.06	0.16	0.16
Sat Flow, veh/h	1781	2689	812	1781	3261	327	1781	2451	1014	1781	1777	1585
Grp Volume(v), veh/h	256	408	397	57	352	360	303	105	107	57	95	189
Grp Sat Flow(s),veh/h/ln	1781	1777	1724	1781	1777	1811	1781	1777	1688	1781	1777	1585
Q Serve(g_s), s	10.9	14.6	14.7	2.5	14.2	14.3	12.9	3.5	3.7	2.4	3.7	8.9
Cycle Q Clear(g_c), s	10.9	14.6	14.7	2.5	14.2	14.3	12.9	3.5	3.7	2.4	3.7	8.9
Prop In Lane	1.00		0.47	1.00		0.18	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	298	661	641	81	467	476	341	513	487	113	286	255
V/C Ratio(X)	0.86	0.62	0.62	0.70	0.75	0.76	0.89	0.21	0.22	0.50	0.33	0.74
Avail Cap(c_a), veh/h	342	683	662	342	683	696	342	683	648	342	683	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	20.0	20.0	36.8	26.5	26.5	30.8	21.0	21.1	35.4	29.0	31.2
Incr Delay (d2), s/veh	18.0	1.8	1.8	12.6	3.3	3.2	23.9	0.2	0.3	4.1	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	5.9	5.8	1.3	6.1	6.2	7.4	1.4	1.4	1.1	1.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	21.8	21.8	49.4	29.7	29.7	54.7	21.3	21.4	39.5	29.9	36.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1061			769			515			341	
Approach Delay, s/veh		28.5			31.2			40.9			35.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	33.0	19.9	16.6	17.1	24.5	10.0	26.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	4.5	16.7	14.9	10.9	12.9	16.3	4.4	5.7				
Green Ext Time (p_c), s	0.1	4.9	0.0	1.7	0.2	4.3	0.1	1.3				

Intersection Summary

HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	743	0	0	780	346	220	4	209	0	0	0
Future Volume (veh/h)	141	743	0	0	780	346	220	4	209	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	196	1032	0	0	857	380	293	5	279			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	229	1930	0	0	892	393	307	5	292			
Arrive On Green	0.13	0.54	0.00	0.00	0.37	0.37	0.36	0.36	0.36			
Sat Flow, veh/h	1781	3647	0	0	2492	1058	854	15	813			
Grp Volume(v), veh/h	196	1032	0	0	634	603	577	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1680	1681	0	0			
Q Serve(g_s), s	10.1	17.6	0.0	0.0	32.7	33.1	31.5	0.0	0.0			
Cycle Q Clear(g_c), s	10.1	17.6	0.0	0.0	32.7	33.1	31.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.63	0.51		0.48			
Lane Grp Cap(c), veh/h	229	1930	0	0	661	625	604	0	0			
V/C Ratio(X)	0.85	0.53	0.00	0.00	0.96	0.97	0.96	0.00	0.00			
Avail Cap(c_a), veh/h	379	1930	0	0	661	625	625	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.1	13.8	0.0	0.0	28.8	29.0	29.4	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.3	0.0	0.0	25.1	27.5	24.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.6	6.5	0.0	0.0	17.7	17.3	15.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	14.1	0.0	0.0	53.9	56.5	54.1	0.0	0.0			
LnGrp LOS	D	B	A	A	D	E	D	A	A			
Approach Vol, veh/h	1228			1237			577					
Approach Delay, s/veh	19.0			55.2			54.1					
Approach LOS	B			E			D					
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	55.7			16.1			39.6			38.4		
Change Period (Y+Rc), s	4.6			4.0			4.6			4.6		
Max Green Setting (Gmax), s	35.0			20.0			35.0			35.0		
Max Q Clear Time (g_c+I1), s	19.6			12.1			35.1			33.5		
Green Ext Time (p_c), s	6.0			0.1			0.0			0.3		
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	40.4											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Background Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	611	204	361	639	0	0	0	0	273	4	122
Future Volume (veh/h)	0	611	204	361	639	0	0	0	0	273	4	122
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	985	329	495	875	0				317	5	142
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	1252	418	403	1127	0				344	5	154
Arrive On Green	0.00	0.33	0.33	0.23	0.60	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3953	1263	1781	1870	0				1173	19	525
Grp Volume(v), veh/h	0	886	428	495	875	0				464	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1643	1781	1870	0				1717	0	0
Q Serve(g_s), s	0.0	20.8	20.8	20.0	30.9	0.0				23.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.8	20.8	20.0	30.9	0.0				23.1	0.0	0.0
Prop In Lane	0.00		0.77	1.00		0.00				0.68		0.31
Lane Grp Cap(c), veh/h	0	1127	544	403	1127	0				504	0	0
V/C Ratio(X)	0.00	0.79	0.79	1.23	0.78	0.00				0.92	0.00	0.00
Avail Cap(c_a), veh/h	0	1347	650	403	1127	0				680	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.8	26.8	34.2	13.1	0.0				30.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	5.2	123.0	3.4	0.0				12.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.5	22.0	12.0	0.0				10.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.3	32.0	157.2	16.6	0.0				42.9	0.0	0.0
LnGrp LOS	A	C	C	F	B	A				D	A	A
Approach Vol, veh/h		1314			1370						464	
Approach Delay, s/veh		30.2			67.4						42.9	
Approach LOS		C			E						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	34.0	33.9		30.6		57.9						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+Q), s	22.0	22.8		25.1		32.9						
Green Ext Time (p_c), s	0.0	6.4		0.8		1.2						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				48.3								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary  
4: Golden Valley Pkwy & Spartan Way

Background Conditions  
Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	464	175	179	382	134	183	10	346	50	10	25
Future Volume (veh/h)	30	464	175	179	382	134	183	10	346	50	10	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	844	318	289	616	216	333	18	629	54	11	27
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	1164	519	368	965	338	372	503	750	106	425	190
Arrive On Green	0.06	0.33	0.33	0.11	0.37	0.37	0.21	0.27	0.27	0.06	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	3456	2581	904	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	55	844	318	289	424	408	333	18	629	54	11	27
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1708	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	2.5	17.7	14.3	6.9	16.6	16.6	15.4	0.6	18.0	2.5	0.2	1.3
Cycle Q Clear(g_c), s	2.5	17.7	14.3	6.9	16.6	16.6	15.4	0.6	18.0	2.5	0.2	1.3
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	1164	519	368	664	639	372	503	750	106	425	190
V/C Ratio(X)	0.51	0.73	0.61	0.79	0.64	0.64	0.90	0.04	0.84	0.51	0.03	0.14
Avail Cap(c_a), veh/h	211	2101	937	409	1050	1009	421	1106	1649	211	1681	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	25.1	23.9	36.8	21.8	21.8	32.6	22.8	29.2	38.6	32.9	33.3
Incr Delay (d2), s/veh	3.8	0.9	1.2	8.9	1.0	1.1	19.7	0.0	2.6	3.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.2	5.0	3.3	6.6	6.4	8.2	0.3	5.8	1.1	0.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	26.0	25.1	45.7	22.8	22.9	52.2	22.9	31.8	42.3	32.9	33.7
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1217			1121			980			92	
Approach Delay, s/veh		26.5			28.7			38.6			38.7	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.6	32.8	22.3	15.9	9.7	36.7	9.6	28.5				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+10), s	19.7	19.7	17.4	3.3	4.5	18.6	4.5	20.0				
Green Ext Time (p_c), s	0.1	8.0	0.3	0.1	0.0	5.9	0.0	2.7				

Intersection Summary

HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	26	230	79	0
Future Vol, veh/h	0	0	26	230	79	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	28	250	86	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	392	86	86	0	0
Stage 1	86	-	-	-	-
Stage 2	306	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	612	973	1510	-	-
Stage 1	937	-	-	-	-
Stage 2	747	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	599	973	1510	-	-
Mov Cap-2 Maneuver	599	-	-	-	-
Stage 1	916	-	-	-	-
Stage 2	747	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1510	-	-	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	-	-
HCM Control Delay (s)	7.4	0	0	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗		↖	↗	
Traffic Vol, veh/h	35	0	0	221	79	0
Future Vol, veh/h	35	0	0	221	79	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	0	0	240	86	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	326	86	86	0	0
Stage 1	86	-	-	-	-
Stage 2	240	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	668	973	1510	-	-
Stage 1	937	-	-	-	-
Stage 2	800	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	668	973	1510	-	-
Mov Cap-2 Maneuver	668	-	-	-	-
Stage 1	937	-	-	-	-
Stage 2	800	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1510	-	668	-	-	-
HCM Lane V/C Ratio	-	-	0.057	-	-	-
HCM Control Delay (s)	0	-	10.7	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Intersection						
Int Delay, s/veh	6.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	85	0	0	139	35
Future Vol, veh/h	0	85	0	0	139	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	92	0	0	151	38

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	92	0	47 46
Stage 1	-	-	-	-	46 -
Stage 2	-	-	-	-	1 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1503	-	963 1023
Stage 1	-	-	-	-	976 -
Stage 2	-	-	-	-	1022 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1503	-	963 1023
Mov Cap-2 Maneuver	-	-	-	-	963 -
Stage 1	-	-	-	-	976 -
Stage 2	-	-	-	-	1022 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	963	1023	-	-	1503	-
HCM Lane V/C Ratio	0.157	0.037	-	-	-	-
HCM Control Delay (s)	9.4	8.7	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Background Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	28	80	63	38	34
Future Vol, veh/h	75	28	80	63	38	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	59	59	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	41	136	107	47	42

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	326	190	0	0	243
Stage 1	190	-	-	-	-
Stage 2	136	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	668	852	-	-	1323
Stage 1	842	-	-	-	-
Stage 2	890	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	644	852	-	-	1323
Mov Cap-2 Maneuver	644	-	-	-	-
Stage 1	842	-	-	-	-
Stage 2	858	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	644	852	1323
HCM Lane V/C Ratio	-	-	0.169	0.048	0.035
HCM Control Delay (s)	-	-	11.7	9.4	7.8
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	0.1



HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Background Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	84	17	166	62	0	0	0	0	271	5	41
Future Vol, veh/h	0	84	17	166	62	0	0	0	0	271	5	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	88	88	88	92	92	92	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	115	23	189	70	0	0	0	0	304	6	46

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	138	0	0		506	586	35
Stage 1	-	-	-	-	-	-		448	448	-
Stage 2	-	-	-	-	-	-		58	138	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1443	-	0		496	421	1030
Stage 1	0	-	-	-	-	0		611	571	-
Stage 2	0	-	-	-	-	0		958	781	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1443	-	-		431	0	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-		431	0	-
Stage 1	-	-	-	-	-	-		611	0	-
Stage 2	-	-	-	-	-	-		833	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.7	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1443	-	431	467	1030
HCM Lane V/C Ratio	-	-	0.131	-	0.471	0.262	0.03
HCM Control Delay (s)	-	-	7.9	-	20.6	15.4	8.6
HCM Lane LOS	-	-	A	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	2.5	1	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Background Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	43	312	0	0	219	278	9	0	196	0	0	0
Future Vol, veh/h	43	312	0	0	219	278	9	0	196	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	94	94	94	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	351	0	0	238	302	10	0	209	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	540	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1025	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1025	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.1	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	433	837	1025	-	-	-
HCM Lane V/C Ratio	0.022	0.249	0.047	-	-	-
HCM Control Delay (s)	13.5	10.7	8.7	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	1	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	19
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	69	295	144	28	229	37	214	33	51	30	14	54
Future Vol, veh/h	69	295	144	28	229	37	214	33	51	30	14	54
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.90	0.90	0.90	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	77	328	160	31	257	42	238	37	57	37	17	67
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	20.1	15.4	22.9	12.8
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	87%	0%	100%	0%	0%	20%	0%	68%	0%
Vol Thru, %	13%	0%	0%	100%	0%	80%	76%	32%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	24%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	51	69	295	144	143	152	44	54
LT Vol	214	0	69	0	0	28	0	30	0
Through Vol	33	0	0	295	0	115	115	14	0
RT Vol	0	51	0	0	144	0	37	0	54
Lane Flow Rate	274	57	77	328	160	160	170	54	67
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.644	0.115	0.172	0.688	0.304	0.363	0.373	0.138	0.15
Departure Headway (Hd)	8.447	7.293	8.066	7.555	6.839	8.161	7.884	9.164	8.093
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	425	490	443	479	523	439	454	389	441
Service Time	6.225	5.069	5.839	5.327	4.611	5.943	5.667	6.963	5.891
HCM Lane V/C Ratio	0.645	0.116	0.174	0.685	0.306	0.364	0.374	0.139	0.152
HCM Control Delay	25.4	11	12.5	25.5	12.6	15.6	15.3	13.4	12.3
HCM Lane LOS	D	B	B	D	B	C	C	B	B
HCM 95th-tile Q	4.4	0.4	0.6	5.2	1.3	1.6	1.7	0.5	0.5

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Background Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕		↖	↕		↖	↕	
Traffic Volume (veh/h)	273	637	193	107	545	59	288	199	106	128	152	102
Future Volume (veh/h)	273	637	193	107	545	59	288	199	106	128	152	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	671	203	126	641	69	465	321	171	138	163	110
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.62	0.62	0.62	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	329	928	281	163	859	92	353	511	266	177	264	168
Arrive On Green	0.18	0.35	0.35	0.09	0.27	0.27	0.20	0.23	0.23	0.10	0.13	0.13
Sat Flow, veh/h	1781	2688	813	1781	3237	348	1781	2258	1177	1781	2082	1326
Grp Volume(v), veh/h	287	443	431	126	352	358	465	251	241	138	138	135
Grp Sat Flow(s),veh/h/ln	1781	1777	1724	1781	1777	1808	1781	1777	1659	1781	1777	1632
Q Serve(g_s), s	11.8	16.5	16.5	5.2	13.7	13.7	15.0	9.6	10.0	5.7	5.5	6.0
Cycle Q Clear(g_c), s	11.8	16.5	16.5	5.2	13.7	13.7	15.0	9.6	10.0	5.7	5.5	6.0
Prop In Lane	1.00		0.47	1.00		0.19	1.00		0.71	1.00		0.81
Lane Grp Cap(c), veh/h	329	613	595	163	472	480	353	402	375	177	226	207
V/C Ratio(X)	0.87	0.72	0.72	0.77	0.75	0.75	1.32	0.62	0.64	0.78	0.61	0.65
Avail Cap(c_a), veh/h	353	705	684	353	705	717	353	705	658	353	705	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	21.6	21.6	33.6	25.4	25.4	30.3	26.4	26.5	33.3	31.2	31.4
Incr Delay (d2), s/veh	20.2	3.4	3.5	9.0	2.8	2.8	161.0	1.9	2.2	8.7	3.2	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.9	6.7	2.6	5.8	5.9	21.8	4.0	3.9	2.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	25.0	25.1	42.6	28.3	28.3	191.4	28.3	28.7	41.9	34.4	35.6
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	D
Approach Vol, veh/h		1161			836			957			411	
Approach Delay, s/veh		31.2			30.4			107.6			37.3	
Approach LOS		C			C			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	30.1	20.0	13.6	17.9	24.1	12.5	21.1				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	7.2	18.5	17.0	8.0	13.8	15.7	7.7	12.0				
Green Ext Time (p_c), s	0.2	4.9	0.0	1.7	0.1	4.3	0.2	3.1				

Intersection Summary

HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

# HCM 6th Signalized Intersection Summary

## 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Background Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	822	0	0	735	353	278	7	408	0	0	0
Future Volume (veh/h)	184	822	0	0	735	353	278	7	408	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	207	924	0	0	855	410	299	8	439			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	240	1920	0	0	850	405	242	6	356			
Arrive On Green	0.13	0.54	0.00	0.00	0.36	0.36	0.36	0.36	0.36			
Sat Flow, veh/h	1781	3647	0	0	2429	1112	666	18	978			
Grp Volume(v), veh/h	207	924	0	0	649	616	746	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1670	1661	0	0			
Q Serve(g_s), s	10.9	15.5	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	10.9	15.5	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.67	0.40		0.59			
Lane Grp Cap(c), veh/h	240	1920	0	0	647	608	605	0	0			
V/C Ratio(X)	0.86	0.48	0.00	0.00	1.00	1.01	1.23	0.00	0.00			
Avail Cap(c_a), veh/h	371	1920	0	0	647	608	605	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	13.7	0.0	0.0	30.6	30.6	30.6	0.0	0.0			
Incr Delay (d2), s/veh	7.9	0.2	0.0	0.0	36.2	39.8	119.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.2	5.8	0.0	0.0	20.6	20.0	32.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	13.9	0.0	0.0	66.8	70.4	149.6	0.0	0.0			
LnGrp LOS	D	B	A	A	F	F	F	A	A			
Approach Vol, veh/h		1131			1265			746				
Approach Delay, s/veh		20.3			68.5			149.6				
Approach LOS		C			E			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		56.5			16.9	39.6		39.6				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		17.5			12.9	37.0		37.0				
Green Ext Time (p_c), s		5.6			0.1	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					70.4							
HCM 6th LOS					E							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Background Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	658	200	270	743	0	0	0	0	348	8	226
Future Volume (veh/h)	0	658	200	270	743	0	0	0	0	348	8	226
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	748	227	329	906	0				395	9	257
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	1021	307	362	953	0				395	9	257
Arrive On Green	0.00	0.26	0.26	0.20	0.51	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	4063	1169	1781	1870	0				1016	23	661
Grp Volume(v), veh/h	0	653	322	329	906	0				661	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1660	1781	1870	0				1701	0	0
Q Serve(g_s), s	0.0	15.8	16.0	16.3	41.5	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.8	16.0	16.3	41.5	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.70	1.00		0.00				0.60		0.39
Lane Grp Cap(c), veh/h	0	893	435	362	953	0				660	0	0
V/C Ratio(X)	0.00	0.73	0.74	0.91	0.95	0.00				1.00	0.00	0.00
Avail Cap(c_a), veh/h	0	1322	644	395	953	0				660	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.4	30.4	35.1	21.0	0.0				27.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	2.3	22.3	18.3	0.0				35.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	6.4	9.0	20.9	0.0				19.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.4	32.7	57.4	39.3	0.0				62.9	0.0	0.0
LnGrp LOS	A	C	C	E	D	A				F	A	A
Approach Vol, veh/h		975			1235						661	
Approach Delay, s/veh		31.8			44.1						62.9	
Approach LOS		C			D						E	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	22.3	28.2		39.6		50.6						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+110), s	110.3	18.0		37.0		43.5						
Green Ext Time (p_c), s	0.0	5.6		0.0		0.0						

Intersection Summary

HCM 6th Ctrl Delay		44.3										
HCM 6th LOS			D									

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Background Conditions  
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	220	35	369	272	260	35	50	368	260	70	50
Future Volume (veh/h)	103	220	35	369	272	260	35	50	368	260	70	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	297	47	429	316	302	38	54	400	283	76	54
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	772	344	509	471	420	94	360	537	262	1020	455
Arrive On Green	0.10	0.22	0.22	0.15	0.27	0.27	0.05	0.19	0.19	0.15	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	3456	1777	1585	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	139	297	47	429	316	302	38	54	400	283	76	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	5.2	4.9	1.6	8.2	10.8	11.7	1.4	1.6	9.2	10.0	1.1	1.7
Cycle Q Clear(g_c), s	5.2	4.9	1.6	8.2	10.8	11.7	1.4	1.6	9.2	10.0	1.1	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	772	344	509	471	420	94	360	537	262	1020	455
V/C Ratio(X)	0.79	0.38	0.14	0.84	0.67	0.72	0.40	0.15	0.74	1.08	0.07	0.12
Avail Cap(c_a), veh/h	262	2615	1167	509	1308	1167	524	1377	2053	262	2092	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	22.7	21.5	28.2	22.3	22.7	31.1	22.8	25.9	29.0	17.6	17.9
Incr Delay (d2), s/veh	9.1	0.3	0.2	12.3	1.7	2.3	2.8	0.2	2.1	78.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.9	0.6	4.0	4.4	4.3	0.6	0.7	2.9	9.6	0.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	23.0	21.6	40.5	24.0	25.0	33.9	23.0	27.9	107.3	17.7	18.0
LnGrp LOS	D	C	C	D	C	C	C	C	C	F	B	B
Approach Vol, veh/h		483			1047			492			413	
Approach Delay, s/veh		27.5			31.0			27.9			79.1	
Approach LOS		C			C			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	19.9	8.2	25.3	11.3	23.1	14.6	18.9				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+10), s	10.0	6.9	3.4	3.7	7.2	13.7	12.0	11.2				
Green Ext Time (p_c), s	0.0	2.2	0.0	0.6	0.1	4.3	0.0	1.9				

### Intersection Summary

HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Background Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↷		↶	↷	
Traffic Vol, veh/h	0	10	0	326	245	0
Future Vol, veh/h	0	10	0	326	245	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	0	354	266	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	620	266	266	0	-	0
Stage 1	266	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	452	773	1298	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	452	773	1298	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1298	-	-	773	-	-
HCM Lane V/C Ratio	-	-	-	0.014	-	-
HCM Control Delay (s)	0	-	0	9.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-



Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	165	0	0	161	103	152
Future Vol, veh/h	165	0	0	161	103	152
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	179	0	0	175	112	165

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	370	195	277	0	-	0
Stage 1	195	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	630	846	1286	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	630	846	1286	-	-	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	855	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1286	-	630	-	-	-
HCM Lane V/C Ratio	-	-	0.285	-	-	-
HCM Control Delay (s)	0	-	13	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Background Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	10					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	228	152	0	248	165
Future Vol, veh/h	0	228	152	0	248	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	248	165	0	270	179

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	248	0	454
Stage 1	-	-	-	-	124
Stage 2	-	-	-	-	330
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1318	-	564
Stage 1	-	-	-	-	902
Stage 2	-	-	-	-	728
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1318	-	494
Mov Cap-2 Maneuver	-	-	-	-	494
Stage 1	-	-	-	-	902
Stage 2	-	-	-	-	637

Approach	EB	WB	NB
HCM Control Delay, s	0	8.1	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	494	927	-	-	1318	-
HCM Lane V/C Ratio	0.546	0.193	-	-	0.125	-
HCM Control Delay (s)	20.7	9.8	-	-	8.1	0
HCM Lane LOS	C	A	-	-	A	A
HCM 95th %tile Q(veh)	3.2	0.7	-	-	0.4	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Background Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	3.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	86	273	53	63	197
Future Vol, veh/h	48	86	273	53	63	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	84	84	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	104	325	63	78	243

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	756	357	0	0	388	0
Stage 1	357	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	376	687	-	-	1170	-
Stage 1	708	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	347	687	-	-	1170	-
Mov Cap-2 Maneuver	347	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	626	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	347	687	1170
HCM Lane V/C Ratio	-	-	0.167	0.151	0.066
HCM Control Delay (s)	-	-	17.4	11.2	8.3
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.2

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Background Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↑	↑
Traffic Vol, veh/h	0	80	36	166	96	0	0	0	0	262	3	38
Future Vol, veh/h	0	80	36	166	96	0	0	0	0	262	3	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	83	83	83	92	92	92	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	103	46	200	116	0	0	0	0	298	3	43

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	149	0	0		568	665	58
Stage 1	-	-	-	-	-	-		516	516	-
Stage 2	-	-	-	-	-	-		52	149	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1430	-	0		453	379	996
Stage 1	0	-	-	-	-	0		564	533	-
Stage 2	0	-	-	-	-	0		964	773	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1430	-	-		390	0	996
Mov Cap-2 Maneuver	-	-	-	-	-	-		390	0	-
Stage 1	-	-	-	-	-	-		564	0	-
Stage 2	-	-	-	-	-	-		829	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1430	-	390	423	996
HCM Lane V/C Ratio	-	-	0.14	-	0.509	0.277	0.029
HCM Control Delay (s)	-	-	7.9	-	23.4	16.7	8.7
HCM Lane LOS	-	-	A	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	2.8	1.1	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Background Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↙	↗			
Traffic Vol, veh/h	35	307	0	0	226	369	36	5	190	0	0	0
Future Vol, veh/h	35	307	0	0	226	369	36	5	190	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	95	95	95	88	88	88	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	345	0	0	238	388	41	6	216	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	626	0	0
Stage 1	-	-	423
Stage 2	-	-	119
Critical Hdwy	4.14	-	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	3.52
Pot Cap-1 Maneuver	952	0	470
Stage 1	-	0	629
Stage 2	-	0	893
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	952	-	451
Mov Cap-2 Maneuver	-	-	451
Stage 1	-	-	603
Stage 2	-	-	893

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	451	840	952	-	-	-
HCM Lane V/C Ratio	0.103	0.257	0.041	-	-	-
HCM Control Delay (s)	13.9	10.8	8.9	-	-	-
HCM Lane LOS	B	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	1	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	24.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	68	279	150	48	335	57	206	59	86	54	53	54
Future Vol, veh/h	68	279	150	48	335	57	206	59	86	54	53	54
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	294	158	54	376	64	219	63	91	59	58	59
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	24.1	24.3	30	16.5
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	78%	0%	100%	0%	0%	22%	0%	50%	0%
Vol Thru, %	22%	0%	0%	100%	0%	78%	75%	50%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	265	86	68	279	150	216	225	107	54
LT Vol	206	0	68	0	0	48	0	54	0
Through Vol	59	0	0	279	0	168	168	53	0
RT Vol	0	86	0	0	150	0	57	0	54
Lane Flow Rate	282	91	72	294	158	242	252	116	59
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.744	0.213	0.186	0.719	0.355	0.604	0.608	0.329	0.15
Departure Headway (Hd)	9.505	8.385	9.33	8.814	8.09	8.978	8.678	10.195	9.206
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	381	427	384	411	444	402	416	352	389
Service Time	7.271	6.15	7.093	6.576	5.852	6.742	6.442	7.974	6.985
HCM Lane V/C Ratio	0.74	0.213	0.188	0.715	0.356	0.602	0.606	0.33	0.152
HCM Control Delay	35.4	13.4	14.2	31.2	15.3	24.6	24.1	17.9	13.6
HCM Lane LOS	E	B	B	D	C	C	C	C	B
HCM 95th-tile Q	5.9	0.8	0.7	5.5	1.6	3.8	3.9	1.4	0.5

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5240	4977	5051	5223	5261	5152
Vehs Exited	5183	4746	5016	5271	5311	5107
Starting Vehs	142	157	152	172	190	159
Ending Vehs	199	388	187	124	140	202
Travel Distance (mi)	2867	2644	2691	2823	2820	2769
Travel Time (hr)	242.1	309.1	315.3	182.2	181.4	246.0
Total Delay (hr)	153.7	227.7	232.1	94.8	94.1	160.5
Total Stops	8599	8017	7735	8422	8484	8246
Fuel Used (gal)	144.1	152.3	155.3	129.6	129.8	142.2

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1166	1194	1169	1193	1159	1177
Vehs Exited	1185	1215	1152	1219	1211	1196
Starting Vehs	142	157	152	172	190	159
Ending Vehs	123	136	169	146	138	140
Travel Distance (mi)	652	661	645	651	643	650
Travel Time (hr)	33.7	34.1	37.0	37.3	34.9	35.4
Total Delay (hr)	13.6	13.7	17.4	17.1	15.0	15.3
Total Stops	1788	1825	1739	1980	1892	1844
Fuel Used (gal)	27.8	28.7	28.5	29.4	28.3	28.6

**Interval #2 Information Recording 2**

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1730	1668	1663	1672	1727	1695
Vehs Exited	1572	1554	1523	1563	1610	1565
Starting Vehs	123	136	169	146	138	140
Ending Vehs	281	250	309	255	255	268
Travel Distance (mi)	894	848	826	849	883	860
Travel Time (hr)	69.8	64.6	73.8	59.8	66.2	66.8
Total Delay (hr)	42.2	38.5	48.4	33.6	38.8	40.3
Total Stops	2708	2612	2346	2598	2953	2640
Fuel Used (gal)	43.4	41.0	42.0	39.8	42.4	41.7

**Interval #3 Information Recording 3**

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1148	1151	1093	1181	1198	1155
Vehs Exited	1267	1083	1207	1276	1317	1230
Starting Vehs	281	250	309	255	255	268
Ending Vehs	162	318	195	160	136	193
Travel Distance (mi)	679	626	624	665	696	658
Travel Time (hr)	75.5	81.0	95.8	49.7	49.2	70.2
Total Delay (hr)	54.6	61.8	76.4	29.1	27.9	50.0
Total Stops	2146	2042	1841	1983	1959	1998
Fuel Used (gal)	38.5	37.5	41.2	32.2	32.8	36.5

**Interval #4 Information Recording 4**

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1196	964	1126	1177	1177	1128
Vehs Exited	1159	894	1134	1213	1173	1114
Starting Vehs	162	318	195	160	136	193
Ending Vehs	199	388	187	124	140	202
Travel Distance (mi)	641	508	596	659	598	600
Travel Time (hr)	63.2	129.4	108.6	35.4	31.1	73.5
Total Delay (hr)	43.3	113.7	89.9	15.0	12.5	54.9
Total Stops	1957	1538	1809	1861	1680	1771
Fuel Used (gal)	34.4	45.1	43.5	28.2	26.3	35.5



Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	265	248	284	217	374	384	263	382	330	84	111	152
Average Queue (ft)	130	108	139	48	173	234	196	219	98	34	44	64
95th Queue (ft)	230	209	246	150	363	390	327	523	292	74	90	121
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)					10	16		36	0			
Queuing Penalty (veh)					0	0		0	0			
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	0	0			6		43	0		0	1	
Queuing Penalty (veh)	1	0			3		24	1		0	0	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	170	316	306	565	564	524
Average Queue (ft)	75	122	126	339	442	209
95th Queue (ft)	140	248	256	594	633	426
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)				1	7	1
Queuing Penalty (veh)				4	35	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B12	B12	B12	WB	WB	SB
Directions Served	T	T	TR	T	T	T	L	T	LTR
Maximum Queue (ft)	192	235	240	48	112	228	515	466	332
Average Queue (ft)	62	112	134	2	10	23	247	182	169
95th Queue (ft)	146	209	245	30	67	119	484	367	270
Link Distance (ft)	168	168	168	969	969	969	491	491	903
Upstream Blk Time (%)	1	5	9				3	0	
Queuing Penalty (veh)	3	23	39				15	1	
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	TR	L	T	R	R
Maximum Queue (ft)	68	286	353	205	108	128	208	285	237	34	204	180
Average Queue (ft)	24	79	115	61	38	64	71	101	85	6	62	43
95th Queue (ft)	56	188	247	155	92	108	148	205	179	24	141	108
Link Distance (ft)		584	584			969	969	969	1196	1196	1196	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	305			125	470							300
Storage Blk Time (%)		0	7	0								
Queuing Penalty (veh)		0	20	0								

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	88	10	46	42
Average Queue (ft)	34	1	10	13
95th Queue (ft)	68	7	32	35
Link Distance (ft)		1346	1346	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200			200
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Manthey Rd & De Lima Rd

Movement	NB
Directions Served	LT
Maximum Queue (ft)	33
Average Queue (ft)	2
95th Queue (ft)	15
Link Distance (ft)	1816
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Manthey Rd & Dos Reis Rd

Movement	EB
Directions Served	L
Maximum Queue (ft)	45
Average Queue (ft)	20
95th Queue (ft)	43
Link Distance (ft)	1414
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	3
Queuing Penalty (veh)	0

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement	NB	NB
Directions Served	L	R
Maximum Queue (ft)	42	21
Average Queue (ft)	13	2
95th Queue (ft)	26	10
Link Distance (ft)	1346	1346
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	NB	SB
Directions Served	L	TR	LT
Maximum Queue (ft)	52	101	89
Average Queue (ft)	25	10	10
95th Queue (ft)	49	98	74
Link Distance (ft)	146	985	898
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	EB	WB	SB	SB	SB
Directions Served	T	TR	L	L	LTR	R
Maximum Queue (ft)	21	53	43	356	398	46
Average Queue (ft)	1	9	11	182	216	8
95th Queue (ft)	10	60	34	673	680	34
Link Distance (ft)	146	146	420	761	761	
Upstream Blk Time (%)		4		17	18	
Queuing Penalty (veh)		2		0	0	
Storage Bay Dist (ft)						25
Storage Blk Time (%)					55	1
Queuing Penalty (veh)					11	1

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	NB	NB	B32
Directions Served	L	T	T	LT	R	T
Maximum Queue (ft)	88	91	88	23	161	35
Average Queue (ft)	24	35	32	5	47	7
95th Queue (ft)	118	228	213	20	266	63
Link Distance (ft)	420	420	420	490	490	179
Upstream Blk Time (%)		7	7		6	4
Queuing Penalty (veh)		8	7		0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	64	143	115	109	130	75	202	56	173	51
Average Queue (ft)	25	66	51	45	54	24	95	20	53	30
95th Queue (ft)	52	134	140	158	175	172	336	43	245	55
Link Distance (ft)		155	155	260	260	361	596		564	
Upstream Blk Time (%)		9	8	7	7	6	7		3	
Queuing Penalty (veh)		21	20	0	0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	0	9					8		12	3
Queuing Penalty (veh)	0	6					4		6	2

Network Summary

Network wide Queuing Penalty: 257

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:45	3:45	3:45	3:45	3:45	3:45
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	3973	5426	5369	5726	5417	5183
Vehs Exited	3617	5368	5400	5681	5455	5106
Starting Vehs	399	226	246	236	320	286
Ending Vehs	755	284	215	281	282	363
Travel Distance (mi)	2294	3419	3501	3572	3506	3259
Travel Time (hr)	1708.8	717.7	680.4	645.7	739.6	898.4
Total Delay (hr)	1636.4	613.5	573.8	536.2	633.2	798.6
Total Stops	7468	9216	9477	9815	9022	8997
Fuel Used (gal)	462.0	268.2	262.0	256.2	275.0	304.7

Interval #0 Information Seeding

Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	4:00
End Time	4:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1042	1347	1326	1422	1307	1287
Vehs Exited	932	1343	1310	1399	1329	1261
Starting Vehs	399	226	246	236	320	286
Ending Vehs	509	230	262	259	298	308
Travel Distance (mi)	621	803	880	857	849	802
Travel Time (hr)	182.8	87.5	91.1	96.6	98.6	111.3
Total Delay (hr)	163.5	62.8	64.3	70.1	72.9	86.7
Total Stops	1975	2326	2432	2378	2095	2244
Fuel Used (gal)	60.8	45.2	47.9	48.8	48.2	50.2

**Interval #2 Information Recording 2**

Start Time	4:15
End Time	4:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1072	1526	1469	1639	1553	1453
Vehs Exited	956	1430	1462	1576	1498	1381
Starting Vehs	509	230	262	259	298	308
Ending Vehs	625	326	269	322	353	379
Travel Distance (mi)	628	946	900	998	965	887
Travel Time (hr)	351.2	148.0	147.9	148.2	168.0	192.7
Total Delay (hr)	331.6	119.3	120.1	117.9	138.7	165.5
Total Stops	1954	2501	2466	2680	2509	2425
Fuel Used (gal)	99.3	62.1	61.1	64.0	67.4	70.8

**Interval #3 Information Recording 3**

Start Time	4:30
End Time	4:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	908	1288	1287	1311	1301	1219
Vehs Exited	881	1293	1320	1337	1357	1238
Starting Vehs	625	326	269	322	353	379
Ending Vehs	652	321	236	296	297	358
Travel Distance (mi)	529	852	851	865	867	793
Travel Time (hr)	515.9	218.3	206.9	185.2	221.7	269.6
Total Delay (hr)	499.0	192.4	181.0	158.7	195.3	245.3
Total Stops	1736	2371	2352	2396	2332	2235
Fuel Used (gal)	134.9	75.8	73.1	68.4	76.9	85.8

**Interval #4 Information Recording 4**

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	951	1265	1287	1354	1256	1224
Vehs Exited	848	1302	1308	1369	1271	1222
Starting Vehs	652	321	236	296	297	358
Ending Vehs	755	284	215	281	282	363
Travel Distance (mi)	516	818	871	852	825	776
Travel Time (hr)	658.9	263.9	234.6	215.6	251.2	324.9
Total Delay (hr)	642.3	238.9	208.4	189.5	226.3	301.1
Total Stops	1803	2018	2227	2361	2086	2100
Fuel Used (gal)	167.0	85.0	79.8	75.0	82.5	97.9

Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	356	424	395	300	390	384	270	447	338	150	161	177
Average Queue (ft)	221	194	215	122	297	323	264	415	81	72	69	67
95th Queue (ft)	351	357	346	286	466	438	277	434	281	126	132	137
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)		0	0		39	51		99	0			
Queuing Penalty (veh)		3	0		0	0		0	0			
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	8	0		0	17		98	0		4	3	
Queuing Penalty (veh)	24	1		0	18		97	0		3	4	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	236	224	232	580	569	664
Average Queue (ft)	122	119	128	474	546	626
95th Queue (ft)	205	199	213	632	578	705
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)				4	23	74
Queuing Penalty (veh)				20	108	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B12	WB	WB	SB
Directions Served	T	T	TR	T	L	T	LTR
Maximum Queue (ft)	168	204	236	50	312	412	681
Average Queue (ft)	71	115	152	3	127	170	320
95th Queue (ft)	141	182	233	23	235	323	619
Link Distance (ft)	168	168	168	969	491	491	903
Upstream Blk Time (%)	0	1	6			0	2
Queuing Penalty (veh)	0	3	17			1	0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	TR	L	T	R	R
Maximum Queue (ft)	120	113	154	62	129	157	143	239	70	95	144	106
Average Queue (ft)	60	41	71	19	68	90	58	91	24	24	58	34
95th Queue (ft)	112	84	130	50	117	136	107	174	57	60	107	71
Link Distance (ft)		584	584			969	969	969	1196	1196	1196	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	305			125	470							300
Storage Blk Time (%)			1									
Queuing Penalty (veh)			1									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	249	538	64	52
Average Queue (ft)	172	209	29	17
95th Queue (ft)	296	719	61	41
Link Distance (ft)		1346	1346	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200			200
Storage Blk Time (%)	35	0		
Queuing Penalty (veh)	12	0		

Intersection: 5: Manthey Rd & De Lima Rd

Movement	EB
Directions Served	R
Maximum Queue (ft)	34
Average Queue (ft)	11
95th Queue (ft)	37
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	25
Storage Blk Time (%)	0
Queuing Penalty (veh)	0



Intersection: 6: Manthey Rd & Dos Reis Rd

Movement	EB
Directions Served	L
Maximum Queue (ft)	69
Average Queue (ft)	37
95th Queue (ft)	61
Link Distance (ft)	1414
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	15
Queuing Penalty (veh)	0

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	17	78	110	35
Average Queue (ft)	2	23	37	8
95th Queue (ft)	13	62	82	22
Link Distance (ft)	492	1414	1346	1346
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	WB	NB	B22	SB
Directions Served	L	R	TR	T	LT
Maximum Queue (ft)	54	11	219	1103	258
Average Queue (ft)	19	0	184	455	174
95th Queue (ft)	49	8	822	2478	720
Link Distance (ft)	146	146	985	6453	898
Upstream Blk Time (%)			16		16
Queuing Penalty (veh)			51		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	WB	SB	SB	SB
Directions Served	TR	L	L	LTR	R
Maximum Queue (ft)	43	47	489	532	30
Average Queue (ft)	30	10	387	422	11
95th Queue (ft)	126	37	978	990	42
Link Distance (ft)	146	420	761	761	
Upstream Blk Time (%)	19		45	46	
Queuing Penalty (veh)	11		0	0	
Storage Bay Dist (ft)					25
Storage Blk Time (%)				73	1
Queuing Penalty (veh)				14	2

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	WB	NB	NB	B32
Directions Served	L	T	T	TR	LT	R	T
Maximum Queue (ft)	32	110	59	6	47	175	36
Average Queue (ft)	7	87	59	0	14	111	33
95th Queue (ft)	28	368	254	5	39	449	143
Link Distance (ft)	420	420	420	155	490	490	179
Upstream Blk Time (%)		20				20	19
Queuing Penalty (veh)		23				0	0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	79	147	131	72	172	32	233	73	185	43
Average Queue (ft)	25	79	72	26	107	32	174	25	144	27
95th Queue (ft)	65	160	188	57	274	136	534	55	480	58
Link Distance (ft)		155	155	260	260	169	596		564	
Upstream Blk Time (%)	0	20	20		20	20	20		19	
Queuing Penalty (veh)	0	50	50		0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	0	22					22		33	3
Queuing Penalty (veh)	0	15					19		18	4

Network Summary

Network wide Queuing Penalty: 567

## Appendix E – Baseline Conditions Freeway Level of Service Sheets

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4200	Heavy Vehicle Adjustment Factor (fhv)	0.871
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1710
Total Trucks, %	14.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.5
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	3975	Heavy Vehicle Adjustment Factor (fhv)	0.860
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1639
Total Trucks, %	16.30	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.3
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4045	Heavy Vehicle Adjustment Factor (fhv)	0.848
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1692
Total Trucks, %	17.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4359	Heavy Vehicle Adjustment Factor (fhv)	0.876
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1765
Total Trucks, %	14.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.5
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4313	Heavy Vehicle Adjustment Factor (fhv)	0.867
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1764
Total Trucks, %	15.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background Conditions
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4243	Heavy Vehicle Adjustment Factor (fhv)	0.885
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1700
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.1
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4586	Heavy Vehicle Adjustment Factor (fhv)	0.900
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1807
Total Trucks, %	11.10	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	10/28/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4606	Heavy Vehicle Adjustment Factor (fhv)	0.881
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1854
Total Trucks, %	13.50	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.77
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4503	Heavy Vehicle Adjustment Factor (fhv)	0.863
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1850
Total Trucks, %	15.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.77
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.5
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4315	Heavy Vehicle Adjustment Factor (fhv)	0.864
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1771
Total Trucks, %	15.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.7
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.6
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4043	Heavy Vehicle Adjustment Factor (fhv)	0.833
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1721
Total Trucks, %	20.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.3
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.6
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background Conditions
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4204	Heavy Vehicle Adjustment Factor (fhv)	0.898
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1660
Total Trucks, %	11.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

## Appendix F – Ashley Driveway Counts



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore N Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-001  
 Date: 6/2/2021

### Total

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	4
12:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
12:30 AM	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
12:45 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
1:15 AM	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	0	11
1:30 AM	0	42	0	0	0	4	0	0	0	0	0	0	0	0	0	0	46
1:45 AM	0	8	0	0	1	3	0	0	0	0	0	0	0	0	1	0	13
2:00 AM	0	6	0	0	1	0	0	0	0	0	0	0	0	0	1	0	8
2:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
2:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
3:15 AM	0	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	12
3:30 AM	0	3	0	0	1	15	0	0	0	0	0	0	0	0	0	0	19
3:45 AM	0	3	0	0	3	44	0	0	0	0	0	0	0	0	0	0	50
4:00 AM	0	5	0	0	4	17	0	0	0	0	0	0	0	0	0	0	26
4:15 AM	0	6	0	0	1	9	0	0	0	0	0	0	0	0	0	0	16
4:30 AM	0	8	0	0	2	11	0	0	0	0	0	0	0	0	2	0	23
4:45 AM	0	3	0	0	4	18	0	0	0	0	0	0	0	0	0	0	25
5:00 AM	0	4	0	0	4	24	0	0	0	0	0	0	0	0	0	0	32
5:15 AM	0	3	0	0	2	14	0	0	0	0	0	0	0	0	0	0	19
5:30 AM	0	4	0	0	1	14	0	0	0	0	0	0	0	0	0	0	19
5:45 AM	0	2	0	0	1	17	0	0	0	0	0	0	0	0	1	0	21
6:00 AM	0	7	1	0	1	13	0	0	0	0	0	0	0	0	2	0	24
6:15 AM	0	8	0	0	1	9	0	0	0	0	0	0	0	0	0	0	18
6:30 AM	0	11	0	0	2	5	0	0	0	0	0	0	0	0	0	0	18
6:45 AM	0	9	0	0	2	12	0	0	0	0	0	0	0	0	2	0	25
7:00 AM	0	10	0	0	1	6	0	0	0	0	0	0	0	0	2	0	19
7:15 AM	0	10	0	0	3	10	0	0	0	0	0	0	0	0	4	0	27
7:30 AM	0	8	0	0	4	11	0	0	0	0	0	0	0	0	4	0	27
7:45 AM	0	8	0	0	10	15	0	0	0	0	0	0	1	0	3	0	37
8:00 AM	0	10	1	0	4	11	0	0	0	0	0	0	0	0	12	0	38
8:15 AM	0	13	0	0	2	8	0	0	0	0	0	0	0	0	1	0	24
8:30 AM	0	5	0	0	1	7	0	0	0	0	0	0	0	0	0	0	13
8:45 AM	0	12	0	0	3	7	0	0	0	0	0	0	0	0	1	0	23
9:00 AM	0	5	0	0	3	9	0	0	0	0	0	0	0	0	0	0	17
9:15 AM	0	9	0	0	4	11	0	0	0	0	0	0	0	0	2	0	26
9:30 AM	0	9	0	0	2	13	0	0	0	0	0	0	0	0	1	0	25
9:45 AM	0	4	0	0	3	11	0	0	0	0	0	0	0	0	2	0	20
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	264	2	0	71	375	0	0	0	0	0	0	1	0	43	0	756
	0.00%	99.25%	0.75%	0.00%	15.92%	84.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.27%	0.00%	97.73%	0.00%	
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																
<b>PEAK HR VOL :</b>	0	36	1	0	21	47	0	0	0	0	0	0	1	0	23	0	129
<b>PEAK HR FACTOR :</b>	0.000	0.900	0.250	0.000	0.525	0.783	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.479	0.000	0.849
	0.841				0.680				0.500								
<b>NOON</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	11	0	0	4	12	0	1	0	0	0	0	0	0	3	0	31
10:15 AM	0	11	0	0	3	5	0	0	0	0	0	0	0	0	3	0	22
10:30 AM	0	9	0	0	2	15	0	1	0	0	0	0	0	0	3	0	30
10:45 AM	0	6	0	0	5	8	0	0	0	0	0	0	0	0	0	0	19
11:00 AM	0	10	0	0	5	4	0	0	0	0	0	0	0	0	1	0	20
11:15 AM	0	10	0	0	4	10	0	0	0	0	0	0	0	0	5	0	29
11:30 AM	0	13	0	0	4	11	0	0	0	0	0	0	0	0	2	0	30
11:45 AM	0	10	0	0	8	10	0	1	0	0	0	0	0	0	3	0	32
12:00 PM	0	6	0	0	6	7	0	0	0	0	0	0	0	0	5	0	24
12:15 PM	0	3	0	0	11	8	0	1	0	0	0	0	0	0	5	0	28
12:30 PM	0	14	0	0	6	10	0	0	0	0	0	0	0	0	6	0	36
12:45 PM	0	7	0	0	8	26	0	0	0	0	0	0	0	0	5	0	46
1:00 PM	0	10	0	0	4	14	0	0	0	0	0	0	0	0	3	0	31
1:15 PM	0	18	0	0	5	6	0	0	0	0	0	0	1	0	4	0	34
1:30 PM	0	21	0	0	1	7	0	0	0	0	0	0	0	0	4	0	33
1:45 PM	0	12	0	0	0	15	0	0	0	0	0	0	0	0	9	0	36
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	171	0	0	76	168	0	4	0	0	0	0	1	0	61	0	481
	0.00%	100.00%	0.00%	0.00%	30.65%	67.74%	0.00%	1.61%	0.00%	0.00%	0.00%	0.00%	1.61%	0.00%	98.39%	0.00%	
<b>PEAK HR :</b>	12:30 PM - 01:30 PM																
<b>PEAK HR VOL :</b>	0	49	0	0	23	56	0	0	0	0	0	0	1	0	18	0	147
<b>PEAK HR FACTOR :</b>	0.000	0.681	0.000	0.000	0.719	0.538	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.750	0.000	0.799
	0.681				0.581				0.792								
<b>PM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	12	0	0	2	10	0	0	0	0	0	0	0	0	4	0	28
2:15 PM	0	23	0	0	3	18	0	0	0	0	0	0	0	0	4	0	48
2:30 PM	0	46	0	0	5	36	0	0	0	0	0	0	0	0	3	0	90
2:45 PM	0	15	0	0	3	35	0	0	0	0	0	0	0	0	2	0	55
3:00 PM	0	9	0	0	3	14	0	1	0	0	0	0	0	0	3	0	30
3:15 PM	0	11	0	0	1	5	0	0	0	0	0	0	0	0	4	0	21
3:30 PM	0	14	0	0	3	10	0	0	0	0	0	0	0	0	7	0	34
3:45 PM	0	9	0	0	3	10	0	0	0	0	0	0	0	0	6	0	28
4:00 PM	0	15	0	0	4	6	0	0	0	0	0	0	0	0	12	0	37
4:15 PM	0	17	0	0	3	10	0	0	0	0	0	0	0	0	6	0	36
4:30 PM	0	10	0	0	6	3	0	1	0	0	0	0	0	0	6	0	26
4:45 PM	0	6	0	0	3	9	0	0	0	0	0	0	0	0	5	0	23
5:00 PM	0	8	0	0	1	11	0	0	0	0	0	0	0	0	6	0	26
5:15 PM	0	12	0	0	0	16	0	0	0	0	0	0	0	0	3	0	31
5:30 PM	0	12	1	0	2	12	0	1	0	0	0	0	0	0	4	0	32
5:45 PM	0	7	0	0	3	11	0	0	0	0	0	0	0	0	5	0	26
6:00 PM	0	14	0	0	2	11	0	1	0	0	0	0	0	0	8	0	36
6:15 PM	0	12	0	0	3	10	0	0	0	0	0	0	0	0	2	0	27
6:30 PM	0	16	0	0	2	12	0	0	0	0	0	0	0	0	6	0	36
6:45 PM	0	10	0	0	2	12	0	0	0	0	0	0	0	0	0	0	24
7:00 PM	0	11	0	1	2	9	0	0	0	0	0	0	0	0	5	0	28
7:15 PM	0	14	0	0	0	4	0	0	0	0	0	0	0	0	0	0	18
7:30 PM	0	14	0	0	1	8	0	0	0	0	0	0	0	0	1	0	24
7:45 PM	0	11	0	0	1												

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore N Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-001  
 Date: 6/2/2021

Cars

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
12:30 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
12:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1:15 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
1:30 AM	0	41	0	0	0	2	0	0	0	0	0	0	0	0	0	0	43
1:45 AM	0	6	0	0	1	1	0	0	0	0	0	0	0	1	0	9	
2:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	1	0	7	
2:15 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	
2:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
2:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	
3:15 AM	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	11	
3:30 AM	0	2	0	0	1	15	0	0	0	0	0	0	0	0	0	18	
3:45 AM	0	1	0	0	3	43	0	0	0	0	0	0	0	0	0	47	
4:00 AM	0	1	0	0	4	16	0	0	0	0	0	0	0	0	0	21	
4:15 AM	0	5	0	0	1	8	0	0	0	0	0	0	0	0	0	14	
4:30 AM	0	4	0	0	2	9	0	0	0	0	0	0	0	2	0	17	
4:45 AM	0	0	0	0	4	15	0	0	0	0	0	0	0	0	0	19	
5:00 AM	0	3	0	0	4	22	0	0	0	0	0	0	0	0	0	29	
5:15 AM	0	1	0	0	2	13	0	0	0	0	0	0	0	0	0	16	
5:30 AM	0	3	0	0	1	11	0	0	0	0	0	0	0	0	0	15	
5:45 AM	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	10	
6:00 AM	0	4	1	0	1	8	0	0	0	0	0	0	0	2	0	16	
6:15 AM	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	7	
6:30 AM	0	4	0	0	2	3	0	0	0	0	0	0	0	0	0	9	
6:45 AM	0	3	0	0	2	12	0	0	0	0	0	0	0	1	0	18	
7:00 AM	0	5	0	0	1	5	0	0	0	0	0	0	0	1	0	12	
7:15 AM	0	5	0	0	3	6	0	0	0	0	0	0	0	1	0	15	
7:30 AM	0	1	0	0	4	7	0	0	0	0	0	0	0	3	0	15	
7:45 AM	0	4	0	0	10	10	0	0	0	0	0	1	0	2	0	27	
8:00 AM	0	2	0	0	4	6	0	0	0	0	0	0	0	6	0	18	
8:15 AM	0	4	0	0	2	6	0	0	0	0	0	0	0	0	0	12	
8:30 AM	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	4	
8:45 AM	0	6	0	0	3	4	0	0	0	0	0	0	0	0	0	13	
9:00 AM	0	3	0	0	3	6	0	0	0	0	0	0	0	0	0	12	
9:15 AM	0	2	0	0	4	5	0	0	0	0	0	0	0	2	0	13	
9:30 AM	0	4	0	0	2	7	0	0	0	0	0	0	0	1	0	14	
9:45 AM	0	0	0	0	3	9	0	0	0	0	0	0	0	2	0	14	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	141	1	0	71	287	0	0	0	0	0	0	1	0	27	0	528
<b>APPROACH %'s :</b>	0.00%	99.30%	0.70%	0.00%	19.83%	80.17%	0.00%	0.00%					3.57%	0.00%	96.43%	0.00%	
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																TOTAL
<b>PEAK HR VOL :</b>	0	12	0	0	21	29	0	0	0	0	0	0	1	0	12	0	75
<b>PEAK HR FACTOR :</b>	0.00	0.600	0.000	0.000	0.525	0.725	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.694
	0.600				0.625								0.542				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
NOON	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	5	0	0	4	4	0	1	0	0	0	0	0	3	0	17	
10:15 AM	0	5	0	0	3	1	0	0	0	0	0	0	0	3	0	12	
10:30 AM	0	3	0	0	2	8	0	1	0	0	0	0	0	3	0	17	
10:45 AM	0	1	0	0	5	4	0	0	0	0	0	0	0	0	0	10	
11:00 AM	0	6	0	0	4	0	0	0	0	0	0	0	0	1	0	11	
11:15 AM	0	4	0	0	4	7	0	0	0	0	0	0	0	5	0	20	
11:30 AM	0	7	0	0	4	7	0	0	0	0	0	0	0	2	0	20	
11:45 AM	0	4	0	0	8	7	0	1	0	0	0	0	0	3	0	23	
12:00 PM	0	3	0	0	6	2	0	0	0	0	0	0	0	5	0	16	
12:15 PM	0	3	0	0	11	6	0	1	0	0	0	0	0	5	0	26	
12:30 PM	0	7	0	0	6	7	0	0	0	0	0	0	0	6	0	26	
12:45 PM	0	5	0	0	8	17	0	0	0	0	0	0	0	4	0	34	
1:00 PM	0	4	0	0	3	6	0	0	0	0	0	0	0	3	0	16	
1:15 PM	0	11	0	0	5	5	0	0	0	0	0	1	0	4	0	26	
1:30 PM	0	18	0	0	1	3	0	0	0	0	0	0	0	4	0	26	
1:45 PM	0	11	0	0	0	11	0	0	0	0	0	0	0	9	0	31	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	97	0	0	74	95	0	4	0	0	0	0	1	0	60	0	331
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	42.77%	54.91%	0.00%	2.31%					1.64%	0.00%	98.36%	0.00%	
<b>PEAK HR :</b>	12:30 PM - 01:30 PM																TOTAL
<b>PEAK HR VOL :</b>	0	27	0	0	22	35	0	0	0	0	0	0	1	0	17	0	102
<b>PEAK HR FACTOR :</b>	0.00	0.614	0.000	0.000	0.688	0.515	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.708	0.000	0.750
	0.614				0.570								0.750				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore N Dwy				Ashley Homestore N Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	10	0	0	2	7	0	0	0	0	0	0	0	4	0	23	
2:15 PM	0	21	0	0	3	11	0	0	0	0	0	0	0	4	0	39	
2:30 PM	0	44	0	0	5	35	0	0	0	0	0	0	0	3	0	87	
2:45 PM	0	12	0	0	3	30	0	0	0	0	0	0	0	2	0	47	
3:00 PM	0	5	0	0	3	10	0	1	0	0	0	0	0	3	0	22	
3:15 PM	0	8	0	0	1	2	0	0	0	0	0	0	0	4	0	15	
3:30 PM	0	10	0	0	3	6	0	0	0	0	0	0	0	7	0	26	
3:45 PM	0	5	0	0	3	3	0	0	0	0	0	0	0	6	0	17	
4:00 PM	0	13	0	0	4	0	0	0	0	0	0	0	0	12	0	29	
4:15 PM	0	13	0	0	3	5	0	0	0	0	0	0	0	6	0	27	
4:30 PM	0	8	0	0	5	2	0	1	0	0	0	0	0	6	0	22	
4:45 PM	0	4	0	0	3	3	0	0	0	0	0	0	0	5	0	15	
5:00 PM	0	5	0	0	1	5	0	0	0	0	0	0	0	6	0	17	
5:15 PM	0	10	0	0	0	9	0	0	0	0	0	0	0	3	0	22	
5:30 PM	0	10	1	0	2	5	0	1	0	0	0	0	0	4	0	23	
5:45 PM	0	6	0	0	3	6	0	0	0	0	0	0	0	5	0	20	
6:00 PM	0	10	0	0	2	5	0	0	0	0	0	0	0	8	0	25	
6:15 PM	0	10	0	0	3	4	0	0	0	0	0	0	0	2	0	19	
6:30 PM	0	13	0	0	2	5	0	0	0	0	0	0	0	6	0	26	
6:45 PM	0	10	0	0	2	3	0	0	0	0	0	0	0	0	0	15	
7:00 PM	0	10	0	1	2	3	0	0	0	0	0	0	0	4	0	20	
7:15 PM	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6	
7:30 PM	0	9	0	0	1	2	0	0	0	0	0	0	0	1	0	13	
7:45 PM	0	9	0	0	1	4	0	0	0	0	0	0	0	3	0	17	
8:00 PM	0	13	1	0	1	5	0	0	0	0	0	0	0	4	0	24	
8:15 PM	0	3	0	0	0	7	0	0	0	0	0	1	0	6	0	17	
8:30 PM	0	5	0	0	1	0	0	0	0	0	0	0	0	2	0	8	
8:45 PM	0	2															



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore S Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-002  
 Date: 6/2/2021

### Total

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
<b>AM</b>																	
12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	3
12:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
12:30 AM	0	2	0	0	1	1	0	0	0	0	0	0	0	0	1	0	5
12:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	4
1:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
1:15 AM	0	10	0	0	1	1	0	0	0	0	0	0	0	0	0	0	12
1:30 AM	0	39	0	0	2	2	0	0	0	0	0	0	0	2	0	45	
1:45 AM	0	5	0	0	0	3	0	0	0	0	0	0	0	3	0	11	
2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	6	
2:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	
2:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	
2:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	
3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	
3:15 AM	0	1	0	0	1	10	0	0	0	0	0	0	0	0	0	12	
3:30 AM	0	2	0	0	3	12	0	0	0	0	0	0	0	1	0	18	
3:45 AM	0	3	0	0	14	30	0	0	0	0	0	0	1	0	0	48	
4:00 AM	0	4	0	0	7	9	0	0	0	0	0	0	0	1	0	21	
4:15 AM	0	1	0	0	2	8	0	0	0	0	0	0	0	5	0	16	
4:30 AM	0	2	0	0	6	5	0	0	0	0	0	0	0	6	0	19	
4:45 AM	0	2	0	0	7	11	0	0	0	0	0	0	0	1	0	21	
5:00 AM	0	2	0	0	18	6	0	0	0	0	0	0	0	3	0	29	
5:15 AM	0	1	2	0	8	6	0	0	0	0	0	0	0	1	0	18	
5:30 AM	0	3	0	0	7	6	0	0	0	0	0	0	0	1	0	17	
5:45 AM	0	2	0	0	9	9	0	0	0	0	0	0	0	0	0	20	
6:00 AM	0	6	0	0	11	2	0	0	0	0	0	0	0	2	0	21	
6:15 AM	0	6	0	0	7	1	0	0	0	0	0	0	0	2	0	16	
6:30 AM	0	3	0	0	4	2	0	0	0	0	0	0	0	8	0	17	
6:45 AM	0	4	0	0	10	2	0	0	0	0	0	0	0	5	0	21	
7:00 AM	0	4	2	0	4	2	0	0	0	0	0	0	1	7	0	20	
7:15 AM	0	1	0	0	3	6	0	0	0	0	0	0	1	8	0	19	
7:30 AM	0	3	0	0	7	5	0	0	0	0	0	0	0	5	0	20	
7:45 AM	0	5	0	0	7	9	0	0	0	0	0	0	0	3	0	24	
8:00 AM	0	3	0	0	3	7	0	0	0	0	0	0	0	8	0	21	
8:15 AM	0	6	0	0	5	4	0	0	0	0	0	0	0	8	0	23	
8:30 AM	0	1	0	0	2	5	0	0	0	0	0	0	0	3	0	11	
8:45 AM	0	9	0	0	3	4	0	0	0	0	0	0	0	3	0	19	
9:00 AM	0	3	1	0	2	7	0	0	0	0	0	0	1	2	0	16	
9:15 AM	0	8	0	0	3	8	0	0	0	0	0	0	0	1	0	20	
9:30 AM	0	8	0	0	4	8	0	0	0	0	0	0	0	1	0	21	
9:45 AM	0	4	0	0	7	5	0	0	0	0	0	0	0	1	0	17	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	170	5	0	169	207	0	0	0	0	0	0	4	0	97	0	652
	0.00%	97.14%	2.86%	0.00%	44.95%	55.05%	0.00%	0.00%					3.96%	0.00%	96.04%	0.00%	
<b>PEAK HR :</b>	03:45 AM - 04:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	10	0	0	29	52	0	0	0	0	0	0	1	0	12	0	104
<b>PEAK HR FACTOR :</b>	0.000	0.625	0.000	0.000	0.518	0.433	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.542
		0.625				0.460								0.542			

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
<b>NOON</b>																	
10:00 AM	0	8	1	0	3	9	0	0	0	0	0	0	0	3	0	24	
10:15 AM	0	8	0	0	2	3	0	0	0	0	0	0	0	3	0	16	
10:30 AM	0	6	0	0	3	12	0	0	0	0	0	0	0	3	0	24	
10:45 AM	0	3	0	0	2	6	0	0	0	0	0	0	0	3	0	14	
11:00 AM	0	11	0	0	2	2	0	0	0	0	0	0	0	0	0	15	
11:15 AM	0	6	0	0	4	6	0	0	0	0	0	0	0	3	0	19	
11:30 AM	0	6	0	0	6	5	0	0	0	0	0	0	0	8	0	25	
11:45 AM	0	6	0	0	6	3	0	1	0	0	0	0	0	2	0	18	
12:00 PM	0	4	0	0	1	6	0	0	0	0	0	0	0	2	0	13	
12:15 PM	0	2	0	0	6	2	0	0	0	0	0	0	0	2	0	12	
12:30 PM	0	9	0	0	2	7	0	0	0	0	0	0	0	4	0	22	
12:45 PM	0	3	0	0	14	13	0	0	0	0	0	0	0	4	0	34	
1:00 PM	0	4	1	0	6	8	0	0	0	0	0	0	0	6	0	25	
1:15 PM	0	12	0	0	1	5	0	1	0	0	0	0	0	5	0	24	
1:30 PM	0	10	0	0	2	5	0	0	0	0	0	0	0	11	0	28	
1:45 PM	0	3	1	0	5	10	0	0	0	0	0	0	0	9	0	28	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	101	3	0	65	102	0	2	0	0	0	0	0	0	68	0	341
	0.00%	97.12%	2.88%	0.00%	38.46%	60.36%	0.00%	1.18%					0.00%	0.00%	100.00%	0.00%	
<b>PEAK HR :</b>	12:45 PM - 01:45 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	29	1	0	23	31	0	1	0	0	0	0	0	0	26	0	111
<b>PEAK HR FACTOR :</b>	0.000	0.604	0.250	0.000	0.411	0.596	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.591	0.000	0.816
		0.625				0.509								0.591			

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
<b>PM</b>																	
2:00 PM	0	7	0	0	5	5	0	0	0	0	0	0	0	5	0	22	
2:15 PM	0	20	0	0	4	12	0	0	0	0	0	0	0	3	0	39	
2:30 PM	0	40	0	0	3	34	0	1	0	0	0	0	1	5	0	84	
2:45 PM	0	6	0	0	10	25	0	0	0	0	0	0	1	9	0	51	
3:00 PM	0	6	0	0	2	12	0	0	0	0	0	0	0	3	0	23	
3:15 PM	0	8	0	0	3	1	0	0	0	0	0	0	0	3	0	15	
3:30 PM	0	8	0	0	7	4	0	0	0	0	0	0	0	6	0	25	
3:45 PM	0	5	0	0	6	4	0	0	0	0	0	0	0	4	0	19	
4:00 PM	0	6	0	0	3	3	0	0	0	0	0	0	0	9	0	21	
4:15 PM	0	6	0	0	4	6	0	0	0	0	0	0	0	11	0	27	
4:30 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	5	0	13	
4:45 PM	0	2	0	0	4	3	0	0	0	0	0	0	0	4	0	13	
5:00 PM	0	5	0	0	8	5	0	0	0	0	0	0	0	3	0	21	
5:15 PM	0	4	0	0	14	2	0	0	0	0	0	0	0	8	0	28	
5:30 PM	0	7	0	0	8	3	0	0	0	0	0	0	0	6	0	24	
5:45 PM	0	2	0	0	10	2	0	0	0	0	0	0	0	5	0	19	
6:00 PM	0	3	0	0	7	1	0	1	0	0	0	0	0	11	0	23	
6:15 PM	0	5	0	0	6	6	0	0	0	0	0	0	0	6	0	23	
6:30 PM	0	2	0	0	8	4	0	0	0	0	0	0	0	14	0	28	
6:45 PM	0	3	0	0	4	8	0	0	0	0	0	0	0	7	0	22	
7:00 PM	0	5	0	0	3	6	0	1	0	0	0	0	0	6	0	21	
7:15 PM	0	9	0	0	1	3	0	0	0	0	0	0	0	5	0	18	
7:30 PM	0	11	0	0	5	3	0	0	0	0	0	0	0	3	0	22	
7:45 PM	0	7	0	0	2	8	0	0	0	0	0	0	0	4	0	21	
8:00 PM	0	9	0	0													

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore S Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-002  
 Date: 6/2/2021

### Cars

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	
12:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	3	
12:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	
1:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	
1:15 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
1:30 AM	0	38	0	0	0	2	0	0	0	0	0	0	0	2	0	42	
1:45 AM	0	5	0	0	0	1	0	0	0	0	0	0	0	1	0	7	
2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
2:15 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	
2:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	
2:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
3:00 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	
3:15 AM	0	0	0	0	1	10	0	0	0	0	0	0	0	0	0	11	
3:30 AM	0	1	0	0	3	12	0	0	0	0	0	0	0	1	0	17	
3:45 AM	0	1	0	0	14	29	0	0	0	0	0	1	0	0	0	45	
4:00 AM	0	0	0	0	7	8	0	0	0	0	0	0	0	1	0	16	
4:15 AM	0	1	0	0	2	7	0	0	0	0	0	0	0	4	0	14	
4:30 AM	0	0	0	0	5	4	0	0	0	0	0	0	0	4	0	13	
4:45 AM	0	0	0	0	6	9	0	0	0	0	0	0	0	0	0	15	
5:00 AM	0	2	0	0	16	6	0	0	0	0	0	0	0	2	0	26	
5:15 AM	0	0	1	0	7	6	0	0	0	0	0	0	0	0	0	14	
5:30 AM	0	2	0	0	5	5	0	0	0	0	0	0	0	1	0	13	
5:45 AM	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	10	
6:00 AM	0	4	0	0	8	0	0	0	0	0	0	0	0	1	0	13	
6:15 AM	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	
6:30 AM	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	8	
6:45 AM	0	0	0	0	10	2	0	0	0	0	0	0	0	3	0	15	
7:00 AM	0	3	2	0	4	1	0	0	0	0	0	1	0	2	0	13	
7:15 AM	0	1	0	0	2	4	0	0	0	0	0	1	0	4	0	12	
7:30 AM	0	0	0	0	5	2	0	0	0	0	0	0	0	1	0	8	
7:45 AM	0	3	0	0	6	5	0	0	0	0	0	0	0	1	0	15	
8:00 AM	0	0	0	0	2	4	0	0	0	0	0	0	0	2	0	8	
8:15 AM	0	1	0	0	5	1	0	0	0	0	0	0	0	3	0	10	
8:30 AM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3	
8:45 AM	0	5	0	0	3	1	0	0	0	0	0	0	0	1	0	10	
9:00 AM	0	2	1	0	1	5	0	0	0	0	0	1	0	1	0	11	
9:15 AM	0	1	0	0	2	3	0	0	0	0	0	0	0	1	0	7	
9:30 AM	0	3	0	0	4	3	0	0	0	0	0	0	0	1	0	11	
9:45 AM	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	9	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	0	97	4	0	143	145	0	0	0	0	0	0	4	0	45	0	438
<b>APPROACH %'s :</b>	0.00%	96.04%	3.96%	0.00%	49.65%	50.35%	0.00%	0.00%					8.16%	0.00%	91.84%	0.00%	
<b>PEAK HR :</b>	03:45 AM - 04:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	2	0	0	28	48	0	0	0	0	0	0	1	0	9	0	88
<b>PEAK HR FACTOR :</b>	0.00	0.500	0.000	0.000	0.500	0.414	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.563	0.000	0.489
	0.500				0.442								0.625				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
NOON	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
10:00 AM	0	3	0	0	1	3	0	0	0	0	0	0	0	2	0	9	
10:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	1	0	6	
10:30 AM	0	2	0	0	2	6	0	0	0	0	0	0	0	1	0	11	
10:45 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0	5	
11:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
11:15 AM	0	2	0	0	2	5	0	0	0	0	0	0	0	2	0	11	
11:30 AM	0	2	0	0	5	2	0	0	0	0	0	0	0	5	0	14	
11:45 AM	0	2	0	0	5	1	0	1	0	0	0	0	0	1	0	10	
12:00 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	1	0	5	
12:15 PM	0	1	0	0	5	1	0	0	0	0	0	0	0	2	0	9	
12:30 PM	0	4	0	0	2	5	0	0	0	0	0	0	0	3	0	14	
12:45 PM	0	2	0	0	11	6	0	0	0	0	0	0	0	3	0	22	
1:00 PM	0	1	1	0	1	5	0	0	0	0	0	0	0	3	0	11	
1:15 PM	0	6	0	0	1	4	0	1	0	0	0	0	0	4	0	16	
1:30 PM	0	9	0	0	2	1	0	0	0	0	0	0	0	9	0	21	
1:45 PM	0	3	1	0	4	7	0	0	0	0	0	0	0	8	0	23	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	0	49	2	0	44	50	0	2	0	0	0	0	0	0	46	0	193
<b>APPROACH %'s :</b>	0.00%	96.08%	3.92%	0.00%	45.83%	52.08%	0.00%	2.08%					0.00%	0.00%	100.00%	0.00%	
<b>PEAK HR :</b>	12:45 PM - 01:45 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	18	1	0	15	16	0	1	0	0	0	0	0	19	0	70	
<b>PEAK HR FACTOR :</b>	0.00	0.500	0.250	0.000	0.341	0.667	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.528	0.000	0.795	
	0.528				0.471								0.528				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	6	0	0	3	4	0	0	0	0	0	0	0	4	0	17	
2:15 PM	0	18	0	0	2	8	0	0	0	0	0	0	0	3	0	31	
2:30 PM	0	38	0	0	3	32	0	1	0	0	0	0	0	5	0	79	
2:45 PM	0	4	0	0	7	23	0	0	0	0	0	0	1	8	0	43	
3:00 PM	0	2	0	0	1	9	0	0	0	0	0	0	0	3	0	15	
3:15 PM	0	6	0	0	2	0	0	0	0	0	0	0	0	2	0	10	
3:30 PM	0	6	0	0	4	2	0	0	0	0	0	0	0	4	0	16	
3:45 PM	0	2	0	0	2	1	0	0	0	0	0	0	0	3	0	8	
4:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	8	0	13	
4:15 PM	0	3	0	0	3	2	0	0	0	0	0	0	0	10	0	18	
4:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	5	0	10	
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	4	0	6	
5:00 PM	0	3	0	0	6	0	0	0	0	0	0	0	0	2	0	11	
5:15 PM	0	2	0	0	9	0	0	0	0	0	0	0	0	8	0	19	
5:30 PM	0	6	0	0	3	1	0	0	0	0	0	0	0	5	0	15	
5:45 PM	0	1	0	0	7	0	0	0	0	0	0	0	0	5	0	13	
6:00 PM	0	1	0	0	4	0	0	0	0	0	0	0	0	10	0	15	
6:15 PM	0	3	0	0	3	2	0	0	0	0	0	0	0	6	0	14	
6:30 PM	0	1	0	0	4	1	0	0	0	0	0	0	0	12	0	18	
6:45 PM	0	3	0	0	2	1	0	0	0	0	0	0	0	7	0	13	
7:00 PM	0	5	0	0	0	3	0	1	0	0	0	0	0	5	0	14	
7:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	4	0	6	
7:30 PM	0	6	0	0	1	1	0	0	0	0	0	0	0	3	0	11	
7:45 PM	0	7	0	0	0	4	0	0	0	0	0	0	0	2	0	13	
8:00 PM	0	8	0	0	1	4	0	0	0	0	0	0	0	6	0	19	
8:15 PM	0	1	0	0	4	4	0	0	0	0	0	0	0	2	0	11	
8:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	5	
8:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	3	
9:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0</		

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Harlan Rd & Ashley Homestore S Dwy  
 City: Lathrop  
 Control: 1-Way Stop(WB)

Project ID: 21-090040-002  
 Date: 6/2/2021

**HT**

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
12:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:15 AM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
1:30 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
1:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	4
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
4:00 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
4:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
4:30 AM	0	2	0	0	1	1	0	0	0	0	0	0	0	2	0	0	6
4:45 AM	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	0	6
5:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
5:15 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	4
5:30 AM	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	4
5:45 AM	0	2	0	0	2	6	0	0	0	0	0	0	0	0	0	0	10
6:00 AM	0	2	0	0	3	2	0	0	0	0	0	0	0	1	0	0	8
6:15 AM	0	6	0	0	2	1	0	0	0	0	0	0	0	2	0	0	11
6:30 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	4	0	0	9
6:45 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	6
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	5	0	0	7
7:15 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	4	0	0	7
7:30 AM	0	3	0	0	2	3	0	0	0	0	0	0	0	4	0	0	12
7:45 AM	0	2	0	0	1	4	0	0	0	0	0	0	0	2	0	0	9
8:00 AM	0	3	0	0	1	3	0	0	0	0	0	0	0	6	0	0	13
8:15 AM	0	5	0	0	0	3	0	0	0	0	0	0	0	5	0	0	13
8:30 AM	0	0	0	0	1	4	0	0	0	0	0	0	0	3	0	0	8
8:45 AM	0	4	0	0	0	3	0	0	0	0	0	0	0	2	0	0	9
9:00 AM	0	1	0	0	1	2	0	0	0	0	0	0	0	1	0	0	5
9:15 AM	0	7	0	0	1	5	0	0	0	0	0	0	0	0	0	0	13
9:30 AM	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	10
9:45 AM	0	4	0	0	1	2	0	0	0	0	0	0	0	1	0	0	8
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	73	1	0	26	62	0	0	0	0	0	0	0	0	52	0	214
<b>APPROACH %'s :</b>	0.00%	98.65%	1.35%	0.00%	29.55%	70.45%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
<b>PEAK HR :</b>	03:45 AM - 04:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	8	0	0	1	4	0	0	0	0	0	0	0	0	3	0	16
<b>PEAK HR FACTOR :</b>	0.000	0.500	0.000	0.000	0.250	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.667
	0.500				0.625								0.375				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
10:00 AM	0	5	1	0	2	6	0	0	0	0	0	0	0	1	0	0	15
10:15 AM	0	4	0	0	2	2	0	0	0	0	0	0	0	2	0	0	10
10:30 AM	0	4	0	0	1	6	0	0	0	0	0	0	0	2	0	0	13
10:45 AM	0	3	0	0	0	4	0	0	0	0	0	0	0	2	0	0	9
11:00 AM	0	5	0	0	2	2	0	0	0	0	0	0	0	0	0	0	9
11:15 AM	0	4	0	0	2	1	0	0	0	0	0	0	0	1	0	0	8
11:30 AM	0	4	0	0	1	3	0	0	0	0	0	0	0	3	0	0	11
11:45 AM	0	4	0	0	1	2	0	0	0	0	0	0	0	1	0	0	8
12:00 PM	0	2	0	0	0	5	0	0	0	0	0	0	0	1	0	0	8
12:15 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	5	0	0	0	2	0	0	0	0	0	0	0	1	0	0	8
12:45 PM	0	1	0	0	3	7	0	0	0	0	0	0	0	1	0	0	12
1:00 PM	0	3	0	0	5	3	0	0	0	0	0	0	0	3	0	0	14
1:15 PM	0	6	0	0	0	1	0	0	0	0	0	0	0	1	0	0	8
1:30 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	2	0	0	7
1:45 PM	0	0	0	0	1	3	0	0	0	0	0	0	0	1	0	0	5
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	52	1	0	21	52	0	0	0	0	0	0	0	0	22	0	148
<b>APPROACH %'s :</b>	0.00%	98.11%	1.89%	0.00%	28.77%	71.23%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
<b>PEAK HR :</b>	12:45 PM - 01:45 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	11	0	0	8	15	0	0	0	0	0	0	0	0	7	0	41
<b>PEAK HR FACTOR :</b>	0.00	0.458	0.000	0.000	0.400	0.536	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.732
	0.458				0.575								0.583				

NS/EW Streets:	S Harlan Rd				S Harlan Rd				Ashley Homestore S Dwy				Ashley Homestore S Dwy				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	1	0	0	2	1	0	0	0	0	0	0	0	1	0	0	5
2:15 PM	0	2	0	0	2	4	0	0	0	0	0	0	0	0	0	0	8
2:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	1	0	0	0	5
2:45 PM	0	2	0	0	3	2	0	0	0	0	0	0	0	1	0	0	8
3:00 PM	0	4	0	0	1	3	0	0	0	0	0	0	0	0	0	0	8
3:15 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	1	0	0	5
3:30 PM	0	2	0	0	3	2	0	0	0	0	0	0	0	2	0	0	9
3:45 PM	0	3	0	0	4	3	0	0	0	0	0	0	0	1	0	0	11
4:00 PM	0	1	0	0	3	3	0	0	0	0	0	0	0	1	0	0	8
4:15 PM	0	3	0	0	1	4	0	0	0	0	0	0	0	1	0	0	9
4:30 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	2	0	0	2	3	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	2	0	0	2	5	0	0	0	0	0	0	0	1	0	0	10
5:15 PM	0	2	0	0	5	2	0	0	0	0	0	0	0	0	0	0	9
5:30 PM	0	1	0	0	5	2	0	0	0	0	0	0	0	1	0	0	9
5:45 PM	0	1	0	0	3	2	0	0	0	0	0	0	0	0	0	0	6
6:00 PM	0	2	0	0	3	1	0	1	0	0	0	0	0	1	0	0	8
6:15 PM	0	2	0	0	3	4	0	0	0	0	0	0	0	0	0	0	9
6:30 PM	0	1	0	0	4	3	0	0	0	0	0	0	0	2	0	0	10
6:45 PM	0	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	9
7:00 PM	0	0	0	0	3	3	0	0	0	0	0	0	0	1	0	0	7
7:15 PM	0	8	0	0	1	2	0	0	0	0	0	0	0	1	0	0	12
7:30 PM	0	5	0	0	4	2	0	0	0	0	0	0	0	0	0	0	11
7:45 PM	0	0	0	0	2	4	0	0	0	0	0	0	0	2	0	0	8
8:00 PM	0	1	0	0	1	3											

## Appendix G – Baseline plus Project Level of Service Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕		↗	↕		↖	↕	
Traffic Volume (veh/h)	200	490	146	50	581	57	227	111	48	45	75	149
Future Volume (veh/h)	200	490	146	50	581	57	227	111	48	45	75	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	628	187	57	660	65	303	148	64	57	95	189
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.75	0.75	0.75	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	1012	301	81	869	85	339	705	292	113	285	254
Arrive On Green	0.17	0.37	0.37	0.05	0.27	0.27	0.19	0.29	0.29	0.06	0.16	0.16
Sat Flow, veh/h	1781	2700	803	1781	3268	321	1781	2451	1014	1781	1777	1585
Grp Volume(v), veh/h	256	413	402	57	359	366	303	105	107	57	95	189
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1812	1781	1777	1688	1781	1777	1585
Q Serve(g_s), s	11.0	14.9	14.9	2.5	14.6	14.6	13.1	3.5	3.8	2.4	3.7	8.9
Cycle Q Clear(g_c), s	11.0	14.9	14.9	2.5	14.6	14.6	13.1	3.5	3.8	2.4	3.7	8.9
Prop In Lane	1.00		0.47	1.00		0.18	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	298	666	647	81	472	482	339	511	486	113	285	254
V/C Ratio(X)	0.86	0.62	0.62	0.71	0.76	0.76	0.89	0.21	0.22	0.51	0.33	0.74
Avail Cap(c_a), veh/h	339	677	658	339	677	691	339	677	643	339	677	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	20.0	20.0	37.1	26.6	26.6	31.1	21.2	21.3	35.7	29.3	31.5
Incr Delay (d2), s/veh	18.4	1.8	1.9	12.8	3.5	3.5	24.6	0.2	0.3	4.2	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	6.0	5.9	1.3	6.3	6.4	7.6	1.4	1.4	1.1	1.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	21.9	22.0	49.9	30.1	30.1	55.6	21.5	21.6	39.8	30.1	36.6
LnGrp LOS	D	C	C	D	C	C	E	C	C	D	C	D
Approach Vol, veh/h		1071			782			515			341	
Approach Delay, s/veh		28.7			31.5			41.6			35.3	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	33.5	20.0	16.6	17.1	24.9	10.0	26.6				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	4.5	16.9	15.1	10.9	13.0	16.6	4.4	5.8				
Green Ext Time (p_c), s	0.1	4.9	0.0	1.7	0.2	4.3	0.1	1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				32.8								
HCM 6th LOS				C								



HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Future Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	235	1043	0	0	870	380	351	5	279			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	267	1949	0	0	862	374	334	5	266			
Arrive On Green	0.15	0.55	0.00	0.00	0.36	0.36	0.36	0.36	0.36			
Sat Flow, veh/h	1781	3647	0	0	2505	1047	934	13	743			
Grp Volume(v), veh/h	235	1043	0	0	640	610	635	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1682	1690	0	0			
Q Serve(g_s), s	12.6	18.4	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	12.6	18.4	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.62	0.55		0.44			
Lane Grp Cap(c), veh/h	267	1949	0	0	635	601	604	0	0			
V/C Ratio(X)	0.88	0.54	0.00	0.00	1.01	1.01	1.05	0.00	0.00			
Avail Cap(c_a), veh/h	364	1949	0	0	635	601	604	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	14.1	0.0	0.0	31.4	31.4	31.4	0.0	0.0			
Incr Delay (d2), s/veh	13.7	0.3	0.0	0.0	37.3	40.5	50.6	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.4	6.8	0.0	0.0	20.8	20.2	21.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	14.4	0.0	0.0	68.8	71.9	82.1	0.0	0.0			
LnGrp LOS	D	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	1278			1250			635					
Approach Delay, s/veh	21.8			70.3			82.1					
Approach LOS	C			E			F					
Timer - Assigned Phs	2		5		6		8					
Phs Duration (G+Y+Rc), s	58.3		18.7		39.6		39.6					
Change Period (Y+Rc), s	4.6		4.0		4.6		4.6					
Max Green Setting (Gmax), s	35.0		20.0		35.0		35.0					
Max Q Clear Time (g_c+I1), s	20.4		14.6		37.0		37.0					
Green Ext Time (p_c), s	5.9		0.1		0.0		0.0					
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	53.1											
HCM 6th LOS	D											

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Future Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1044	373	495	951	0				317	5	192
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1239	443	370	1091	0				337	5	204
Arrive On Green	0.00	0.33	0.33	0.21	0.58	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	3879	1325	1781	1870	0				1050	17	636
Grp Volume(v), veh/h	0	958	459	495	951	0				514	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1632	1781	1870	0				1703	0	0
Q Serve(g_s), s	0.0	25.1	25.1	20.0	41.5	0.0				28.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	25.1	25.1	20.0	41.5	0.0				28.2	0.0	0.0
Prop In Lane	0.00		0.81	1.00		0.00				0.62		0.37
Lane Grp Cap(c), veh/h	0	1137	545	370	1091	0				547	0	0
V/C Ratio(X)	0.00	0.84	0.84	1.34	0.87	0.00				0.94	0.00	0.00
Avail Cap(c_a), veh/h	0	1239	594	370	1091	0				620	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	29.7	29.7	38.1	17.0	0.0				31.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.0	9.9	168.8	7.8	0.0				20.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.6	10.9	25.8	17.9	0.0				14.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.7	39.6	206.9	24.8	0.0				52.0	0.0	0.0
LnGrp LOS	A	C	D	F	C	A				D	A	A
Approach Vol, veh/h		1417			1446						514	
Approach Delay, s/veh		36.3			87.1						52.0	
Approach LOS		D			F						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	34.0	36.7		35.5		60.7						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+Q), s	27.1	27.1		30.2		43.5						
Green Ext Time (p_c), s	0.0	5.0		0.6		0.0						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											60.5	
HCM 6th LOS											E	

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Future Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1441	643	291	721	643	300	480	716	150	612	273
Arrive On Green	0.08	0.41	0.41	0.08	0.41	0.41	0.17	0.26	0.26	0.08	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	3456	1777	1585	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	10.0	17.1	17.7	9.9	37.4	42.7	20.0	1.9	25.7	10.0	1.2	3.5
Cycle Q Clear(g_c), s	10.0	17.1	17.7	9.9	37.4	42.7	20.0	1.9	25.7	10.0	1.2	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	1441	643	291	721	643	300	480	716	150	612	273
V/C Ratio(X)	1.44	0.48	0.49	0.99	0.85	0.93	1.11	0.08	0.88	1.09	0.07	0.20
Avail Cap(c_a), veh/h	150	1498	668	291	749	668	300	788	1176	150	1198	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	26.1	26.2	54.3	32.1	33.7	49.3	33.5	42.3	54.3	41.1	42.1
Incr Delay (d2), s/veh	231.0	0.3	0.6	50.5	9.3	19.3	84.5	0.1	4.6	98.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	7.2	6.5	6.3	17.4	19.3	15.7	0.9	9.0	8.5	0.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	285.4	26.3	26.8	104.8	41.4	53.0	133.8	33.6	46.9	152.5	41.2	42.4
LnGrp LOS	F	C	C	F	D	D	F	C	D	F	D	D
Approach Vol, veh/h		1229			1503			1002			259	
Approach Delay, s/veh		72.0			58.2			75.3			111.5	
Approach LOS		E			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	53.2	24.6	26.2	14.6	53.2	14.6	36.2				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M), s	19.7	19.7	22.0	5.5	12.0	44.7	12.0	27.7				
Green Ext Time (p_c), s	0.0	6.5	0.0	0.4	0.0	3.4	0.0	2.8				

### Intersection Summary

HCM 6th Ctrl Delay	70.2
HCM 6th LOS	E

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	26	315	100	0
Future Vol, veh/h	0	0	26	315	100	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	26	14	2
Mvmt Flow	0	0	28	342	109	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	507	109	109	0	-	0
Stage 1	109	-	-	-	-	-
Stage 2	398	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	525	945	1481	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	513	945	1481	-	-	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1481	-	-	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	-	-
HCM Control Delay (s)	7.5	0	0	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

04/25/2023

Intersection				
Intersection Delay, s/veh	2.0			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	92	167	556	
Demand Flow Rate, veh/h	94	170	567	
Vehicles Circulating, veh/h	170	154	0	
Vehicles Exiting, veh/h	154	0	264	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	3.9	4.4	1.0	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	413
Entry Flow, veh/h	94	170	154	1938
Cap Entry Lane, veh/h	1160	1179	1380	0.980
Entry HV Adj Factor	0.979	0.982	0.981	405
Flow Entry, veh/h	92	167	151	1900
Cap Entry, veh/h	1136	1158	1353	0.213
V/C Ratio	0.081	0.144	0.112	0.0
Control Delay, s/veh	3.9	4.4	3.6	A
LOS	A	A	A	1
95th %tile Queue, veh	0	1	0	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

04/25/2023

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	28	80	148	38	34
Future Vol, veh/h	96	28	80	148	38	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	59	59	81	81
Heavy Vehicles, %	15	2	2	55	2	2
Mvmt Flow	139	41	136	251	47	42

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	398	262	0	0	387
Stage 1	262	-	-	-	-
Stage 2	136	-	-	-	-
Critical Hdwy	6.55	6.22	-	-	4.12
Critical Hdwy Stg 1	5.55	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-
Follow-up Hdwy	3.635	3.318	-	-	2.218
Pot Cap-1 Maneuver	583	777	-	-	1171
Stage 1	753	-	-	-	-
Stage 2	859	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	559	777	-	-	1171
Mov Cap-2 Maneuver	559	-	-	-	-
Stage 1	753	-	-	-	-
Stage 2	824	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	559	777	1171
HCM Lane V/C Ratio	-	-	0.249	0.052	0.04
HCM Control Delay (s)	-	-	13.6	9.9	8.2
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	9.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↑	↑
Traffic Vol, veh/h	0	133	53	166	70	0	0	0	0	271	5	54
Future Vol, veh/h	0	133	53	166	70	0	0	0	0	271	5	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	88	88	88	92	92	92	89	89	89
Heavy Vehicles, %	2	34	68	2	11	2	2	2	2	2	2	11
Mvmt Flow	0	182	73	189	80	0	0	0	0	304	6	61

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	255	0	0		549	713	40
Stage 1	-	-	-	-	-	-		458	458	-
Stage 2	-	-	-	-	-	-		91	255	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.41
Pot Cap-1 Maneuver	0	-	-	1307	-	0		466	356	994
Stage 1	0	-	-	-	-	0		604	565	-
Stage 2	0	-	-	-	-	0		922	695	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1307	-	-		398	0	994
Mov Cap-2 Maneuver	-	-	-	-	-	-		398	0	-
Stage 1	-	-	-	-	-	-		604	0	-
Stage 2	-	-	-	-	-	-		788	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.8	19.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1307	-	398	442	994
HCM Lane V/C Ratio	-	-	0.144	-	0.51	0.288	0.041
HCM Control Delay (s)	-	-	8.2	-	23.1	16.4	8.8
HCM Lane LOS	-	-	A	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	2.8	1.2	0.1

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	83	321	0	0	221	278	15	0	196	0	0	0
Future Vol, veh/h	83	321	0	0	221	278	15	0	196	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	94	94	94	92	92	92
Heavy Vehicles, %	43	3	2	2	2	2	40	2	2	2	2	2
Mvmt Flow	93	361	0	0	240	302	16	0	209	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	542	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.96	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.63	-	-
Pot Cap-1 Maneuver	786	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	786	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	2.1	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	280	831	786	-	-	-
HCM Lane V/C Ratio	0.057	0.251	0.119	-	-	-
HCM Control Delay (s)	18.6	10.8	10.2	-	-	-
HCM Lane LOS	C	B	B	-	-	-
HCM 95th %tile Q(veh)	0.2	1	0.4	-	-	-



Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	69	304	144	28	231	37	214	33	51	30	14	54
Future Vol, veh/h	69	304	144	28	231	37	214	33	51	30	14	54
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.90	0.90	0.90	0.81	0.81	0.81
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	77	338	160	31	260	42	238	37	57	37	17	67
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	21.2	15.6	23.2	12.9
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	87%	0%	100%	0%	0%	20%	0%	68%	0%
Vol Thru, %	13%	0%	0%	100%	0%	80%	76%	32%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	24%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	51	69	304	144	144	153	44	54
LT Vol	214	0	69	0	0	28	0	30	0
Through Vol	33	0	0	304	0	116	116	14	0
RT Vol	0	51	0	0	144	0	37	0	54
Lane Flow Rate	274	57	77	338	160	161	171	54	67
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.648	0.116	0.172	0.712	0.305	0.367	0.377	0.139	0.151
Departure Headway (Hd)	8.495	7.34	8.087	7.593	6.86	8.203	7.928	9.222	8.151
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	423	486	442	473	522	437	452	387	437
Service Time	6.274	5.118	5.862	5.368	4.634	5.987	5.712	7.021	5.948
HCM Lane V/C Ratio	0.648	0.117	0.174	0.715	0.307	0.368	0.378	0.14	0.153
HCM Control Delay	25.7	11.1	12.5	27.2	12.6	15.7	15.5	13.5	12.4
HCM Lane LOS	D	B	B	D	B	C	C	B	B
HCM 95th-tile Q	4.5	0.4	0.6	5.6	1.3	1.7	1.7	0.5	0.5

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	332	136	0	0	18
Future Vol, veh/h	41	332	136	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	361	148	0	0	20

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	148	0	-	0	599 148
Stage 1	-	-	-	-	148 -
Stage 2	-	-	-	-	451 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1434	-	-	-	465 899
Stage 1	-	-	-	-	880 -
Stage 2	-	-	-	-	642 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1434	-	-	-	451 899
Mov Cap-2 Maneuver	-	-	-	-	451 -
Stage 1	-	-	-	-	853 -
Stage 2	-	-	-	-	642 -

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1434	-	-	-	899
HCM Lane V/C Ratio	0.031	-	-	-	0.022
HCM Control Delay (s)	7.6	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

04/25/2023

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	57	76	256	79	7
Future Vol, veh/h	4	57	76	256	79	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	62	83	278	86	8

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	534	90	94	0	0
Stage 1	90	-	-	-	-
Stage 2	444	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	507	968	1500	-	-
Stage 1	934	-	-	-	-
Stage 2	646	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	479	968	1500	-	-
Mov Cap-2 Maneuver	479	-	-	-	-
Stage 1	883	-	-	-	-
Stage 2	646	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1500	-	907	-	-
HCM Lane V/C Ratio	0.055	-	0.073	-	-
HCM Control Delay (s)	7.5	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

HCM 6th TWSC  
15: Manthey Rd & Ashley Dwy #4

04/25/2023

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	81	0	0	260	86	14
Future Vol, veh/h	81	0	0	260	86	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	88	0	0	283	93	15

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	384	101	108	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	466	954	1483	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	466	954	1483	-	-	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1483	-	466	-	-
HCM Lane V/C Ratio	-	-	0.189	-	-
HCM Control Delay (s)	0	-	14.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↖↗		↖	↖↗	
Traffic Volume (veh/h)	273	652	193	107	556	59	288	199	106	128	152	102
Future Volume (veh/h)	273	652	193	107	556	59	288	199	106	128	152	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	686	203	126	654	69	465	321	171	138	163	110
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.62	0.62	0.62	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	942	279	163	871	92	351	507	264	177	264	168
Arrive On Green	0.18	0.35	0.35	0.09	0.27	0.27	0.20	0.22	0.22	0.10	0.13	0.13
Sat Flow, veh/h	1781	2704	800	1781	3244	342	1781	2258	1177	1781	2082	1326
Grp Volume(v), veh/h	287	451	438	126	358	365	465	251	241	138	138	135
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1809	1781	1777	1659	1781	1777	1632
Q Serve(g_s), s	11.9	16.9	16.9	5.3	14.0	14.1	15.0	9.7	10.0	5.8	5.6	6.0
Cycle Q Clear(g_c), s	11.9	16.9	16.9	5.3	14.0	14.1	15.0	9.7	10.0	5.8	5.6	6.0
Prop In Lane	1.00		0.46	1.00		0.19	1.00		0.71	1.00		0.81
Lane Grp Cap(c), veh/h	328	619	601	163	477	486	351	399	373	177	225	207
V/C Ratio(X)	0.87	0.73	0.73	0.77	0.75	0.75	1.32	0.63	0.65	0.78	0.61	0.65
Avail Cap(c_a), veh/h	351	700	680	351	700	713	351	700	654	351	700	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	21.7	21.7	33.8	25.5	25.5	30.6	26.6	26.8	33.5	31.5	31.6
Incr Delay (d2), s/veh	20.5	3.6	3.7	9.1	3.0	3.0	164.6	2.0	2.3	8.7	3.2	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	7.1	6.9	2.6	5.9	6.1	22.0	4.0	3.9	2.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	25.2	25.4	42.9	28.5	28.5	195.2	28.6	29.0	42.2	34.7	35.8
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	D
Approach Vol, veh/h		1176			849			957			411	
Approach Delay, s/veh		31.5			30.7			109.7			37.6	
Approach LOS		C			C			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	30.5	20.0	13.6	18.0	24.4	12.5	21.1				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	7.3	18.9	17.0	8.0	13.9	16.1	7.8	12.0				
Green Ext Time (p_c), s	0.2	4.9	0.0	1.7	0.1	4.4	0.2	3.1				

Intersection Summary

HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Future Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	264	940	0	0	867	410	340	8	439			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	295	1978	0	0	824	387	253	6	326			
Arrive On Green	0.17	0.56	0.00	0.00	0.35	0.35	0.35	0.35	0.35			
Sat Flow, veh/h	1781	3647	0	0	2441	1101	720	17	930			
Grp Volume(v), veh/h	264	940	0	0	655	622	787	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1672	1667	0	0			
Q Serve(g_s), s	14.5	15.9	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	14.5	15.9	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.66	0.43		0.56			
Lane Grp Cap(c), veh/h	295	1978	0	0	624	587	585	0	0			
V/C Ratio(X)	0.89	0.48	0.00	0.00	1.05	1.06	1.35	0.00	0.00			
Avail Cap(c_a), veh/h	357	1978	0	0	624	587	585	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.7	13.3	0.0	0.0	32.4	32.4	32.4	0.0	0.0			
Incr Delay (d2), s/veh	19.2	0.2	0.0	0.0	49.7	54.2	166.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	5.9	0.0	0.0	22.9	22.3	40.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.9	13.5	0.0	0.0	82.1	86.6	198.8	0.0	0.0			
LnGrp LOS	E	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	1204				1277		787					
Approach Delay, s/veh	23.7				84.3		198.8					
Approach LOS	C				F		F					
Timer - Assigned Phs	2				5		6		8			
Phs Duration (G+Y+Rc), s	60.1				20.5		39.6		39.6			
Change Period (Y+Rc), s	4.6				4.0		4.6		4.6			
Max Green Setting (Gmax), s	35.0				20.0		35.0		35.0			
Max Q Clear Time (g_c+I1), s	17.9				16.5		37.0		37.0			
Green Ext Time (p_c), s	5.7				0.0		0.0		0.0			
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			89.5									
HCM 6th LOS			F									

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Future Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	823	284	329	966	0				395	9	300
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1073	368	360	992	0				353	8	268
Arrive On Green	0.00	0.29	0.29	0.20	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	3924	1287	1781	1870	0				950	22	721
Grp Volume(v), veh/h	0	746	361	329	966	0				704	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1639	1781	1870	0				1693	0	0
Q Serve(g_s), s	0.0	18.9	19.0	17.0	47.2	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.9	19.0	17.0	47.2	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.79	1.00		0.00				0.56		0.43
Lane Grp Cap(c), veh/h	0	973	468	360	992	0				629	0	0
V/C Ratio(X)	0.00	0.77	0.77	0.91	0.97	0.00				1.12	0.00	0.00
Avail Cap(c_a), veh/h	0	1266	609	378	992	0				629	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.7	30.8	36.7	21.5	0.0				29.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	4.3	24.6	22.3	0.0				73.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	7.8	9.6	24.4	0.0				26.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.8	35.1	61.3	43.8	0.0				102.5	0.0	0.0
LnGrp LOS	A	C	D	E	D	A				F	A	A
Approach Vol, veh/h		1107			1295						704	
Approach Delay, s/veh		33.5			48.2						102.5	
Approach LOS		C			D						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	33.0	31.5		39.6		54.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+119), s	119.0	21.0		37.0		49.2						
Green Ext Time (p_c), s	0.0	5.9		0.0		0.0						

### Intersection Summary

HCM 6th Ctrl Delay	55.3
HCM 6th LOS	E

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Future Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1358	606	377	679	606	84	337	503	194	861	384
Arrive On Green	0.11	0.38	0.38	0.11	0.38	0.38	0.05	0.18	0.18	0.11	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	3456	1777	1585	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	10.0	3.6	1.7	10.0	12.2	27.4	1.9	2.7	12.6	10.0	2.2	3.6
Cycle Q Clear(g_c), s	10.0	3.6	1.7	10.0	12.2	27.4	1.9	2.7	12.6	10.0	2.2	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	1358	606	377	679	606	84	337	503	194	861	384
V/C Ratio(X)	1.19	0.16	0.08	1.14	0.47	0.85	0.45	0.20	0.79	2.51	0.13	0.20
Avail Cap(c_a), veh/h	194	1939	865	377	970	865	389	1021	1522	194	1551	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	18.6	18.0	40.8	21.3	26.0	42.5	31.9	35.9	40.8	27.1	27.7
Incr Delay (d2), s/veh	126.4	0.1	0.1	89.3	0.5	5.9	3.7	0.3	2.9	694.7	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.4	0.6	8.8	4.9	10.7	0.9	1.2	4.2	41.7	0.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	167.2	18.7	18.1	130.1	21.8	31.9	46.2	32.2	38.8	735.6	27.2	27.9
LnGrp LOS	F	B	B	F	C	C	D	C	D	F	C	C
Approach Vol, veh/h		491			1262			504			675	
Approach Delay, s/veh		88.8			62.7			38.5			539.4	
Approach LOS		F			E			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	40.1	8.9	28.0	14.6	40.1	14.6	22.3				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	10.0	5.6	3.9	5.6	12.0	29.4	12.0	14.6				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.8	0.0	5.6	0.0	2.0				

### Intersection Summary

HCM 6th Ctrl Delay	172.7
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	0	347	282	0
Future Vol, veh/h	0	10	0	347	282	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	4	11	2
Mvmt Flow	0	11	0	377	307	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	684	307	307	0	-	0
Stage 1	307	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	414	733	1254	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	414	733	1254	-	-	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1254	-	-	733	-	-
HCM Lane V/C Ratio	-	-	-	0.015	-	-
HCM Control Delay (s)	0	-	0	10	-	-
HCM Lane LOS	A	-	A	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

04/25/2023

Intersection				
Intersection Delay, s/veh	4.6			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	248	427	737	
Demand Flow Rate, veh/h	253	436	751	
Vehicles Circulating, veh/h	436	275	0	
Vehicles Exiting, veh/h	275	0	689	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	7.2	8.1	1.6	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	476
Entry Flow, veh/h	253	436	275	1938
Cap Entry Lane, veh/h	885	1042	1380	0.980
Entry HV Adj Factor	0.980	0.979	0.982	467
Flow Entry, veh/h	248	427	270	1900
Cap Entry, veh/h	867	1021	1355	0.246
V/C Ratio	0.286	0.418	0.199	0.0
Control Delay, s/veh	7.2	8.1	4.3	A
LOS	A	A	A	1
95th %tile Queue, veh	1	2	1	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

04/25/2023

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	85	86	273	74	63	197
Future Vol, veh/h	85	86	273	74	63	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	84	84	81	81
Heavy Vehicles, %	36	2	2	19	2	2
Mvmt Flow	102	104	325	88	78	243

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	768	369	0	0	413	0
Stage 1	369	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.76	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.76	-	-	-	-	-
Critical Hdwy Stg 2	5.76	-	-	-	-	-
Follow-up Hdwy	3.824	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	326	677	-	-	1146	-
Stage 1	631	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	300	677	-	-	1146	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	562	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	300	677	1146	-
HCM Lane V/C Ratio	-	-	0.341	0.153	0.068	-
HCM Control Delay (s)	-	-	23.1	11.3	8.4	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	1.5	0.5	0.2	-

HCM 6th TWSC  
9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	95	42	166	113	0	0	0	0	262	3	58
Future Vol, veh/h	0	95	42	166	113	0	0	0	0	262	3	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	83	83	83	92	92	92	88	88	88
Heavy Vehicles, %	2	8	14	2	15	2	2	2	2	2	2	24
Mvmt Flow	0	122	54	200	136	0	0	0	0	298	3	66

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	176	0	0		597	712	68
Stage 1	-	-	-	-	-	-		536	536	-
Stage 2	-	-	-	-	-	-		61	176	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7.38
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.54
Pot Cap-1 Maneuver	0	-	-	1398	-	0		434	356	915
Stage 1	0	-	-	-	-	0		551	522	-
Stage 2	0	-	-	-	-	0		954	752	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1398	-	-		372	0	915
Mov Cap-2 Maneuver	-	-	-	-	-	-		372	0	-
Stage 1	-	-	-	-	-	-		551	0	-
Stage 2	-	-	-	-	-	-		818	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.8	20.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1398	-	372	417	915
HCM Lane V/C Ratio	-	-	0.143	-	0.534	0.299	0.048
HCM Control Delay (s)	-	-	8	-	25.2	17.3	9.1
HCM Lane LOS	-	-	A	-	D	C	A
HCM 95th %tile Q(veh)	-	-	0.5	-	3	1.2	0.2

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

04/25/2023

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	48	309	0	0	229	369	50	5	190	0	0	0
Future Vol, veh/h	48	309	0	0	229	369	50	5	190	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	95	95	95	88	88	88	92	92	92
Heavy Vehicles, %	13	2	2	2	2	2	28	2	2	2	2	2
Mvmt Flow	54	347	0	0	241	388	57	6	216	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	629	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.36	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.33	-	-
Pot Cap-1 Maneuver	878	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	878	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.3	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	367	839	878	-	-	-
HCM Lane V/C Ratio	0.17	0.257	0.061	-	-	-
HCM Control Delay (s)	16.8	10.8	9.4	-	-	-
HCM Lane LOS	C	B	A	-	-	-
HCM 95th %tile Q(veh)	0.6	1	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	25
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	68	281	150	48	338	57	206	59	86	54	53	54
Future Vol, veh/h	68	281	150	48	338	57	206	59	86	54	53	54
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	296	158	54	380	64	219	63	91	59	58	59
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	24.5	24.6	30.3	16.6
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	78%	0%	100%	0%	0%	22%	0%	50%	0%
Vol Thru, %	22%	0%	0%	100%	0%	78%	75%	50%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	25%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	265	86	68	281	150	217	226	107	54
LT Vol	206	0	68	0	0	48	0	54	0
Through Vol	59	0	0	281	0	169	169	53	0
RT Vol	0	86	0	0	150	0	57	0	54
Lane Flow Rate	282	91	72	296	158	244	254	116	59
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.746	0.214	0.186	0.726	0.356	0.609	0.613	0.33	0.151
Departure Headway (Hd)	9.531	8.41	9.35	8.834	8.11	8.994	8.697	10.224	9.235
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	381	426	384	408	444	400	414	351	387
Service Time	7.297	6.176	7.113	6.596	5.872	6.76	6.462	8.004	7.014
HCM Lane V/C Ratio	0.74	0.214	0.188	0.725	0.356	0.61	0.614	0.33	0.152
HCM Control Delay	35.7	13.5	14.3	31.8	15.3	24.9	24.4	18	13.7
HCM Lane LOS	E	B	B	D	C	C	C	C	B
HCM 95th-tile Q	5.9	0.8	0.7	5.6	1.6	3.9	4	1.4	0.5

HCM 6th TWSC  
12: Dos Reis Rd & Ashley Dwy #1

04/25/2023

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	394	363	0	0	30
Future Vol, veh/h	36	394	363	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	428	395	0	0	33

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	395	0	-	0	901
Stage 1	-	-	-	-	395
Stage 2	-	-	-	-	506
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1164	-	-	-	309
Stage 1	-	-	-	-	681
Stage 2	-	-	-	-	606
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1164	-	-	-	298
Mov Cap-2 Maneuver	-	-	-	-	298
Stage 1	-	-	-	-	658
Stage 2	-	-	-	-	606

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1164	-	-	-	654
HCM Lane V/C Ratio	0.034	-	-	-	0.05
HCM Control Delay (s)	8.2	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

04/25/2023

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	108	68	326	255	6
Future Vol, veh/h	7	108	68	326	255	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	117	74	354	277	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	783	281	284	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	362	758	1278	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	341	758	1278	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	608	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1278	-	705	-	-
HCM Lane V/C Ratio	0.058	-	0.177	-	-
HCM Control Delay (s)	8	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-



HCM 6th TWSC  
 15: Manthey Rd & Ashley Dwy #4

04/25/2023

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑	↑	
Traffic Vol, veh/h	14	0	0	333	261	31
Future Vol, veh/h	14	0	0	333	261	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	15	0	0	362	284	34

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	663	301	318	0	-	0
Stage 1	301	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	306	739	1242	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	306	739	1242	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	532	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1242	-	306	-	-
HCM Lane V/C Ratio	-	-	0.05	-	-
HCM Control Delay (s)	0	-	17.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

# HCM 6th Signalized Intersection Summary

## 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Future Volume (veh/h)	169	751	0	0	792	346	263	4	209	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	235	1043	0	0	870	380	351	5	279			
Peak Hour Factor	0.72	0.72	0.72	0.91	0.91	0.91	0.75	0.75	0.75			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	278	2276	0	0	1033	449	404	6	365			
Arrive On Green	0.16	0.64	0.00	0.00	0.43	0.43	0.23	0.23	0.23			
Sat Flow, veh/h	1781	3647	0	0	2505	1047	1757	25	1585			
Grp Volume(v), veh/h	235	1043	0	0	640	610	356	0	279			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1682	1782	0	1585			
Q Serve(g_s), s	9.1	10.6	0.0	0.0	22.9	23.2	13.7	0.0	11.7			
Cycle Q Clear(g_c), s	9.1	10.6	0.0	0.0	22.9	23.2	13.7	0.0	11.7			
Prop In Lane	1.00		0.00	0.00		0.62	0.99		1.00			
Lane Grp Cap(c), veh/h	278	2276	0	0	761	721	410	0	365			
V/C Ratio(X)	0.85	0.46	0.00	0.00	0.84	0.85	0.87	0.00	0.76			
Avail Cap(c_a), veh/h	500	2276	0	0	874	827	876	0	779			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.2	6.5	0.0	0.0	18.2	18.2	26.4	0.0	25.6			
Incr Delay (d2), s/veh	2.7	0.1	0.0	0.0	6.5	7.2	2.2	0.0	1.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	3.0	0.0	0.0	9.5	9.3	5.4	0.0	4.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	6.6	0.0	0.0	24.6	25.5	28.6	0.0	26.9			
LnGrp LOS	C	A	A	A	C	C	C	A	C			
Approach Vol, veh/h		1278			1250			635				
Approach Delay, s/veh		11.3			25.1			27.8				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.2			15.1	35.1		21.0				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		12.6			11.1	25.2		15.7				
Green Ext Time (p_c), s		7.2			0.1	5.3		0.7				

### Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑					↖	↔	
Traffic Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Future Volume (veh/h)	0	647	231	361	694	0	0	0	0	273	4	165
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1044	373	495	951	0				257	89	192
Peak Hour Factor	0.62	0.62	0.62	0.73	0.73	0.73				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1377	492	463	1278	0				351	104	224
Arrive On Green	0.00	0.37	0.37	0.26	0.68	0.00				0.20	0.20	0.20
Sat Flow, veh/h	0	3879	1325	1781	1870	0				1781	528	1138
Grp Volume(v), veh/h	0	958	459	495	951	0				257	0	281
Grp Sat Flow(s),veh/h/ln	0	1702	1632	1781	1870	0				1781	0	1666
Q Serve(g_s), s	0.0	18.9	18.9	20.0	25.2	0.0				10.4	0.0	12.5
Cycle Q Clear(g_c), s	0.0	18.9	18.9	20.0	25.2	0.0				10.4	0.0	12.5
Prop In Lane	0.00		0.81	1.00		0.00				1.00		0.68
Lane Grp Cap(c), veh/h	0	1264	606	463	1278	0				351	0	328
V/C Ratio(X)	0.00	0.76	0.76	1.07	0.74	0.00				0.73	0.00	0.86
Avail Cap(c_a), veh/h	0	1549	743	463	1278	0				811	0	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.2	21.2	28.5	7.8	0.0				29.0	0.0	29.8
Incr Delay (d2), s/veh	0.0	1.7	3.5	61.3	2.4	0.0				1.1	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.2	7.2	15.8	7.9	0.0				4.3	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.9	24.6	89.7	10.2	0.0				30.1	0.0	32.3
LnGrp LOS	A	C	C	F	B	A				C	A	C
Approach Vol, veh/h		1417			1446						538	
Approach Delay, s/veh		23.4			37.4						31.3	
Approach LOS		C			D						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	24.0	33.1		19.8		57.1						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+I1), s	22.0	20.9		14.5		27.2						
Green Ext Time (p_c), s	0.0	7.6		0.6		3.9						

### Intersection Summary

HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Future Volume (veh/h)	119	382	175	179	382	371	183	22	346	150	39	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Peak Hour Factor	0.55	0.55	0.55	0.62	0.62	0.62	0.55	0.55	0.55	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	1421	634	348	1290	575	363	482	720	225	424	189
Arrive On Green	0.14	0.40	0.40	0.10	0.36	0.36	0.20	0.26	0.26	0.07	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	2790	3456	3554	1585
Grp Volume(v), veh/h	216	695	318	289	616	598	333	40	629	163	42	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1728	1777	1585
Q Serve(g_s), s	13.5	16.6	17.1	9.3	15.2	41.3	20.8	1.8	24.6	5.3	1.2	3.5
Cycle Q Clear(g_c), s	13.5	16.6	17.1	9.3	15.2	41.3	20.8	1.8	24.6	5.3	1.2	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	1421	634	348	1290	575	363	482	720	225	424	189
V/C Ratio(X)	0.88	0.49	0.50	0.83	0.48	1.04	0.92	0.08	0.87	0.73	0.10	0.29
Avail Cap(c_a), veh/h	272	1446	645	377	1290	575	413	814	1214	355	1124	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	25.5	25.6	50.2	27.9	36.2	44.4	32.0	40.5	52.2	44.7	45.7
Incr Delay (d2), s/veh	25.2	0.3	0.6	13.7	0.3	48.1	23.5	0.1	4.0	4.4	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.9	6.2	4.7	6.4	22.7	11.2	0.8	8.5	2.4	0.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	25.7	26.3	63.9	28.2	84.4	67.9	32.1	44.4	56.6	44.8	46.5
LnGrp LOS	E	C	C	E	C	F	E	C	D	E	D	D
Approach Vol, veh/h		1229			1503			1002			259	
Approach Delay, s/veh		34.3			57.4			51.7			52.6	
Approach LOS		C			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	61.1	50.6	27.8	19.4	20.2	46.4	12.0	35.1				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	12.4	46.3	26.4	* 36	17.4	41.3	11.7	49.5				
Max Q Clear Time (g_c+I), s	19.1	19.1	22.8	5.5	15.5	43.3	7.3	26.6				
Green Ext Time (p_c), s	0.1	6.3	0.4	0.4	0.1	0.0	0.2	2.8				

### Intersection Summary

HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷			↷			↷	↶			
Traffic Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Future Volume (veh/h)	235	837	0	0	746	353	316	7	408	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	264	940	0	0	867	410	340	76	394			
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	300	2195	0	0	944	443	402	90	434			
Arrive On Green	0.17	0.62	0.00	0.00	0.40	0.40	0.27	0.27	0.27			
Sat Flow, veh/h	1781	3647	0	0	2441	1101	1469	328	1585			
Grp Volume(v), veh/h	264	940	0	0	655	622	416	0	394			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1672	1797	0	1585			
Q Serve(g_s), s	12.3	11.7	0.0	0.0	29.6	30.1	18.6	0.0	20.4			
Cycle Q Clear(g_c), s	12.3	11.7	0.0	0.0	29.6	30.1	18.6	0.0	20.4			
Prop In Lane	1.00		0.00	0.00		0.66	0.82		1.00			
Lane Grp Cap(c), veh/h	300	2195	0	0	714	672	492	0	434			
V/C Ratio(X)	0.88	0.43	0.00	0.00	0.92	0.93	0.85	0.00	0.91			
Avail Cap(c_a), veh/h	420	2195	0	0	733	690	742	0	654			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.4	8.4	0.0	0.0	24.0	24.2	29.1	0.0	29.8			
Incr Delay (d2), s/veh	11.3	0.1	0.0	0.0	16.0	18.2	3.7	0.0	9.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.1	3.8	0.0	0.0	14.6	14.3	7.8	0.0	8.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	8.5	0.0	0.0	40.0	42.4	32.8	0.0	38.8			
LnGrp LOS	D	A	A	A	D	D	C	A	D			
Approach Vol, veh/h		1204			1277			810				
Approach Delay, s/veh		16.7			41.2			35.7				
Approach LOS		B			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		57.0			18.3	38.7		27.8				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		13.7			14.3	32.1		22.4				
Green Ext Time (p_c), s		6.2			0.1	2.0		0.8				

### Intersection Summary

HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑					↖	↕	
Traffic Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Future Volume (veh/h)	0	724	250	270	792	0	0	0	0	348	8	264
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	823	284	329	966	0				352	69	300
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1233	423	375	1122	0				463	79	345
Arrive On Green	0.00	0.33	0.33	0.21	0.60	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3924	1287	1781	1870	0				1781	305	1326
Grp Volume(v), veh/h	0	746	361	329	966	0				352	0	369
Grp Sat Flow(s),veh/h/ln	0	1702	1639	1781	1870	0				1781	0	1632
Q Serve(g_s), s	0.0	12.4	12.5	11.7	28.0	0.0				12.0	0.0	14.2
Cycle Q Clear(g_c), s	0.0	12.4	12.5	11.7	28.0	0.0				12.0	0.0	14.2
Prop In Lane	0.00		0.79	1.00		0.00				1.00		0.81
Lane Grp Cap(c), veh/h	0	1118	538	375	1122	0				463	0	424
V/C Ratio(X)	0.00	0.67	0.67	0.88	0.86	0.00				0.76	0.00	0.87
Avail Cap(c_a), veh/h	0	1817	874	543	1122	0				951	0	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.9	19.0	25.1	10.9	0.0				22.4	0.0	23.2
Incr Delay (d2), s/veh	0.0	0.6	1.3	8.3	7.0	0.0				1.0	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	4.4	5.4	10.5	0.0				4.7	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.6	20.3	33.4	17.8	0.0				23.4	0.0	25.4
LnGrp LOS	A	B	C	C	B	A				C	A	C
Approach Vol, veh/h		1107			1295						721	
Approach Delay, s/veh		19.8			21.8						24.4	
Approach LOS		B			C						C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.8	26.1		21.7		43.9						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+I1), s	13.7	14.5		16.2		30.0						
Green Ext Time (p_c), s	0.1	7.1		0.9		2.8						

### Intersection Summary

HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

04/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘↗	↑↑	↗	↘	↑	↗↘	↘↗	↑↑	↗
Traffic Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Future Volume (veh/h)	172	157	35	369	272	445	35	61	368	449	100	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Peak Hour Factor	0.74	0.74	0.74	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1282	572	465	1240	553	76	322	480	543	1018	454
Arrive On Green	0.15	0.36	0.36	0.13	0.35	0.35	0.04	0.17	0.17	0.16	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	1870	2790	3456	3554	1585
Grp Volume(v), veh/h	232	212	47	429	316	517	38	66	400	488	109	78
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1870	1395	1728	1777	1585
Q Serve(g_s), s	14.6	4.6	2.2	14.0	7.3	36.1	2.4	3.5	15.9	15.9	2.6	4.2
Cycle Q Clear(g_c), s	14.6	4.6	2.2	14.0	7.3	36.1	2.4	3.5	15.9	15.9	2.6	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	1282	572	465	1240	553	76	322	480	543	1018	454
V/C Ratio(X)	0.89	0.17	0.08	0.92	0.25	0.93	0.50	0.20	0.83	0.90	0.11	0.17
Avail Cap(c_a), veh/h	286	1431	638	465	1338	597	112	653	975	555	1626	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	24.9	24.1	49.0	26.6	36.0	53.6	40.7	45.8	47.4	30.1	30.7
Incr Delay (d2), s/veh	25.9	0.1	0.1	24.1	0.1	21.4	4.9	0.3	3.8	17.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	2.0	0.8	7.5	3.1	16.4	1.1	1.6	5.6	7.9	1.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	24.9	24.2	73.1	26.7	57.4	58.5	41.0	49.6	64.7	30.1	30.8
LnGrp LOS	E	C	C	E	C	E	E	D	D	E	C	C
Approach Vol, veh/h		491			1262			504			675	
Approach Delay, s/veh		48.0			55.0			49.2			55.2	
Approach LOS		D			E			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	46.4	9.5	38.6	21.3	45.1	22.6	25.5				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	15.4	46.1	7.2	* 52	18.4	43.1	18.4	40.0				
Max Q Clear Time (g_c+I1), s	16.0	6.6	4.4	6.2	16.6	38.1	17.9	17.9				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.9	0.1	1.9	0.1	1.8				

### Intersection Summary

HCM 6th Ctrl Delay	52.9
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	7:55	7:55	7:55	7:55	7:55	7:55
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	55	55	55	55	55	55
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4946	4020	5125	4940	5031	4810
Vehs Exited	4977	3663	5163	4885	5084	4755
Starting Vehs	241	362	184	172	186	223
Ending Vehs	210	719	146	227	133	280
Travel Distance (mi)	2954	2187	3081	3046	3171	2888
Travel Time (hr)	419.9	1201.8	197.4	279.8	206.4	461.1
Total Delay (hr)	327.6	1131.9	101.4	185.1	108.2	370.8
Total Stops	8244	6919	8516	8035	8628	8065
Fuel Used (gal)	189.3	339.3	142.6	158.4	145.8	195.1

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1152	988	1213	1200	1189	1151
Vehs Exited	1181	845	1247	1189	1223	1139
Starting Vehs	241	362	184	172	186	223
Ending Vehs	212	505	150	183	152	235
Travel Distance (mi)	718	568	751	752	778	713
Travel Time (hr)	67.8	164.0	37.3	42.1	39.6	70.2
Total Delay (hr)	45.3	146.3	13.9	18.6	15.4	47.9
Total Stops	1781	1527	1827	1954	1898	1799
Fuel Used (gal)	37.9	54.8	32.5	33.4	33.0	38.3



**Interval #2 Information Recording 2**

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1844	1492	1873	1772	1832	1763
Vehs Exited	1625	1257	1701	1589	1639	1559
Starting Vehs	212	505	150	183	152	235
Ending Vehs	431	740	322	366	345	438
Travel Distance (mi)	976	759	963	1004	1025	945
Travel Time (hr)	130.4	305.9	73.6	83.8	79.7	134.7
Total Delay (hr)	99.9	281.8	43.2	52.6	47.9	105.1
Total Stops	3008	2520	3188	2864	3333	2985
Fuel Used (gal)	60.5	93.1	47.7	50.2	50.3	60.3

**Interval #3 Information Recording 3**

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1179	898	1202	1129	1233	1125
Vehs Exited	1355	948	1360	1298	1430	1278
Starting Vehs	431	740	322	366	345	438
Ending Vehs	255	690	164	197	148	287
Travel Distance (mi)	783	524	818	773	873	754
Travel Time (hr)	134.8	407.8	59.4	88.0	62.7	150.5
Total Delay (hr)	110.3	390.8	34.1	63.9	35.8	127.0
Total Stops	2183	1753	2220	1986	2223	2074
Fuel Used (gal)	56.0	108.2	39.3	44.2	41.5	57.9

**Interval #4 Information Recording 4**

Start Time	7:45
End Time	7:55
Total Time (min)	10

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	771	642	837	839	777	771
Vehs Exited	816	613	855	809	792	775
Starting Vehs	255	690	164	197	148	287
Ending Vehs	210	719	146	227	133	280
Travel Distance (mi)	477	336	548	518	495	475
Travel Time (hr)	86.9	324.0	27.1	65.9	24.4	105.7
Total Delay (hr)	72.1	313.0	10.2	49.9	9.1	90.8
Total Stops	1272	1119	1281	1231	1174	1212
Fuel Used (gal)	35.0	83.2	23.0	30.6	21.0	38.5

Queuing and Blocking Report  
Background plus Project - Interim Mitigations

AM Peak  
08/07/2023

Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	292	283	327	130	322	369	258	377	335	78	117	156
Average Queue (ft)	134	115	149	45	152	220	178	152	79	33	46	62
95th Queue (ft)	245	226	273	125	310	361	308	434	247	67	95	123
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)					3	6		19	0			
Queuing Penalty (veh)					0	0		0	0			
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	1	0		0	4		31	0		0	1	
Queuing Penalty (veh)	1	0		0	2		17	0		0	0	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	T	TR	LT	R
Maximum Queue (ft)	266	327	311	542	554	258	129
Average Queue (ft)	99	117	125	259	367	135	51
95th Queue (ft)	204	255	259	567	611	223	102
Link Distance (ft)	491	491	491	534	534	612	
Upstream Blk Time (%)				0	3		
Queuing Penalty (veh)				1	17		
Storage Bay Dist (ft)						400	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B44	B44	B44	WB	WB	SB
Directions Served	T	T	TR	T	T	T	L	T	LTR
Maximum Queue (ft)	246	244	253	276	358	448	501	500	336
Average Queue (ft)	94	139	166	38	66	93	268	226	211
95th Queue (ft)	220	261	273	185	280	353	512	427	327
Link Distance (ft)	168	168	168	969	969	969	491	491	903
Upstream Blk Time (%)	8	19	24				3	0	
Queuing Penalty (veh)	34	78	98				15	1	
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	TR	L	T	R	R
Maximum Queue (ft)	321	450	477	205	147	176	295	466	447	66	179	140
Average Queue (ft)	123	107	136	59	52	79	109	188	130	14	62	43
95th Queue (ft)	300	329	339	157	127	150	230	378	310	43	134	98
Link Distance (ft)		584	584			969	969	969	1196	1196	1196	
Upstream Blk Time (%)		1	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	305			125	470							300
Storage Blk Time (%)	9	0	8	0								
Queuing Penalty (veh)	25	0	25	1								

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	207	138	50	53
Average Queue (ft)	100	17	15	22
95th Queue (ft)	191	77	41	46
Link Distance (ft)		1320	1320	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200			200
Storage Blk Time (%)	3			
Queuing Penalty (veh)	1			

Intersection: 5: Manthey Rd & De Lima Rd

Movement	NB
Directions Served	LT
Maximum Queue (ft)	168
Average Queue (ft)	27
95th Queue (ft)	244
Link Distance (ft)	701
Upstream Blk Time (%)	3
Queuing Penalty (veh)	9
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

**Intersection: 7: Golden Valley Pkwy & Dos Reis Rd**

Movement	EB	WB	NB
Directions Served	TR	LT	L
Maximum Queue (ft)	41	49	29
Average Queue (ft)	6	9	3
95th Queue (ft)	27	31	18
Link Distance (ft)	492	814	1320
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

**Intersection: 8: Manthey Rd & Roth Rd**

Movement	WB	NB	B22	SB
Directions Served	L	TR	T	LT
Maximum Queue (ft)	76	228	1293	213
Average Queue (ft)	32	211	786	133
95th Queue (ft)	69	904	3838	606
Link Distance (ft)	146	985	6453	898
Upstream Blk Time (%)		20	4	8
Queuing Penalty (veh)		62	12	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

**Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd**

Movement	EB	EB	WB	SB	SB	SB
Directions Served	T	TR	L	L	LTR	R
Maximum Queue (ft)	18	48	60	488	551	27
Average Queue (ft)	1	31	22	429	450	5
95th Queue (ft)	12	128	53	1026	1004	26
Link Distance (ft)	146	146	420	761	761	
Upstream Blk Time (%)		20		51	52	
Queuing Penalty (veh)		19		0	0	
Storage Bay Dist (ft)						25
Storage Blk Time (%)					75	0
Queuing Penalty (veh)					20	1

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	B32
Directions Served	L	T	T	T	TR	LT	R	T
Maximum Queue (ft)	143	116	68	13	10	48	179	32
Average Queue (ft)	94	87	55	1	0	11	117	32
95th Queue (ft)	319	366	231	7	7	41	480	137
Link Distance (ft)	420	420	420	155	155	490	490	179
Upstream Blk Time (%)		20					20	
Queuing Penalty (veh)		27					0	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	75	130	94	89	127	69	221	29	169	46
Average Queue (ft)	23	80	40	65	87	69	161	15	134	25
95th Queue (ft)	63	161	86	197	267	296	515	37	489	56
Link Distance (ft)		155	155	260	260	361	596		564	
Upstream Blk Time (%)		21	1		20	20	20		18	
Queuing Penalty (veh)		54	2		0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	0	22					21		24	3
Queuing Penalty (veh)	1	15					11		13	1

Intersection: 12: Dos Reis Rd & Ashley Dwy #1

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	31	34
Average Queue (ft)	5	11
95th Queue (ft)	24	35
Link Distance (ft)		413
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	90	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Manthey Rd & Ashley Dwy #3

Movement	EB	NB	NB	B13
Directions Served	LR	L	T	T
Maximum Queue (ft)	57	28	75	68
Average Queue (ft)	29	3	6	3
95th Queue (ft)	49	16	78	51
Link Distance (ft)	444		306	330
Upstream Blk Time (%)			1	0
Queuing Penalty (veh)			3	0
Storage Bay Dist (ft)		90		
Storage Blk Time (%)			1	
Queuing Penalty (veh)			1	

Intersection: 15: Manthey Rd & Ashley Dwy #4

Movement	EB	NB
Directions Served	LR	T
Maximum Queue (ft)	181	63
Average Queue (ft)	72	8
95th Queue (ft)	153	86
Link Distance (ft)	382	307
Upstream Blk Time (%)	0	2
Queuing Penalty (veh)	0	4
Storage Bay Dist (ft)		
Storage Blk Time (%)		2
Queuing Penalty (veh)		0

Network Summary

Network wide Queuing Penalty: 574
-----------------------------------

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:45	3:45	3:45	3:45	3:45	3:45
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5884	6099	6187	5835	6041	6012
Vehs Exited	5637	5991	5881	5586	5839	5785
Starting Vehs	304	296	293	273	262	281
Ending Vehs	551	404	599	522	464	504
Travel Distance (mi)	3859	3900	3943	3779	3864	3869
Travel Time (hr)	733.5	611.9	581.6	669.7	482.2	615.8
Total Delay (hr)	616.6	492.7	461.1	554.5	364.2	497.8
Total Stops	10466	11067	10956	10132	10565	10633
Fuel Used (gal)	281.4	259.1	250.5	264.1	226.4	256.3

Interval #0 Information Seeding

Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	4:00
End Time	4:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1461	1468	1484	1375	1464	1448
Vehs Exited	1407	1447	1423	1283	1420	1395
Starting Vehs	304	296	293	273	262	281
Ending Vehs	358	317	354	365	306	335
Travel Distance (mi)	964	948	995	933	986	965
Travel Time (hr)	90.6	96.6	96.2	88.1	67.7	87.8
Total Delay (hr)	61.3	67.4	66.1	59.6	37.7	58.4
Total Stops	2583	2601	2655	2300	2417	2515
Fuel Used (gal)	49.2	51.0	51.8	47.5	44.7	48.8

**Interval #2 Information Recording 2**

Start Time	4:15
End Time	4:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1661	1679	1647	1656	1758	1680
Vehs Exited	1449	1547	1581	1506	1586	1531
Starting Vehs	358	317	354	365	306	335
Ending Vehs	570	449	420	515	478	483
Travel Distance (mi)	1026	1044	1036	1011	1060	1035
Travel Time (hr)	162.9	144.5	129.8	150.1	114.5	140.4
Total Delay (hr)	132.2	112.6	98.1	119.3	82.2	108.9
Total Stops	2731	2994	2838	2833	3046	2886
Fuel Used (gal)	67.4	65.2	60.8	64.0	58.0	63.1

**Interval #3 Information Recording 3**

Start Time	4:30
End Time	4:45
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1358	1474	1432	1387	1405	1408
Vehs Exited	1408	1494	1382	1399	1476	1430
Starting Vehs	570	449	420	515	478	483
Ending Vehs	520	429	470	503	407	464
Travel Distance (mi)	936	954	934	899	906	926
Travel Time (hr)	223.7	180.1	161.2	201.2	146.5	182.6
Total Delay (hr)	195.1	151.0	132.5	173.7	118.7	154.2
Total Stops	2626	2793	2547	2441	2562	2589
Fuel Used (gal)	79.2	70.1	64.5	72.6	61.5	69.6

**Interval #4 Information Recording 4**

Start Time	4:45
End Time	5:00
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1404	1478	1624	1417	1414	1465
Vehs Exited	1373	1503	1495	1398	1357	1427
Starting Vehs	520	429	470	503	407	464
Ending Vehs	551	404	599	522	464	504
Travel Distance (mi)	934	954	978	936	912	943
Travel Time (hr)	256.3	190.7	194.3	230.4	153.5	205.0
Total Delay (hr)	228.0	161.7	164.4	201.8	125.6	176.3
Total Stops	2526	2679	2916	2558	2540	2643
Fuel Used (gal)	85.7	72.7	73.4	80.0	62.2	74.8



Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	336	335	357	272	359	374	270	446	405	164	163	138
Average Queue (ft)	184	160	194	93	203	268	253	377	178	81	70	64
95th Queue (ft)	306	268	306	210	378	403	328	569	422	138	131	118
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)			0		10	15		81	0			
Queuing Penalty (veh)			0		0	0		0	0			
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	1	0		0	6		83	0		8	3	
Queuing Penalty (veh)	4	1		0	6		83	0		6	4	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	T	TR	LT	R
Maximum Queue (ft)	242	265	287	549	559	295	230
Average Queue (ft)	115	95	101	369	483	168	98
95th Queue (ft)	191	202	207	623	619	260	179
Link Distance (ft)	491	491	491	534	534	612	
Upstream Blk Time (%)				1	8		
Queuing Penalty (veh)				5	37		
Storage Bay Dist (ft)						400	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B37	B37	WB	WB	SB
Directions Served	T	T	TR	T	T	L	T	LTR
Maximum Queue (ft)	172	205	244	9	72	290	443	785
Average Queue (ft)	71	120	157	0	5	161	253	448
95th Queue (ft)	139	188	244	6	35	255	403	855
Link Distance (ft)	168	168	168	969	969	491	491	903
Upstream Blk Time (%)	0	1	8				0	6
Queuing Penalty (veh)	1	5	28				1	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	TR	L	T	R	R
Maximum Queue (ft)	268	180	141	66	156	175	141	284	85	93	125	94
Average Queue (ft)	122	32	56	15	87	107	67	140	28	39	55	37
95th Queue (ft)	241	103	105	44	145	159	118	240	64	81	97	70
Link Distance (ft)		584	584			969	969	969	1196	1196	1196	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	305			125	470							300
Storage Blk Time (%)	2		0									
Queuing Penalty (veh)	2		0									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	250	1389	1374	56
Average Queue (ft)	250	1362	1243	20
95th Queue (ft)	251	1417	1831	46
Link Distance (ft)		1320	1320	
Upstream Blk Time (%)		91	37	
Queuing Penalty (veh)		283	115	
Storage Bay Dist (ft)	200			200
Storage Blk Time (%)	95	0		
Queuing Penalty (veh)	47	0		

Intersection: 5: Manthey Rd & De Lima Rd

Movement	EB	EB	SB
Directions Served	L	R	TR
Maximum Queue (ft)	3	34	728
Average Queue (ft)	0	9	118
95th Queue (ft)	2	34	722
Link Distance (ft)	1206		6453
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement	EB	WB	NB
Directions Served	TR	LT	L
Maximum Queue (ft)	531	826	161
Average Queue (ft)	440	692	50
95th Queue (ft)	677	1101	130
Link Distance (ft)	492	813	1320
Upstream Blk Time (%)	73	53	
Queuing Penalty (veh)	0	210	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	LT
Maximum Queue (ft)	131	46	10	78
Average Queue (ft)	50	1	0	19
95th Queue (ft)	103	18	7	59
Link Distance (ft)	146	146	985	898
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	L	LTR	R
Maximum Queue (ft)	12	22	51	16	493	536	35
Average Queue (ft)	1	1	14	1	314	356	13
95th Queue (ft)	9	12	41	9	886	907	45
Link Distance (ft)	146	146	420	420	761	761	
Upstream Blk Time (%)					17	37	
Queuing Penalty (veh)					0	0	
Storage Bay Dist (ft)							25
Storage Blk Time (%)						69	1
Queuing Penalty (veh)						20	2

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	TR	LT	R
Maximum Queue (ft)	48	19	4	83	70
Average Queue (ft)	9	1	0	30	7
95th Queue (ft)	33	8	3	65	39
Link Distance (ft)	420	155	155	490	490
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	LT	R	LT	R
Maximum Queue (ft)	89	110	71	69	122	139	64	109	50
Average Queue (ft)	29	58	36	30	56	65	29	41	30
95th Queue (ft)	64	98	59	55	102	114	53	75	57
Link Distance (ft)		155	155	260	260	596		564	
Upstream Blk Time (%)		0							
Queuing Penalty (veh)		0							
Storage Bay Dist (ft)	100						100		25
Storage Blk Time (%)	0	1				2		14	4
Queuing Penalty (veh)	0	0				2		8	4

Intersection: 12: Dos Reis Rd & Ashley Dwy #1

Movement	EB	WB	B6	B13	SB
Directions Served	L	TR	T	T	LR
Maximum Queue (ft)	35	583	424	329	285
Average Queue (ft)	5	387	241	171	105
95th Queue (ft)	23	795	557	427	265
Link Distance (ft)		506	330	307	445
Upstream Blk Time (%)		64	57	38	
Queuing Penalty (veh)		231	206	133	
Storage Bay Dist (ft)	90				
Storage Blk Time (%)					
Queuing Penalty (veh)					

**Intersection: 14: Manthey Rd & Ashley Dwy #3**

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	327	39	314
Average Queue (ft)	123	8	139
95th Queue (ft)	305	30	377
Link Distance (ft)	321		309
Upstream Blk Time (%)	16		28
Queuing Penalty (veh)	0		71
Storage Bay Dist (ft)		90	
Storage Blk Time (%)			
Queuing Penalty (veh)			

**Intersection: 15: Manthey Rd & Ashley Dwy #4**

Movement	EB	SB
Directions Served	LR	TR
Maximum Queue (ft)	77	610
Average Queue (ft)	18	186
95th Queue (ft)	62	653
Link Distance (ft)	363	699
Upstream Blk Time (%)		14
Queuing Penalty (veh)		40
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

**Network Summary**

Network wide Queuing Penalty: 1555
------------------------------------

## Appendix H – Baseline plus Project Conditions Freeway Level of Service Sheets

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4228	Heavy Vehicle Adjustment Factor (fhv)	0.866
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1731
Total Trucks, %	15.50	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4018	Heavy Vehicle Adjustment Factor (fhv)	0.860
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1657
Total Trucks, %	16.30	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.3
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4073	Heavy Vehicle Adjustment Factor (fhv)	0.848
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1703
Total Trucks, %	17.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4402	Heavy Vehicle Adjustment Factor (fhv)	0.876
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1782
Total Trucks, %	14.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.5
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/17/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4340	Heavy Vehicle Adjustment Factor (fhv)	0.861
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1787
Total Trucks, %	16.20	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak - Background plus Project
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4286	Heavy Vehicle Adjustment Factor (fhv)	0.879
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1729
Total Trucks, %	13.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 NB north of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4637	Heavy Vehicle Adjustment Factor (fhv)	0.900
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1827
Total Trucks, %	11.10	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.76
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.8
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	27.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 NB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4644	Heavy Vehicle Adjustment Factor (fhv)	0.880
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1871
Total Trucks, %	13.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.78
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.2
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 NB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4555	Heavy Vehicle Adjustment Factor (fhv)	0.862
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1874
Total Trucks, %	16.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.78
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	65.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	28.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 SB north of Roth Rd		

## Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4353	Heavy Vehicle Adjustment Factor (fhv)	0.863
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1789
Total Trucks, %	15.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.9
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		



# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 SB south of Lathrop Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4093	Heavy Vehicle Adjustment Factor (fhv)	0.833
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1742
Total Trucks, %	20.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (ET)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	26.0
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

# HCS7 Basic Freeway Report

## Project Information

Analyst	TJKM	Date	11/18/2021
Agency	City of Lathrop	Analysis Year	2022
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak - Background plus Project
Project Description	Interstate 5 SB south of Roth Rd		

## Geometric Data

Number of Lanes, In	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.48
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	10		

## Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

## Demand and Capacity

Demand Volume veh/h	4242	Heavy Vehicle Adjustment Factor (fhv)	0.898
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1675
Total Trucks, %	11.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (Et)	2.000		

## Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	67.9
Right-Side Lateral Clearance Adj. (fRLC)	0.0	Density (D), pc/mi/ln	24.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

## Appendix I – Cumulative Conditions Level of Service Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Cumulative Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘		↗	↗↘	
Traffic Volume (veh/h)	282	1142	140	70	938	80	250	110	60	70	90	230
Future Volume (veh/h)	282	1142	140	70	938	80	250	110	60	70	90	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	1142	140	70	938	80	250	110	60	70	90	230
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	1319	161	91	1039	89	283	627	322	113	320	286
Arrive On Green	0.16	0.41	0.41	0.05	0.31	0.31	0.16	0.28	0.28	0.06	0.18	0.18
Sat Flow, veh/h	1781	3187	390	1781	3314	283	1781	2272	1165	1781	1777	1585
Grp Volume(v), veh/h	282	636	646	70	503	515	250	84	86	70	90	230
Grp Sat Flow(s),veh/h/ln	1781	1777	1800	1781	1777	1819	1781	1777	1661	1781	1777	1585
Q Serve(g_s), s	14.5	30.1	30.3	3.6	25.0	25.0	12.7	3.3	3.6	3.5	4.0	12.8
Cycle Q Clear(g_c), s	14.5	30.1	30.3	3.6	25.0	25.0	12.7	3.3	3.6	3.5	4.0	12.8
Prop In Lane	1.00		0.22	1.00		0.16	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	290	736	745	91	557	570	283	491	459	113	320	286
V/C Ratio(X)	0.97	0.86	0.87	0.77	0.90	0.90	0.88	0.17	0.19	0.62	0.28	0.80
Avail Cap(c_a), veh/h	290	736	745	290	578	592	290	578	540	290	578	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	24.6	24.7	43.2	30.3	30.3	37.9	25.4	25.5	42.1	32.6	36.2
Incr Delay (d2), s/veh	45.4	10.6	10.8	14.7	17.4	17.1	25.6	0.2	0.2	6.6	0.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	13.9	14.2	1.9	12.8	13.1	7.3	1.4	1.4	1.7	1.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.8	35.2	35.5	57.9	47.7	47.4	63.5	25.6	25.7	48.7	33.2	42.5
LnGrp LOS	F	D	D	E	D	D	E	C	C	D	C	D
Approach Vol, veh/h		1564			1088			420			390	
Approach Delay, s/veh		44.1			48.2			48.2			41.5	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	42.2	19.7	20.6	19.0	32.9	10.8	29.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	5.6	32.3	14.7	14.8	16.5	27.0	5.5	5.6				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.8	0.0	1.9	0.1	1.0				

Intersection Summary

HCM 6th Ctrl Delay			45.6									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Cumulative Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	492	1512	0	0	1378	230	567	0	180	0	0	0
Future Volume (veh/h)	492	1512	0	0	1378	230	567	0	180	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	492	1512	0	0	1378	230	567	0	180			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1035	171	445	0	141			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3147	503	1313	0	417			
Grp Volume(v), veh/h	492	1512	0	0	795	813	747	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1780	1730	0	0			
Q Serve(g_s), s	20.0	32.7	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	32.7	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.28	0.76		0.24			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	604	587	0	0			
V/C Ratio(X)	1.43	0.74	0.00	0.00	1.32	1.35	1.27	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	604	587	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	16.5	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	207.5	1.5	0.0	0.0	155.1	167.0	136.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh	28.5	12.5	0.0	0.0	40.4	42.4	35.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	249.1	18.0	0.0	0.0	189.2	201.1	170.1	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h		2004			1608			747				
Approach Delay, s/veh		74.7			195.2			170.1				
Approach LOS		E			F			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		63.6			24.0	39.6		39.6				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		34.7			22.0	37.0		37.0				
Green Ext Time (p_c), s		0.2			0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					135.5							
HCM 6th LOS					F							

HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Cumulative Conditions

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	1824	433	270	1675	0	0	0	0	180	0	327
Future Volume (veh/h)	0	1824	433	270	1675	0	0	0	0	180	0	327
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1824	433	270	1675	0				180	0	327
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1515	352	302	1080	0				191	0	347
Arrive On Green	0.00	0.37	0.37	0.17	0.58	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	4309	961	1781	1870	0				586	0	1064
Grp Volume(v), veh/h	0	1492	765	270	1675	0				507	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1697	1781	1870	0				1650	0	0
Q Serve(g_s), s	0.0	35.0	35.0	14.2	55.2	0.0				28.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	14.2	55.2	0.0				28.6	0.0	0.0
Prop In Lane	0.00		0.57	1.00		0.00				0.36		0.64
Lane Grp Cap(c), veh/h	0	1246	621	302	1080	0				538	0	0
V/C Ratio(X)	0.00	1.20	1.23	0.89	1.55	0.00				0.94	0.00	0.00
Avail Cap(c_a), veh/h	0	1246	621	373	1080	0				604	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.3	30.3	38.9	20.2	0.0				31.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	96.9	117.8	17.9	252.5	0.0				21.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	30.3	33.8	7.5	96.5	0.0				14.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	127.3	148.1	56.8	272.7	0.0				52.5	0.0	0.0
LnGrp LOS	A	F	F	E	F	A				D	A	A
Approach Vol, veh/h		2257			1945						507	
Approach Delay, s/veh		134.3			242.7						52.5	
Approach LOS		F			F						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.2	39.6		35.8		59.8						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+110), s	110.2	37.0		30.6		57.2						
Green Ext Time (p_c), s	0.1	0.0		0.6		0.0						

Intersection Summary

HCM 6th Ctrl Delay		170.3										
HCM 6th LOS			F									

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

Cumulative Conditions  
Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘↗	↑↑		↘	↑	↗↘	↘	↑↑	↗
Traffic Volume (veh/h)	0	920	310	1083	620	302	80	68	1200	137	42	1
Future Volume (veh/h)	0	920	310	1083	620	302	80	68	1200	137	42	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	920	310	1083	620	302	80	68	1200	137	42	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	1100	490	265	976	475	102	717	1069	137	1431	638
Arrive On Green	0.00	0.31	0.31	0.08	0.42	0.42	0.06	0.38	0.38	0.08	0.40	0.40
Sat Flow, veh/h	1781	3554	1585	3456	2316	1128	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	920	310	1083	476	446	80	68	1200	137	42	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1667	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	31.5	21.9	10.0	27.6	27.6	5.8	3.0	50.0	10.0	0.9	0.0
Cycle Q Clear(g_c), s	0.0	31.5	21.9	10.0	27.6	27.6	5.8	3.0	50.0	10.0	0.9	0.0
Prop In Lane	1.00		1.00	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1	1100	490	265	749	703	102	717	1069	137	1431	638
V/C Ratio(X)	0.00	0.84	0.63	4.09	0.64	0.64	0.79	0.09	1.12	1.00	0.03	0.00
Avail Cap(c_a), veh/h	137	1362	607	265	749	703	273	717	1069	137	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	42.0	38.7	60.2	29.8	29.8	60.7	25.8	40.2	60.2	23.6	23.3
Incr Delay (d2), s/veh	0.0	3.9	1.5	1399.0	1.8	1.9	12.4	0.1	67.7	78.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.2	8.5	55.8	12.0	11.3	2.9	1.3	26.3	7.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	45.9	40.1	1459.2	31.6	31.7	73.1	25.8	107.9	138.2	23.6	23.3
LnGrp LOS	A	D	D	F	C	C	E	C	F	F	C	C
Approach Vol, veh/h		1230			2005			1348			180	
Approach Delay, s/veh		44.4			802.8			101.7			110.8	
Approach LOS		D			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.6	45.5	12.1	58.3	0.0	60.1	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	40.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	11.0	33.5	7.8	2.9	0.0	29.6	12.0	52.0				
Green Ext Time (p_c), s	0.0	6.9	0.1	0.2	0.0	6.0	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	382.4
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	10	0	0	29	60
Future Vol, veh/h	30	10	0	0	29	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	10	0	0	29	60

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	59	59	89	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	948	1007	1506	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	948	1007	1506	-	-	-
Mov Cap-2 Maneuver	948	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1506	-	948	1007	-	-
HCM Lane V/C Ratio	-	-	0.032	0.01	-	-
HCM Control Delay (s)	0	-	8.9	8.6	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-



HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	0	0	34	5
Future Vol, veh/h	0	23	0	0	34	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	0	0	34	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	37	37	39	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	975	1035	1571	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	975	1035	1571	-	-	-
Mov Cap-2 Maneuver	975	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1571	-	-	1035	-	-
HCM Lane V/C Ratio	-	-	-	0.022	-	-
HCM Control Delay (s)	0	-	0	8.6	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	6.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	↔
Traffic Vol, veh/h	20	140	0	5	240	3
Future Vol, veh/h	20	140	0	5	240	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	140	0	5	240	3

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	160	0	95
Stage 1	-	-	-	-	90
Stage 2	-	-	-	-	5
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1419	-	905
Stage 1	-	-	-	-	934
Stage 2	-	-	-	-	1018
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1419	-	905
Mov Cap-2 Maneuver	-	-	-	-	905
Stage 1	-	-	-	-	934
Stage 2	-	-	-	-	1018

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	905	968	-	-	1419	-
HCM Lane V/C Ratio	0.265	0.003	-	-	-	-
HCM Control Delay (s)	10.4	8.7	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection						
Int Delay, s/veh	11.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	449	40	50	185	50	40
Future Vol, veh/h	449	40	50	185	50	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	449	40	50	185	50	40

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	283	143	0	0	235
Stage 1	143	-	-	-	-
Stage 2	140	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	707	905	-	-	1332
Stage 1	884	-	-	-	-
Stage 2	887	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	680	905	-	-	1332
Mov Cap-2 Maneuver	680	-	-	-	-
Stage 1	884	-	-	-	-
Stage 2	853	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	4.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	680	905	1332
HCM Lane V/C Ratio	-	-	0.66	0.044	0.038
HCM Control Delay (s)	-	-	20	9.2	7.8
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	5	0.1	0.1

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	181.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	171	64	400	392	0	0	0	0	430	0	97
Future Vol, veh/h	0	171	64	400	392	0	0	0	0	430	0	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	171	64	400	392	0	0	0	0	430	0	97

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	235	0	0		1278	1427	196
Stage 1	-	-	-	-	-	-		1192	1192	-
Stage 2	-	-	-	-	-	-		86	235	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1329	-	0		~ 158	134	812
Stage 1	0	-	-	-	-	0		~ 250	259	-
Stage 2	0	-	-	-	-	0		927	709	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	1329	-	-		~ 110	0	812
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 110	0	-
Stage 1	-	-	-	-	-	-		~ 250	0	-
Stage 2	-	-	-	-	-	-		648	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.5	\$ 528.2
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1329	-	110	131	812
HCM Lane V/C Ratio	-	-	0.301	-	2.606	1.341	0.08
HCM Control Delay (s)	-	-	8.9	-	\$ 810.1	259.1	9.8
HCM Lane LOS	-	-	A	-	F	F	A
HCM 95th %tile Q(veh)	-	-	1.3	-	26.2	11.4	0.3

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: AM Peak

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	40	561	0	0	618	370	174	0	230	0	0	0
Future Vol, veh/h	40	561	0	0	618	370	174	0	230	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	561	0	0	618	370	174	0	230	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	988	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	695	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	695	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0	28.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	243	716	695	-	-	-
HCM Lane V/C Ratio	0.716	0.321	0.058	-	-	-
HCM Control Delay (s)	50	12.4	10.5	-	-	-
HCM Lane LOS	F	B	B	-	-	-
HCM 95th %tile Q(veh)	4.8	1.4	0.2	-	-	-

HCM 6th AWSC  
11: S Harlan Rd & Roth Rd

Cumulative Conditions  
Timing Plan: AM Peak

Intersection	
Intersection Delay, s/veh	127.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	110	571	110	70	698	120	190	40	50	80	30	100
Future Vol, veh/h	110	571	110	70	698	120	190	40	50	80	30	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	571	110	70	698	120	190	40	50	80	30	100
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	198	119	34.5	20.2
HCM LOS	F	F	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	83%	0%	100%	0%	0%	17%	0%	73%	0%
Vol Thru, %	17%	0%	0%	100%	0%	83%	74%	27%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	26%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	50	110	571	110	419	469	110	100
LT Vol	190	0	110	0	0	70	0	80	0
Through Vol	40	0	0	571	0	349	349	30	0
RT Vol	0	50	0	0	110	0	120	0	100
Lane Flow Rate	230	50	110	571	110	419	469	110	100
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.698	0.136	0.306	1.509	0.269	1.078	1.173	0.345	0.284
Departure Headway (Hd)	12.11	10.946	10.417	9.898	9.171	10.145	9.87	12.521	11.403
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	301	330	348	371	394	360	371	289	317
Service Time	9.81	8.646	8.117	7.598	6.871	7.845	7.57	10.221	9.103
HCM Lane V/C Ratio	0.764	0.152	0.316	1.539	0.279	1.164	1.264	0.381	0.315
HCM Control Delay	38.6	15.4	17.6	268	15.2	102.7	133.5	21.7	18.6
HCM Lane LOS	E	C	C	F	C	F	F	C	C
HCM 95th-tile Q	4.8	0.5	1.3	30	1.1	13.8	17.2	1.5	1.1

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Cumulative Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕		↗	↕		↖	↕	
Traffic Volume (veh/h)	314	1025	200	132	1029	90	314	210	160	180	150	110
Future Volume (veh/h)	314	1025	200	132	1029	90	314	210	160	180	150	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1025	200	132	1029	90	314	210	160	180	150	110
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1208	235	167	1122	98	309	330	239	219	236	162
Arrive On Green	0.17	0.41	0.41	0.09	0.34	0.34	0.17	0.17	0.17	0.12	0.12	0.12
Sat Flow, veh/h	1781	2966	577	1781	3306	289	1781	1965	1426	1781	2014	1384
Grp Volume(v), veh/h	314	613	612	132	553	566	314	189	181	180	131	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1818	1781	1777	1614	1781	1777	1621
Q Serve(g_s), s	15.0	27.0	27.2	6.3	25.8	25.8	15.0	8.6	9.1	8.5	6.1	6.6
Cycle Q Clear(g_c), s	15.0	27.0	27.2	6.3	25.8	25.8	15.0	8.6	9.1	8.5	6.1	6.6
Prop In Lane	1.00		0.33	1.00		0.16	1.00		0.88	1.00		0.85
Lane Grp Cap(c), veh/h	309	724	720	167	603	617	309	298	271	219	208	190
V/C Ratio(X)	1.02	0.85	0.85	0.79	0.92	0.92	1.02	0.63	0.67	0.82	0.63	0.68
Avail Cap(c_a), veh/h	309	724	720	309	616	631	309	616	560	309	616	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	23.2	23.2	38.3	27.4	27.4	35.7	33.5	33.7	37.0	36.4	36.6
Incr Delay (d2), s/veh	55.4	9.4	9.7	9.6	18.6	18.4	55.4	2.7	3.4	12.7	3.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	12.3	12.4	3.1	13.4	13.6	10.9	3.7	3.7	4.3	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	32.6	32.9	47.9	46.0	45.8	91.2	36.2	37.1	49.7	40.1	41.7
LnGrp LOS	F	C	C	D	D	D	F	D	D	D	D	D
Approach Vol, veh/h		1539			1251			684			440	
Approach Delay, s/veh		44.7			46.1			61.7			44.5	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	39.2	20.0	14.1	19.0	33.4	15.6	18.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	8.3	29.2	17.0	8.6	17.0	27.8	10.5	11.1				
Green Ext Time (p_c), s	0.2	0.7	0.0	1.6	0.0	1.5	0.2	2.3				

Intersection Summary

HCM 6th Ctrl Delay	48.1
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Cumulative Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	499	1365	0	0	1359	250	562	0	300	0	0	0
Future Volume (veh/h)	499	1365	0	0	1359	250	562	0	300	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	499	1365	0	0	1359	250	562	0	300			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1019	185	378	0	202			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3097	545	1113	0	594			
Grp Volume(v), veh/h	499	1365	0	0	796	813	862	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1772	1708	0	0			
Q Serve(g_s), s	20.0	27.6	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	27.6	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.31	0.65		0.35			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	601	579	0	0			
V/C Ratio(X)	1.45	0.67	0.00	0.00	1.32	1.35	1.49	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	601	579	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	15.4	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	216.2	0.9	0.0	0.0	156.1	169.1	228.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh	19.3	10.4	0.0	0.0	40.6	42.6	50.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	257.8	16.2	0.0	0.0	190.2	203.2	263.0	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h		1864			1609			862				
Approach Delay, s/veh		80.9			196.8			263.0				
Approach LOS		F			F			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		63.6			24.0	39.6		39.6				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		29.6			22.0	37.0		37.0				
Green Ext Time (p_c), s		3.7			0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					160.1							
HCM 6th LOS					F							



HCM 6th Signalized Intersection Summary  
 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Cumulative Conditions

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↕	
Traffic Volume (veh/h)	0	1644	390	140	1781	0	0	0	0	220	0	542
Future Volume (veh/h)	0	1644	390	140	1781	0	0	0	0	220	0	542
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No		No						No		
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1644	390	140	1781	0				220	0	542
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1570	368	172	973	0				180	0	443
Arrive On Green	0.00	0.38	0.38	0.10	0.52	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	4300	968	1781	1870	0				473	0	1164
Grp Volume(v), veh/h	0	1351	683	140	1781	0				762	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1696	1781	1870	0				1637	0	0
Q Serve(g_s), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.57	1.00		0.00				0.29		0.71
Lane Grp Cap(c), veh/h	0	1294	645	172	973	0				622	0	0
V/C Ratio(X)	0.00	1.04	1.06	0.81	1.83	0.00				1.22	0.00	0.00
Avail Cap(c_a), veh/h	0	1294	645	387	973	0				622	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.5	28.5	40.8	22.1	0.0				28.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	37.4	52.2	3.5	378.1	0.0				114.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.0	22.6	3.2	120.7	0.0				32.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	65.9	80.8	44.3	400.2	0.0				143.5	0.0	0.0
LnGrp LOS	A	F	F	D	F	A				F	A	A
Approach Vol, veh/h		2034			1921						762	
Approach Delay, s/veh		70.9			374.3						143.5	
Approach LOS		E			F						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.9	39.6		39.6		52.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+1), s	19.1	37.0		37.0		49.9						
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0						

Intersection Summary

HCM 6th Ctrl Delay	206.2
HCM 6th LOS	F

HCM 6th Signalized Intersection Summary  
4: Golden Valley Pkwy & Spartan Way

Cumulative Conditions  
Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘↗	↑↑		↘	↑	↗↘	↘	↑↑	↗
Traffic Volume (veh/h)	0	520	150	1530	610	183	80	39	1260	254	85	0
Future Volume (veh/h)	0	520	150	1530	610	183	80	39	1260	254	85	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	520	150	1530	610	183	80	39	1260	254	85	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	689	307	309	874	262	103	837	1248	159	1702	759
Arrive On Green	0.00	0.19	0.19	0.09	0.32	0.32	0.06	0.45	0.45	0.09	0.48	0.00
Sat Flow, veh/h	1781	3554	1585	3456	2695	807	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	0	520	150	1530	402	391	80	39	1260	254	85	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1725	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.0	15.4	9.4	10.0	22.1	22.1	5.0	1.3	50.0	10.0	1.4	0.0
Cycle Q Clear(g_c), s	0.0	15.4	9.4	10.0	22.1	22.1	5.0	1.3	50.0	10.0	1.4	0.0
Prop In Lane	1.00		1.00	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	2	689	307	309	576	560	103	837	1248	159	1702	759
V/C Ratio(X)	0.00	0.76	0.49	4.95	0.70	0.70	0.77	0.05	1.01	1.59	0.05	0.00
Avail Cap(c_a), veh/h	159	1590	709	309	795	772	319	837	1248	159	1702	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	42.5	40.1	50.9	33.0	33.0	51.9	17.4	30.9	50.9	15.5	0.0
Incr Delay (d2), s/veh	0.0	1.7	1.2	1783.8	1.6	1.7	11.6	0.0	27.8	294.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	3.7	80.9	9.5	9.3	2.5	0.5	20.2	17.4	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	44.3	41.3	1834.7	34.6	34.7	63.5	17.4	58.7	345.5	15.6	0.0
LnGrp LOS	A	D	D	F	C	C	E	B	F	F	B	A
Approach Vol, veh/h		670			2323			1379			339	
Approach Delay, s/veh		43.6			1220.2			57.8			262.7	
Approach LOS		D			F			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.6	26.8	11.1	59.3	0.0	41.4	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	40.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	17.4	7.0	3.4	0.0	24.1	12.0	52.0					
Green Ext Time (p_c), s	0.0	4.2	0.1	0.4	0.0	5.3	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	643.7
HCM 6th LOS	F

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
5: Manthey Rd & De Lima Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	10	0	59	33	50
Future Vol, veh/h	70	10	0	59	33	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	10	0	59	33	50

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	117	58	83	0	-	0
Stage 1	58	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	879	1008	1514	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	879	1008	1514	-	-	-
Mov Cap-2 Maneuver	879	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1514	-	879	1008	-	-
HCM Lane V/C Ratio	-	-	0.08	0.01	-	-
HCM Control Delay (s)	0	-	9.5	8.6	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

HCM 6th TWSC  
6: Manthey Rd & Dos Reis Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	4.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	0	29	13	0	43
Future Vol, veh/h	46	0	29	13	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	0	29	13	0	43

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	93	22	43	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	907	1055	1566	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	890	1055	1566	-	-	-
Mov Cap-2 Maneuver	890	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	5.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1566	-	890	-	-	-
HCM Lane V/C Ratio	0.019	-	0.052	-	-	-
HCM Control Delay (s)	7.3	0	9.3	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	-

HCM 6th TWSC  
7: Golden Valley Pkwy & Dos Reis Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	110	52	20	90	16
Future Vol, veh/h	30	110	52	20	90	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	110	52	20	90	16

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	140	0	209 85
Stage 1	-	-	-	-	85 -
Stage 2	-	-	-	-	124 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1443	-	779 974
Stage 1	-	-	-	-	938 -
Stage 2	-	-	-	-	902 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1443	-	751 974
Mov Cap-2 Maneuver	-	-	-	-	751 -
Stage 1	-	-	-	-	938 -
Stage 2	-	-	-	-	870 -

Approach	EB	WB	NB
HCM Control Delay, s	0	5.5	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	751	974	-	-	1443	-
HCM Lane V/C Ratio	0.12	0.016	-	-	0.036	-
HCM Control Delay (s)	10.4	8.8	-	-	7.6	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection						
Int Delay, s/veh	39.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	433	110	120	619	90	60
Future Vol, veh/h	433	110	120	619	90	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	433	110	120	619	90	60

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	670	430	0	0	739
Stage 1	430	-	-	-	-
Stage 2	240	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 422	625	-	-	867
Stage 1	656	-	-	-	-
Stage 2	800	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 377	625	-	-	867
Mov Cap-2 Maneuver	~ 377	-	-	-	-
Stage 1	656	-	-	-	-
Stage 2	714	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	102.7	0	5.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	377	625	867	-
HCM Lane V/C Ratio	-	-	1.149	0.176	0.104	-
HCM Control Delay (s)	-	-	125.8	12	9.6	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	16.7	0.6	0.3	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	260											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↑↓	↑
Traffic Vol, veh/h	0	395	314	320	463	0	0	0	0	530	0	80
Future Vol, veh/h	0	395	314	320	463	0	0	0	0	530	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	395	314	320	463	0	0	0	0	530	0	80

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	709	0	0		1301	1812	232
Stage 1	-	-	-	-	-	-		1103	1103	-
Stage 2	-	-	-	-	-	-		198	709	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	886	-	0		~ 153	78	770
Stage 1	0	-	-	-	-	0		~ 279	285	-
Stage 2	0	-	-	-	-	0		816	435	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	886	-	-		~ 98	0	770
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 98	0	-
Stage 1	-	-	-	-	-	-		~ 279	0	-
Stage 2	-	-	-	-	-	-		~ 521	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.6	\$ 890.1
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	886	-	98	111	770
HCM Lane V/C Ratio	-	-	0.361	-	3.605	1.832	0.069
HCM Control Delay (s)	-	-	11.3	-	\$ 1263	\$ 473.1	10
HCM Lane LOS	-	-	B	-	F	F	B
HCM 95th %tile Q(veh)	-	-	1.7	-	35.6	16.2	0.2

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Cumulative Conditions  
 Timing Plan: PM Peak

Intersection												
Int Delay, s/veh	49.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	117	808	0	0	547	540	236	0	310	0	0	0
Future Vol, veh/h	117	808	0	0	547	540	236	0	310	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	808	0	0	547	540	236	0	310	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	1087	0	- - - 0 1316 2129 404
Stage 1	-	-	- - - 1042 1042 -
Stage 2	-	-	- - - 274 1087 -
Critical Hdwy	4.14	-	- - - 6.84 6.54 6.94
Critical Hdwy Stg 1	-	-	- - - 5.84 5.54 -
Critical Hdwy Stg 2	-	-	- - - 5.84 5.54 -
Follow-up Hdwy	2.22	-	- - - 3.52 4.02 3.32
Pot Cap-1 Maneuver	638	- 0 0	- - ~ 149 49 596
Stage 1	-	- 0 0	- - 301 305 -
Stage 2	-	- 0 0	- - 747 290 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	638	- - -	- - ~ 122 0 596
Mov Cap-2 Maneuver	-	- - -	- - ~ 122 0 -
Stage 1	-	- - -	- - 246 0 -
Stage 2	-	- - -	- - 747 0 -

Approach	EB	WB	NB
HCM Control Delay, s	1.5	0	229.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	122	596	638	-	-	-
HCM Lane V/C Ratio	1.934	0.52	0.183	-	-	-
HCM Control Delay (s)	\$ 509.1	17.4	11.9	-	-	-
HCM Lane LOS	F	C	B	-	-	-
HCM 95th %tile Q(veh)	18.9	3	0.7	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



HCM 6th AWSC  
11: S Harlan Rd & Roth Rd

Cumulative Conditions  
Timing Plan: PM Peak

Intersection	
Intersection Delay, s/veh	365.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	140	858	120	110	767	170	200	70	140	190	80	120
Future Vol, veh/h	140	858	120	110	767	170	200	70	140	190	80	120
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	140	858	120	110	767	170	200	70	140	190	80	120
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	615.5	327.7	63.9	65.8
HCM LOS	F	F	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	74%	0%	100%	0%	0%	22%	0%	70%	0%
Vol Thru, %	26%	0%	0%	100%	0%	78%	69%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	31%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	140	140	858	120	494	554	270	120
LT Vol	200	0	140	0	0	110	0	190	0
Through Vol	70	0	0	858	0	384	384	80	0
RT Vol	0	140	0	0	120	0	170	0	120
Lane Flow Rate	270	140	140	858	120	494	554	270	120
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.913	0.432	0.459	2.692	0.353	1.547	1.685	0.916	0.372
Departure Headway (Hd)	15.94	14.811	12.62	12.097	11.366	13.875	13.523	16.065	14.955
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	229	245	287	309	318	266	277	227	242
Service Time	13.64	12.511	10.32	9.797	9.066	11.575	11.223	13.765	12.655
HCM Lane V/C Ratio	1.179	0.571	0.488	2.777	0.377	1.857	2	1.189	0.496
HCM Control Delay	82.3	28.3	25.6	795	20.1	297.2	354.8	83.4	26.3
HCM Lane LOS	F	D	D	F	C	F	F	F	D
HCM 95th-tile Q	7.7	2	2.3	67.4	1.5	24	28.7	7.7	1.6

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4967	3296	3396	4214	3693	3913
Vehs Exited	4731	3184	3223	4109	3389	3724
Starting Vehs	625	740	661	608	538	633
Ending Vehs	861	852	834	713	842	818
Travel Distance (mi)	2725	1926	1923	2351	1983	2182
Travel Time (hr)	2736.1	3958.2	3663.6	3131.7	3405.1	3379.0
Total Delay (hr)	2651.3	3897.9	3603.1	3058.0	3342.9	3310.6
Total Stops	12257	9714	10010	10846	9956	10557
Fuel Used (gal)	708.2	961.7	894.0	787.9	837.2	837.8

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1292	892	995	1161	1284	1125
Vehs Exited	1220	776	829	1080	991	979
Starting Vehs	625	740	661	608	538	633
Ending Vehs	697	856	827	689	831	774
Travel Distance (mi)	695	459	507	619	576	571
Travel Time (hr)	344.5	449.2	413.4	347.5	328.4	376.6
Total Delay (hr)	323.1	434.8	397.6	328.1	310.3	358.8
Total Stops	3066	2321	2745	2922	3069	2824
Fuel Used (gal)	100.0	116.4	109.4	98.6	92.4	103.4

**Interval #2 Information Recording 2**

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1261	742	833	1037	829	942
Vehs Exited	1243	744	834	1046	826	940
Starting Vehs	697	856	827	689	831	774
Ending Vehs	715	854	826	680	834	779
Travel Distance (mi)	728	461	487	602	483	552
Travel Time (hr)	566.7	817.2	734.6	639.7	670.8	685.8
Total Delay (hr)	544.0	802.8	719.2	620.9	655.7	668.5
Total Stops	3184	2322	2502	2667	2443	2624
Fuel Used (gal)	151.8	200.6	182.3	164.9	167.8	173.5

**Interval #3 Information Recording 3**

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1343	885	806	1011	729	955
Vehs Exited	1310	823	829	978	756	941
Starting Vehs	715	854	826	680	834	779
Ending Vehs	748	916	803	713	807	793
Travel Distance (mi)	752	512	468	564	444	548
Travel Time (hr)	785.7	1167.9	1077.5	929.3	1028.3	997.8
Total Delay (hr)	762.4	1151.8	1062.6	911.6	1014.4	980.6
Total Stops	3269	2701	2344	2526	2258	2618
Fuel Used (gal)	202.4	282.0	260.2	229.6	248.3	244.5

**Interval #4 Information Recording 4**

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1071	777	762	1005	851	896
Vehs Exited	958	841	731	1005	816	869
Starting Vehs	748	916	803	713	807	793
Ending Vehs	861	852	834	713	842	818
Travel Distance (mi)	551	494	461	566	480	510
Travel Time (hr)	1039.1	1524.0	1438.1	1215.2	1377.6	1318.8
Total Delay (hr)	1021.8	1508.5	1423.7	1197.4	1362.5	1302.8
Total Stops	2738	2370	2419	2731	2186	2491
Fuel Used (gal)	254.0	362.7	342.1	294.9	328.8	316.5

Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	290	353	387	213	389	381	270	419	273	130	382	412
Average Queue (ft)	138	191	214	21	355	353	259	407	23	33	250	357
95th Queue (ft)	247	345	375	129	377	371	272	420	133	93	515	462
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)					95	99		100	0		35	80
Queuing Penalty (veh)					0	0		0	0		0	0
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	0	2			37		100			2	4	
Queuing Penalty (veh)	1	6			26		55			1	3	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	522	534	519	595	562	668
Average Queue (ft)	434	307	251	471	545	630
95th Queue (ft)	630	589	496	671	558	654
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)	26	2	0	16	78	97
Queuing Penalty (veh)	171	16	2	112	551	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B12	B12	B12	WB	WB	SB
Directions Served	T	T	TR	T	T	T	L	T	LTR
Maximum Queue (ft)	272	277	271	1013	1033	1016	529	533	951
Average Queue (ft)	241	243	242	974	991	979	175	511	913
95th Queue (ft)	257	262	257	1049	1059	1052	506	543	999
Link Distance (ft)	168	168	168	969	969	969	491	491	903
Upstream Blk Time (%)	69	78	69	13	20	29	5	65	93
Queuing Penalty (veh)	520	588	517	95	154	219	47	636	0
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	WB	WB	WB	WB	B12	B12	NB	NB	NB
Directions Served	T	T	R	L	L	T	TR	T	T	L	T	R
Maximum Queue (ft)	619	624	205	520	1071	1043	1046	244	244	1219	1238	1248
Average Queue (ft)	573	599	187	518	1044	945	433	194	194	308	1052	1134
95th Queue (ft)	678	639	274	526	1056	1253	1122	240	244	1113	1722	1518
Link Distance (ft)	584	584			969	969	969	168	168	1196	1196	1196
Upstream Blk Time (%)	35	81			100	38	1	55	41	3	72	83
Queuing Penalty (veh)	0	0			665	255	3	547	406	0	0	0
Storage Bay Dist (ft)			125	470								
Storage Blk Time (%)	65	83	1	67	97							66
Queuing Penalty (veh)	0	257	4	362	527							399

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	350	250	1250	418	15
Average Queue (ft)	348	241	809	50	1
95th Queue (ft)	373	281	1383	220	7
Link Distance (ft)			1346	1346	
Upstream Blk Time (%)			1		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	300	200		200	
Storage Blk Time (%)	53	94	0		
Queuing Penalty (veh)	319	20	0		

Intersection: 5: Manthey Rd & De Lima Rd

Movement	EB	EB
Directions Served	L	R
Maximum Queue (ft)	47	34
Average Queue (ft)	20	10
95th Queue (ft)	44	35
Link Distance (ft)	1132	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		25
Storage Blk Time (%)	2	0
Queuing Penalty (veh)	0	0

Intersection: 6: Manthey Rd & Dos Reis Rd

Movement	EB	EB
Directions Served	L	R
Maximum Queue (ft)	11	39
Average Queue (ft)	0	18
95th Queue (ft)	8	47
Link Distance (ft)	1414	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	25	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement	EB	NB	NB
Directions Served	TR	L	R
Maximum Queue (ft)	23	41	1
Average Queue (ft)	1	12	0
95th Queue (ft)	11	26	0
Link Distance (ft)	492	1346	1346
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	NB	SB
Directions Served	L	TR	LT
Maximum Queue (ft)	59	13	47
Average Queue (ft)	20	0	12
95th Queue (ft)	72	6	37
Link Distance (ft)	146	985	898
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR	R
Maximum Queue (ft)	19	16	347	328	76	755	776	10
Average Queue (ft)	4	1	280	257	6	749	764	0
95th Queue (ft)	32	11	588	577	53	787	776	7
Link Distance (ft)	146	146	420	420	420	761	761	
Upstream Blk Time (%)			62	42		79	100	
Queuing Penalty (veh)			165	111		0	0	
Storage Bay Dist (ft)								25
Storage Blk Time (%)							100	0
Queuing Penalty (veh)							48	0

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	B32
Directions Served	L	T	T	T	TR	LT	R	T
Maximum Queue (ft)	61	37	6	124	153	475	49	152
Average Queue (ft)	27	4	0	97	116	346	5	95
95th Queue (ft)	120	44	5	221	264	735	33	235
Link Distance (ft)	420	420	420	155	155	490	490	179
Upstream Blk Time (%)				62	61	57		36
Queuing Penalty (veh)				305	304	0		0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	79	112	95	238	327	374	504	46	474	48
Average Queue (ft)	26	53	27	192	270	309	372	10	341	38
95th Queue (ft)	74	113	87	345	411	512	794	41	752	50
Link Distance (ft)		155	155	260	260	361	596		564	
Upstream Blk Time (%)	0	2	1	38	69	82	54		54	
Queuing Penalty (veh)	0	6	4	0	0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	0	4					61		6	65
Queuing Penalty (veh)	0	4					31		6	71

Network Summary

Network wide Queuing Penalty: 8540

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:45	3:45	3:45	3:45	3:45	3:45
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5487	5106	5211	5221	2919	4788
Vehs Exited	5283	4969	4981	5012	2685	4585
Starting Vehs	669	633	559	593	774	644
Ending Vehs	873	770	789	802	1008	850
Travel Distance (mi)	2847	2710	2793	2811	1750	2582
Travel Time (hr)	3817.0	3893.1	3850.7	3678.3	5257.0	4099.2
Total Delay (hr)	3727.7	3807.9	3763.4	3590.2	5202.5	4018.4
Total Stops	12332	11682	12340	12156	9064	11515
Fuel Used (gal)	959.8	970.9	964.4	925.4	1250.0	1014.1

Interval #0 Information Seeding

Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	4:00
End Time	4:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1524	1489	1434	1466	831	1348
Vehs Exited	1418	1372	1299	1320	730	1229
Starting Vehs	669	633	559	593	774	644
Ending Vehs	775	750	694	739	875	767
Travel Distance (mi)	777	750	737	754	488	701
Travel Time (hr)	475.5	452.7	468.1	442.6	582.8	484.3
Total Delay (hr)	451.3	429.2	444.9	419.1	567.4	462.4
Total Stops	3476	3238	3291	3261	2181	3088
Fuel Used (gal)	132.8	126.2	129.8	124.5	147.0	132.0



**Interval #2 Information Recording 2**

Start Time	4:15
End Time	4:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1341	1232	1320	1409	759	1211
Vehs Exited	1327	1227	1213	1339	683	1157
Starting Vehs	775	750	694	739	875	767
Ending Vehs	789	755	801	809	951	820
Travel Distance (mi)	720	649	685	742	440	647
Travel Time (hr)	788.9	798.1	782.4	739.4	1064.4	834.6
Total Delay (hr)	766.3	777.6	761.0	716.4	1050.9	814.4
Total Stops	3037	2792	3047	3200	2234	2859
Fuel Used (gal)	203.0	202.3	199.5	191.3	255.8	210.4

**Interval #3 Information Recording 3**

Start Time	4:30
End Time	4:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1408	1217	1234	1186	683	1143
Vehs Exited	1341	1176	1254	1206	635	1124
Starting Vehs	789	755	801	809	951	820
Ending Vehs	856	796	781	789	999	843
Travel Distance (mi)	722	645	699	674	429	634
Travel Time (hr)	1105.7	1140.7	1129.3	1061.6	1556.9	1198.9
Total Delay (hr)	1083.0	1120.3	1107.6	1040.6	1543.6	1179.0
Total Stops	3078	2757	2935	2760	2472	2803
Fuel Used (gal)	274.7	279.8	279.1	262.8	367.5	292.8

**Interval #4 Information Recording 4**

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1214	1168	1223	1160	646	1083
Vehs Exited	1197	1194	1215	1147	637	1076
Starting Vehs	856	796	781	789	999	843
Ending Vehs	873	770	789	802	1008	850
Travel Distance (mi)	628	666	672	641	393	600
Travel Time (hr)	1446.9	1501.7	1470.9	1434.6	2053.0	1581.4
Total Delay (hr)	1427.2	1480.8	1449.9	1414.2	2040.7	1562.6
Total Stops	2741	2895	3067	2935	2177	2765
Fuel Used (gal)	349.3	362.6	356.0	346.8	479.7	378.9

Queuing and Blocking Report  
Cumulative Conditions

PM Peak  
08/08/2023

Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	360	419	450	250	377	365	266	423	217	163	384	395
Average Queue (ft)	186	191	210	35	350	351	255	407	27	74	219	284
95th Queue (ft)	339	385	402	175	387	367	266	421	161	159	432	457
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)			0		93	99		100	0		14	29
Queuing Penalty (veh)			0		0	0		0	0		0	0
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	4	3			46		100	0		9	9	
Queuing Penalty (veh)	20	8			61		105	0		7	16	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	524	552	527	576	563	644
Average Queue (ft)	495	313	262	449	545	626
95th Queue (ft)	546	592	510	698	558	638
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)	40	4	1	22	83	99
Queuing Penalty (veh)	247	28	5	162	605	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B12	B12	B12	WB	WB	SB
Directions Served	T	T	TR	T	T	T	L	T	LTR
Maximum Queue (ft)	267	267	274	1003	1036	1013	491	529	949
Average Queue (ft)	241	242	241	941	965	958	58	511	922
95th Queue (ft)	256	257	255	1134	1139	1115	269	524	937
Link Distance (ft)	168	168	168	969	969	969	491	491	903
Upstream Blk Time (%)	87	71	64	9	16	23	1	76	98
Queuing Penalty (veh)	588	480	433	62	110	157	7	728	0
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	WB	WB	WB	WB	B12	B12	NB	NB	NB
Directions Served	T	T	R	L	L	T	TR	T	T	L	T	R
Maximum Queue (ft)	470	525	205	520	1063	1044	1001	245	242	1205	1240	1238
Average Queue (ft)	230	288	138	518	1044	902	275	196	198	268	934	1050
95th Queue (ft)	448	514	274	527	1056	1320	900	234	254	1016	1759	1591
Link Distance (ft)	584	584			969	969	969	168	168	1196	1196	1196
Upstream Blk Time (%)	0	2			100	31	0	67	44	3	60	71
Queuing Penalty (veh)	0	0			772	244	2	780	506	0	0	0
Storage Bay Dist (ft)			125	470								
Storage Blk Time (%)	7	51	0	62	97							58
Queuing Penalty (veh)	0	76	0	473	741							366

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	NB	SB	SB	SB
Directions Served	R	L	T	T
Maximum Queue (ft)	350	250	1171	536
Average Queue (ft)	339	249	889	72
95th Queue (ft)	400	254	1185	319
Link Distance (ft)			1346	1346
Upstream Blk Time (%)			1	
Queuing Penalty (veh)			1	
Storage Bay Dist (ft)	300	200		
Storage Blk Time (%)	43	99	0	
Queuing Penalty (veh)	274	41	0	

Intersection: 5: Manthey Rd & De Lima Rd

Movement	EB	EB
Directions Served	L	R
Maximum Queue (ft)	63	37
Average Queue (ft)	30	8
95th Queue (ft)	48	32
Link Distance (ft)	1132	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		25
Storage Blk Time (%)	5	0
Queuing Penalty (veh)	0	0

Queuing and Blocking Report  
Cumulative Conditions

PM Peak  
08/08/2023

Intersection: 6: Manthey Rd & Dos Reis Rd

Movement	EB	NB
Directions Served	L	LT
Maximum Queue (ft)	40	6
Average Queue (ft)	19	0
95th Queue (ft)	41	4
Link Distance (ft)	1414	1022
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)	2	
Queuing Penalty (veh)	0	

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement	EB	WB	NB	NB
Directions Served	TR	LT	L	R
Maximum Queue (ft)	17	40	21	7
Average Queue (ft)	1	5	5	0
95th Queue (ft)	9	26	15	4
Link Distance (ft)	492	1414	1346	1346
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	WB	NB	B22	SB
Directions Served	L	R	TR	T	LT
Maximum Queue (ft)	130	37	713	407	928
Average Queue (ft)	62	3	608	179	727
95th Queue (ft)	145	22	988	964	1191
Link Distance (ft)	146	146	985	6453	898
Upstream Blk Time (%)	2		16		64
Queuing Penalty (veh)	6		21		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR	R
Maximum Queue (ft)	140	177	227	218	25	786	778	20
Average Queue (ft)	91	157	100	98	6	765	763	1
95th Queue (ft)	197	193	312	383	32	778	782	10
Link Distance (ft)	146	146	420	420	420	761	761	
Upstream Blk Time (%)	1	61	2	22		100	100	
Queuing Penalty (veh)	3	216	4	56		0	0	
Storage Bay Dist (ft)								25
Storage Blk Time (%)							100	0
Queuing Penalty (veh)							40	0

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	B32
Directions Served	L	T	T	T	TR	LT	R	T
Maximum Queue (ft)	356	427	341	32	86	279	295	39
Average Queue (ft)	92	402	234	2	42	152	119	36
95th Queue (ft)	353	541	562	32	168	470	319	154
Link Distance (ft)	420	420	420	155	155	490	490	179
Upstream Blk Time (%)	2	63	1	1	21	20		20
Queuing Penalty (veh)	5	195	4	6	116	0		0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	120	198	200	211	350	199	347	124	393	53
Average Queue (ft)	104	180	179	102	332	177	187	36	211	42
95th Queue (ft)	205	203	331	290	346	200	523	91	528	59
Link Distance (ft)		155	155	260	260	169	596		564	
Upstream Blk Time (%)	1	87	56	1	98	98	20		20	
Queuing Penalty (veh)	0	488	314	0	0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	1	97					27	0	44	28
Queuing Penalty (veh)	5	136					38	0	52	76

---

Intersection: 28: Bend

---

Movement	SB
Directions Served	T
Maximum Queue (ft)	94
Average Queue (ft)	3
95th Queue (ft)	69
Link Distance (ft)	449
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

---

Network Summary

---

Network wide Queuing Penalty: 9889

Appendix J – Cumulative plus Project Conditions Level of Service  
Sheets

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘		↗	↗↘	
Traffic Volume (veh/h)	282	1150	140	70	950	80	250	110	60	70	90	230
Future Volume (veh/h)	282	1150	140	70	950	80	250	110	60	70	90	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	1150	140	70	950	80	250	110	60	70	90	230
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1323	161	91	1044	88	283	627	322	113	320	286
Arrive On Green	0.16	0.41	0.41	0.05	0.31	0.31	0.16	0.28	0.28	0.06	0.18	0.18
Sat Flow, veh/h	1781	3190	387	1781	3318	279	1781	2272	1165	1781	1777	1585
Grp Volume(v), veh/h	282	639	651	70	509	521	250	84	86	70	90	230
Grp Sat Flow(s),veh/h/ln	1781	1777	1801	1781	1777	1820	1781	1777	1661	1781	1777	1585
Q Serve(g_s), s	14.6	30.4	30.6	3.6	25.4	25.4	12.7	3.3	3.6	3.5	4.0	12.9
Cycle Q Clear(g_c), s	14.6	30.4	30.6	3.6	25.4	25.4	12.7	3.3	3.6	3.5	4.0	12.9
Prop In Lane	1.00		0.22	1.00		0.15	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	289	737	747	91	559	573	283	491	458	113	320	286
V/C Ratio(X)	0.98	0.87	0.87	0.77	0.91	0.91	0.88	0.17	0.19	0.62	0.28	0.81
Avail Cap(c_a), veh/h	289	737	747	289	576	590	289	576	539	289	576	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	24.7	24.8	43.3	30.4	30.4	38.0	25.4	25.5	42.2	32.7	36.3
Incr Delay (d2), s/veh	46.2	10.9	11.1	14.7	18.5	18.1	25.7	0.2	0.2	6.6	0.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	14.1	14.5	1.9	13.2	13.5	7.3	1.4	1.4	1.7	1.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.8	35.6	35.9	58.0	48.9	48.6	63.8	25.6	25.8	48.9	33.3	42.7
LnGrp LOS	F	D	D	E	D	D	E	C	C	D	C	D
Approach Vol, veh/h		1572			1100			420			390	
Approach Delay, s/veh		44.5			49.3			48.4			41.6	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	42.4	19.7	20.7	19.0	33.1	10.8	29.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	5.6	32.6	14.7	14.9	16.6	27.4	5.5	5.6				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.8	0.0	1.7	0.1	1.0				

Intersection Summary

HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D



HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1520	0	0	1390	230	610	0	180	0	0	0
Future Volume (veh/h)	520	1520	0	0	1390	230	610	0	180	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	520	1520	0	0	1390	230	610	0	180			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1037	169	454	0	134			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3151	500	1338	0	395			
Grp Volume(v), veh/h	520	1520	0	0	800	820	790	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1780	1732	0	0			
Q Serve(g_s), s	20.0	33.0	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	33.0	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.28	0.77		0.23			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	604	588	0	0			
V/C Ratio(X)	1.51	0.75	0.00	0.00	1.33	1.36	1.34	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	604	588	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	16.5	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	242.4	1.5	0.0	0.0	159.0	171.4	166.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	11.8	12.6	0.0	0.0	41.0	43.2	40.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	284.0	18.1	0.0	0.0	193.1	205.5	200.3	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h		2040			1620			790				
Approach Delay, s/veh		85.9			199.4			200.3				
Approach LOS		F			F			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		63.6			24.0	39.6		39.6				
Change Period (Y+Rc), s		4.6			4.0	4.6		4.6				
Max Green Setting (Gmax), s		35.0			20.0	35.0		35.0				
Max Q Clear Time (g_c+I1), s		35.0			22.0	37.0		37.0				
Green Ext Time (p_c), s		0.0			0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					147.5							
HCM 6th LOS					F							

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑						↔	
Traffic Volume (veh/h)	0	1860	460	270	1730	0	0	0	0	180	0	370
Future Volume (veh/h)	0	1860	460	270	1730	0	0	0	0	180	0	370
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1860	460	270	1730	0				180	0	370
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1441	346	301	1047	0				187	0	385
Arrive On Green	0.00	0.35	0.35	0.17	0.56	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	4277	988	1781	1870	0				538	0	1106
Grp Volume(v), veh/h	0	1532	788	270	1730	0				550	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1692	1781	1870	0				1644	0	0
Q Serve(g_s), s	0.0	35.0	35.0	14.8	55.9	0.0				32.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	14.8	55.9	0.0				32.7	0.0	0.0
Prop In Lane	0.00		0.58	1.00		0.00				0.33		0.67
Lane Grp Cap(c), veh/h	0	1194	593	301	1047	0				573	0	0
V/C Ratio(X)	0.00	1.28	1.33	0.90	1.65	0.00				0.96	0.00	0.00
Avail Cap(c_a), veh/h	0	1194	593	357	1047	0				577	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	32.4	32.4	40.6	22.0	0.0				31.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	134.2	158.8	20.1	298.1	0.0				27.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	35.9	39.8	8.0	108.3	0.0				16.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	166.6	191.2	60.8	320.1	0.0				59.3	0.0	0.0
LnGrp LOS	A	F	F	E	F	A				E	A	A
Approach Vol, veh/h		2320			2000						550	
Approach Delay, s/veh		174.9			285.1						59.3	
Approach LOS		F			F						E	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.9	39.6		39.4		60.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+110), s	10.8	37.0		34.7		57.9						
Green Ext Time (p_c), s	0.0	0.0		0.1		0.0						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												207.1
HCM 6th LOS												F

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	920	310	1083	620	400	80	80	1200	200	50	5
Future Volume (veh/h)	5	920	310	1083	620	400	80	80	1200	200	50	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	920	310	1083	620	400	80	80	1200	200	50	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	1100	490	265	781	504	102	717	1069	137	1431	638
Arrive On Green	0.01	0.31	0.31	0.08	0.38	0.38	0.06	0.38	0.38	0.08	0.40	0.40
Sat Flow, veh/h	1781	3554	1585	3456	2071	1336	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	5	920	310	1083	532	488	80	80	1200	200	50	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1630	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.4	31.5	21.9	10.0	34.7	34.7	5.8	3.6	50.0	10.0	1.1	0.2
Cycle Q Clear(g_c), s	0.4	31.5	21.9	10.0	34.7	34.7	5.8	3.6	50.0	10.0	1.1	0.2
Prop In Lane	1.00		1.00	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	1100	490	265	670	615	102	717	1069	137	1431	638
V/C Ratio(X)	0.32	0.84	0.63	4.09	0.79	0.79	0.79	0.11	1.12	1.46	0.03	0.01
Avail Cap(c_a), veh/h	137	1362	607	265	681	625	273	717	1069	137	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	42.0	38.7	60.2	36.1	36.1	60.7	25.9	40.2	60.2	23.6	23.4
Incr Delay (d2), s/veh	10.9	3.9	1.5	1399.0	6.4	6.9	12.4	0.1	67.7	244.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	14.2	8.5	55.8	16.0	14.7	2.9	1.6	26.3	13.7	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.2	45.9	40.1	1459.2	42.5	43.0	73.1	26.0	107.9	305.0	23.6	23.4
LnGrp LOS	E	D	D	F	D	D	E	C	F	F	C	C
Approach Vol, veh/h		1235			2103			1360			255	
Approach Delay, s/veh		44.6			772.2			101.1			244.3	
Approach LOS		D			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	45.5	12.1	58.3	5.8	54.3	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	10.0	33.5	7.8	3.1	2.4	36.7	12.0	52.0				
Green Ext Time (p_c), s	0.0	6.9	0.1	0.2	0.0	5.5	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	379.3
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	10	0	50	50	60
Future Vol, veh/h	30	10	0	50	50	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	50	28	2
Mvmt Flow	30	10	0	50	50	60

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	130	80	110	0	-	0
Stage 1	80	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	864	980	1480	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	864	980	1480	-	-	-
Mov Cap-2 Maneuver	864	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1480	-	864	980	-	-
HCM Lane V/C Ratio	-	-	0.035	0.01	-	-
HCM Control Delay (s)	0	-	9.3	8.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

05/08/2023

Intersection				
Intersection Delay, s/veh	3.3			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	160	75	360	
Demand Flow Rate, veh/h	163	76	367	
Vehicles Circulating, veh/h	71	245	20	
Vehicles Exiting, veh/h	250	20	214	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	3.9	4.0	2.8	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	122
Entry Flow, veh/h	163	76	245	1938
Cap Entry Lane, veh/h	1283	1075	1352	0.980
Entry HV Adj Factor	0.979	0.986	0.980	120
Flow Entry, veh/h	160	75	240	1900
Cap Entry, veh/h	1257	1059	1324	0.063
V/C Ratio	0.127	0.071	0.181	0.0
Control Delay, s/veh	3.9	4.0	4.2	A
LOS	A	A	A	0
95th %tile Queue, veh	0	0	1	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

05/08/2023

Intersection						
Int Delay, s/veh	13.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	470	40	50	270	50	40
Future Vol, veh/h	470	40	50	270	50	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	2	2	30	2	2
Mvmt Flow	470	40	50	270	50	40

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	325	185	0	0	320
Stage 1	185	-	-	-	-
Stage 2	140	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218
Pot Cap-1 Maneuver	667	857	-	-	1240
Stage 1	844	-	-	-	-
Stage 2	884	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	640	857	-	-	1240
Mov Cap-2 Maneuver	640	-	-	-	-
Stage 1	844	-	-	-	-
Stage 2	848	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	4.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	640	857	1240
HCM Lane V/C Ratio	-	-	0.734	0.047	0.04
HCM Control Delay (s)	-	-	24.6	9.4	8
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	6.4	0.1	0.1

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

05/08/2023

Intersection												
Int Delay, s/veh	192.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↔	↑
Traffic Vol, veh/h	0	220	100	400	400	0	0	0	0	430	0	110
Future Vol, veh/h	0	220	100	400	400	0	0	0	0	430	0	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	20	36	2	2	2	2	2	2	2	2	5
Mvmt Flow	0	220	100	400	400	0	0	0	0	430	0	110

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	320	0	0		1310	1520	200
Stage 1	-	-	-	-	-	-		1200	1200	-
Stage 2	-	-	-	-	-	-		110	320	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.35
Pot Cap-1 Maneuver	0	-	-	1237	-	0		~ 151	118	798
Stage 1	0	-	-	-	-	0		~ 248	256	-
Stage 2	0	-	-	-	-	0		902	651	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	1237	-	-		~ 102	0	798
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 102	0	-
Stage 1	-	-	-	-	-	-		~ 248	0	-
Stage 2	-	-	-	-	-	-		611	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.6	\$ 584.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1237	-	102	124	798
HCM Lane V/C Ratio	-	-	0.323	-	2.81	1.452	0.092
HCM Control Delay (s)	-	-	9.3	-	\$ 906.5	\$ 306.8	10
HCM Lane LOS	-	-	A	-	F	F	B
HCM 95th %tile Q(veh)	-	-	1.4	-	27.1	12.4	0.3

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

05/08/2023

Intersection												
Int Delay, s/veh	11.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↘	↗			
Traffic Vol, veh/h	80	570	0	0	620	370	180	0	230	0	0	0
Future Vol, veh/h	80	570	0	0	620	370	180	0	230	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	45	2	2	2	2	2	3	2	2	2	2	2
Mvmt Flow	80	570	0	0	620	370	180	0	230	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	990	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	5	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.65	-	-
Pot Cap-1 Maneuver	484	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	484	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	54.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	187	712	484	-	-	-
HCM Lane V/C Ratio	0.963	0.323	0.165	-	-	-
HCM Control Delay (s)	107.5	12.5	13.9	-	-	-
HCM Lane LOS	F	B	B	-	-	-
HCM 95th %tile Q(veh)	7.8	1.4	0.6	-	-	-



HCM 6th AWSC  
11: S Harlan Rd & Roth Rd

05/08/2023

Intersection	
Intersection Delay, s/veh	130.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↖	↗		↖	↗
Traffic Vol, veh/h	110	580	110	70	700	120	190	40	50	80	30	100
Future Vol, veh/h	110	580	110	70	700	120	190	40	50	80	30	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	580	110	70	700	120	190	40	50	80	30	100
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	205.8	120.1	34.5	20.2
HCM LOS	F	F	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	83%	0%	100%	0%	0%	17%	0%	73%	0%
Vol Thru, %	17%	0%	0%	100%	0%	83%	74%	27%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	26%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	50	110	580	110	420	470	110	100
LT Vol	190	0	110	0	0	70	0	80	0
Through Vol	40	0	0	580	0	350	350	30	0
RT Vol	0	50	0	0	110	0	120	0	100
Lane Flow Rate	230	50	110	580	110	420	470	110	100
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.698	0.136	0.306	1.532	0.269	1.081	1.176	0.345	0.284
Departure Headway (Hd)	12.15	10.986	10.42	9.902	9.175	10.174	9.9	12.562	11.443
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	299	329	348	371	394	361	371	288	316
Service Time	9.85	8.686	8.12	7.602	6.875	7.874	7.6	10.262	9.143
HCM Lane V/C Ratio	0.769	0.152	0.316	1.563	0.279	1.163	1.267	0.382	0.316
HCM Control Delay	38.7	15.4	17.6	277.7	15.2	103.8	134.7	21.7	18.6
HCM Lane LOS	E	C	C	F	C	F	F	C	C
HCM 95th-tile Q	4.8	0.5	1.3	30.9	1.1	13.9	17.3	1.5	1.1

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	101	75	0	0	18
Future Vol, veh/h	41	101	75	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	101	75	0	0	18

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	75	0	-	0	258 75
Stage 1	-	-	-	-	75 -
Stage 2	-	-	-	-	183 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1524	-	-	-	731 986
Stage 1	-	-	-	-	948 -
Stage 2	-	-	-	-	848 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1524	-	-	-	711 986
Mov Cap-2 Maneuver	-	-	-	-	711 -
Stage 1	-	-	-	-	922 -
Stage 2	-	-	-	-	848 -

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1524	-	-	-	986
HCM Lane V/C Ratio	0.027	-	-	-	0.018
HCM Control Delay (s)	7.4	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

05/08/2023

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	4	57	76	27	39	7
Future Vol, veh/h	4	57	76	27	39	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	57	76	27	39	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	222	43	46	0	0
Stage 1	43	-	-	-	-
Stage 2	179	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	766	1027	1562	-	-
Stage 1	979	-	-	-	-
Stage 2	852	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	728	1027	1562	-	-
Mov Cap-2 Maneuver	728	-	-	-	-
Stage 1	931	-	-	-	-
Stage 2	852	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	5.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1562	-	1000	-	-
HCM Lane V/C Ratio	0.049	-	0.061	-	-
HCM Control Delay (s)	7.4	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

HCM 6th TWSC  
15: Manthey Rd & Ashley Dwy #4

05/08/2023

Intersection						
Int Delay, s/veh	5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	81	0	0	31	46	14
Future Vol, veh/h	81	0	0	31	46	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	81	0	0	31	46	14

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	84	53	60	0	0
Stage 1	53	-	-	-	-
Stage 2	31	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	724	1014	1544	-	-
Stage 1	769	-	-	-	-
Stage 2	789	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	724	1014	1544	-	-
Mov Cap-2 Maneuver	724	-	-	-	-
Stage 1	769	-	-	-	-
Stage 2	789	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	724	-	-
HCM Lane V/C Ratio	-	-	0.112	-	-
HCM Control Delay (s)	0	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

HCM 6th Signalized Intersection Summary  
 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↶↷		↶	↶↷		↶	↶↷		↶	↶↷	
Traffic Volume (veh/h)	314	1040	200	132	1040	90	314	210	160	180	150	110
Future Volume (veh/h)	314	1040	200	132	1040	90	314	210	160	180	150	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	1040	200	132	1040	90	314	210	160	180	150	110
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	1214	233	167	1126	97	308	329	239	218	236	162
Arrive On Green	0.17	0.41	0.41	0.09	0.34	0.34	0.17	0.17	0.17	0.12	0.12	0.12
Sat Flow, veh/h	1781	2974	571	1781	3309	286	1781	1965	1426	1781	2014	1384
Grp Volume(v), veh/h	314	620	620	132	558	572	314	189	181	180	131	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1768	1781	1777	1819	1781	1777	1614	1781	1777	1621
Q Serve(g_s), s	15.0	27.5	27.7	6.3	26.2	26.2	15.0	8.6	9.1	8.5	6.1	6.6
Cycle Q Clear(g_c), s	15.0	27.5	27.7	6.3	26.2	26.2	15.0	8.6	9.1	8.5	6.1	6.6
Prop In Lane	1.00		0.32	1.00		0.16	1.00		0.88	1.00		0.85
Lane Grp Cap(c), veh/h	308	725	721	167	605	619	308	298	270	218	208	190
V/C Ratio(X)	1.02	0.86	0.86	0.79	0.92	0.92	1.02	0.63	0.67	0.82	0.63	0.68
Avail Cap(c_a), veh/h	308	725	721	308	615	630	308	615	559	308	615	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	23.3	23.4	38.4	27.5	27.5	35.8	33.6	33.8	37.1	36.5	36.7
Incr Delay (d2), s/veh	55.9	10.0	10.3	9.6	19.6	19.4	55.9	2.7	3.4	12.8	3.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	12.6	12.7	3.1	13.7	14.0	11.0	3.7	3.7	4.3	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.7	33.3	33.7	48.0	47.1	46.9	91.7	36.3	37.2	49.8	40.2	41.7
LnGrp LOS	F	C	C	D	D	D	F	D	D	D	D	D
Approach Vol, veh/h		1554			1262			684			440	
Approach Delay, s/veh		45.3			47.1			62.0			44.6	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	39.4	20.0	14.1	19.0	33.5	15.6	18.5				
Change Period (Y+Rc), s	5.0	4.0	5.0	4.0	4.0	4.0	5.0	4.0				
Max Green Setting (Gmax), s	15.0	30.0	15.0	30.0	15.0	30.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s	8.3	29.7	17.0	8.6	17.0	28.2	10.5	11.1				
Green Ext Time (p_c), s	0.2	0.3	0.0	1.6	0.0	1.3	0.2	2.3				

Intersection Summary

HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary  
 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	1380	0	0	1370	250	600	0	300	0	0	0
Future Volume (veh/h)	550	1380	0	0	1370	250	600	0	300	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	550	1380	0	0	1370	250	600	0	300			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	345	2032	0	0	1020	184	387	0	193			
Arrive On Green	0.19	0.57	0.00	0.00	0.34	0.34	0.34	0.00	0.34			
Sat Flow, veh/h	1781	3647	0	0	3102	541	1140	0	570			
Grp Volume(v), veh/h	550	1380	0	0	801	819	900	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1773	1711	0	0			
Q Serve(g_s), s	20.0	28.1	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Cycle Q Clear(g_c), s	20.0	28.1	0.0	0.0	35.0	35.0	35.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.31	0.67		0.33			
Lane Grp Cap(c), veh/h	345	2032	0	0	603	601	580	0	0			
V/C Ratio(X)	1.59	0.68	0.00	0.00	1.33	1.36	1.55	0.00	0.00			
Avail Cap(c_a), veh/h	345	2032	0	0	603	601	580	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	41.6	15.5	0.0	0.0	34.1	34.1	34.1	0.0	0.0			
Incr Delay (d2), s/veh	280.3	0.9	0.0	0.0	159.7	173.2	256.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh	35.4	10.6	0.0	0.0	41.2	43.3	54.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	321.9	16.4	0.0	0.0	193.8	207.3	290.6	0.0	0.0			
LnGrp LOS	F	B	A	A	F	F	F	A	A			
Approach Vol, veh/h	1930				1620				900			
Approach Delay, s/veh	103.4				200.6				290.6			
Approach LOS	F				F				F			
Timer - Assigned Phs	2				5		6		8			
Phs Duration (G+Y+Rc), s	63.6				24.0		39.6		39.6			
Change Period (Y+Rc), s	4.6				4.0		4.6		4.6			
Max Green Setting (Gmax), s	35.0				20.0		35.0		35.0			
Max Q Clear Time (g_c+I1), s	30.1				22.0		37.0		37.0			
Green Ext Time (p_c), s	3.5				0.0		0.0		0.0			
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					176.7							
HCM 6th LOS					F							

# HCM 6th Signalized Intersection Summary

## 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑						↕	
Traffic Volume (veh/h)	0	1710	440	140	1830	0	0	0	0	220	0	580
Future Volume (veh/h)	0	1710	440	140	1830	0	0	0	0	220	0	580
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1710	440	140	1830	0				220	0	580
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1545	390	172	973	0				171	0	450
Arrive On Green	0.00	0.38	0.38	0.10	0.52	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	4232	1026	1781	1870	0				450	0	1185
Grp Volume(v), veh/h	0	1427	723	140	1830	0				800	0	0
Grp Sat Flow(s),veh/h/ln	0	1702	1686	1781	1870	0				1635	0	0
Q Serve(g_s), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.0	35.0	7.1	47.9	0.0				35.0	0.0	0.0
Prop In Lane	0.00		0.61	1.00		0.00				0.27		0.72
Lane Grp Cap(c), veh/h	0	1294	641	172	973	0				621	0	0
V/C Ratio(X)	0.00	1.10	1.13	0.81	1.88	0.00				1.29	0.00	0.00
Avail Cap(c_a), veh/h	0	1294	641	387	973	0				621	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.5	28.5	40.8	22.1	0.0				28.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	58.2	76.3	3.5	400.6	0.0				141.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.8	26.8	3.2	126.8	0.0				37.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	86.8	104.8	44.3	422.7	0.0				169.9	0.0	0.0
LnGrp LOS	A	F	F	D	F	A				F	A	A
Approach Vol, veh/h		2150			1970						800	
Approach Delay, s/veh		92.9			395.8						169.9	
Approach LOS		F			F						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.9	39.6		39.6		52.5						
Change Period (Y+Rc), s	4.0	4.6		4.6		4.6						
Max Green Setting (Gmax), s	20.0	35.0		35.0		35.0						
Max Q Clear Time (g_c+1), s	19.1	37.0		37.0		49.9						
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0						

### Intersection Summary

HCM 6th Ctrl Delay	226.7
HCM 6th LOS	F

# HCM 6th Signalized Intersection Summary

## 4: Golden Valley Pkwy & Spartan Way

05/08/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	520	150	1530	610	270	80	50	1260	370	100	5
Future Volume (veh/h)	5	520	150	1530	610	270	80	50	1260	370	100	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	520	150	1530	610	270	80	50	1260	370	100	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	806	359	297	728	322	103	803	1197	153	1624	725
Arrive On Green	0.01	0.23	0.23	0.09	0.30	0.30	0.06	0.43	0.43	0.09	0.46	0.46
Sat Flow, veh/h	1781	3554	1585	3456	2396	1060	1781	1870	2790	1781	3554	1585
Grp Volume(v), veh/h	5	520	150	1530	452	428	80	50	1260	370	100	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1680	1781	1870	1395	1781	1777	1585
Q Serve(g_s), s	0.3	15.4	9.4	10.0	27.7	27.7	5.2	1.8	50.0	10.0	1.8	0.2
Cycle Q Clear(g_c), s	0.3	15.4	9.4	10.0	27.7	27.7	5.2	1.8	50.0	10.0	1.8	0.2
Prop In Lane	1.00		1.00	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	806	359	297	539	510	103	803	1197	153	1624	725
V/C Ratio(X)	0.31	0.65	0.42	5.16	0.84	0.84	0.78	0.06	1.05	2.42	0.06	0.01
Avail Cap(c_a), veh/h	153	1525	680	297	762	721	306	803	1197	153	1624	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	40.8	38.5	53.3	37.9	37.9	54.2	19.5	33.3	53.3	17.7	17.2
Incr Delay (d2), s/veh	10.7	0.9	0.8	1879.1	5.8	6.1	11.8	0.0	41.0	658.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.8	3.6	81.7	12.7	12.0	2.6	0.8	22.5	32.3	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	41.7	39.2	1932.4	43.7	44.1	66.0	19.5	74.3	711.9	17.7	17.2
LnGrp LOS	E	D	D	F	D	D	E	B	F	F	B	B
Approach Vol, veh/h		675			2410			1390			475	
Approach Delay, s/veh		41.3			1242.8			71.8			558.5	
Approach LOS		D			F			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	31.5	11.3	59.1	5.6	40.5	14.6	55.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	* 5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	10.0	50.0	20.0	* 40	10.0	50.0	10.0	50.0				
Max Q Clear Time (g_c+M2), s	17.4	17.4	7.2	3.8	2.3	29.7	12.0	52.0				
Green Ext Time (p_c), s	0.0	4.2	0.1	0.6	0.0	5.6	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	684.5
HCM 6th LOS	F

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	10	0	80	70	50
Future Vol, veh/h	70	10	0	80	70	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	25	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	18	44	2
Mvmt Flow	70	10	0	80	70	50

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	175	95	120	0	-	0
Stage 1	95	-	-	-	-	-
Stage 2	80	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	815	962	1468	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	815	962	1468	-	-	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1468	-	815	962	-	-
HCM Lane V/C Ratio	-	-	0.086	0.01	-	-
HCM Control Delay (s)	0	-	9.8	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

HCM 6th Roundabout  
7: Golden Valley Pkwy & Dos Reis Rd

05/08/2023

Intersection				
Intersection Delay, s/veh	3.3			
Intersection LOS	A			
Approach	EB	WB	NB	
Entry Lanes	1	1	1	
Conflicting Circle Lanes	1	1	1	
Adj Approach Flow, veh/h	140	210	210	
Demand Flow Rate, veh/h	143	214	214	
Vehicles Circulating, veh/h	194	92	31	
Vehicles Exiting, veh/h	112	31	306	
Ped Vol Crossing Leg, #/h	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	
Approach Delay, s/veh	4.3	4.4	1.4	
Approach LOS	A	A	A	
Lane	Left	Left	Left	Bypass
Designated Moves	TR	LT	L	R
Assumed Moves	TR	LT	L	R
RT Channelized				Free
Lane Util	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	122
Entry Flow, veh/h	143	214	92	1938
Cap Entry Lane, veh/h	1132	1256	1337	0.980
Entry HV Adj Factor	0.982	0.979	0.978	120
Flow Entry, veh/h	140	210	90	1900
Cap Entry, veh/h	1111	1230	1308	0.063
V/C Ratio	0.126	0.170	0.069	0.0
Control Delay, s/veh	4.3	4.4	3.3	A
LOS	A	A	A	0
95th %tile Queue, veh	0	1	0	

HCM 6th TWSC  
8: Manthey Rd & Roth Rd

05/08/2023

Intersection						
Int Delay, s/veh	58.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	470	110	120	640	90	60
Future Vol, veh/h	470	110	120	640	90	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	7	2	2	2	2	2
Mvmt Flow	470	110	120	640	90	60

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	680	440	0	0	760
Stage 1	440	-	-	-	-
Stage 2	240	-	-	-	-
Critical Hdwy	6.47	6.22	-	-	4.12
Critical Hdwy Stg 1	5.47	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-
Follow-up Hdwy	3.563	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 409	617	-	-	852
Stage 1	639	-	-	-	-
Stage 2	788	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 364	617	-	-	852
Mov Cap-2 Maneuver	~ 364	-	-	-	-
Stage 1	639	-	-	-	-
Stage 2	702	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	148.6	0	5.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	364	617	852	-
HCM Lane V/C Ratio	-	-	1.291	0.178	0.106	-
HCM Control Delay (s)	-	-	180.6	12.1	9.7	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	21.5	0.6	0.4	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

05/08/2023

Intersection												
Int Delay, s/veh	274.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑					↑	↔	↑
Traffic Vol, veh/h	0	410	320	320	480	0	0	0	0	530	0	100
Future Vol, veh/h	0	410	320	320	480	0	0	0	0	530	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	0	-	-	-	-	-	0	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	14	2	4	2	2	2	2	2	2	14
Mvmt Flow	0	410	320	320	480	0	0	0	0	530	0	100

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	730	0	0		1325	1850	240
Stage 1	-	-	-	-	-	-		1120	1120	-
Stage 2	-	-	-	-	-	-		205	730	-
Critical Hdwy	-	-	-	4.14	-	-		6.84	6.54	7.18
Critical Hdwy Stg 1	-	-	-	-	-	-		5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.84	5.54	-
Follow-up Hdwy	-	-	-	2.22	-	-		3.52	4.02	3.44
Pot Cap-1 Maneuver	0	-	-	870	-	0		~ 147	74	726
Stage 1	0	-	-	-	-	0		~ 274	280	-
Stage 2	0	-	-	-	-	0		809	426	-
Platoon blocked, %		-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	870	-	-		~ 93	0	726
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 93	0	-
Stage 1	-	-	-	-	-	-		~ 274	0	-
Stage 2	-	-	-	-	-	-		~ 511	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.6	\$ 934.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	870	-	93	108	726
HCM Lane V/C Ratio	-	-	0.368	-	3.799	1.944	0.092
HCM Control Delay (s)	-	-	11.5	\$ 1353.9	\$ 523.5	10.5	
HCM Lane LOS	-	-	B	-	F	F	B
HCM 95th %tile Q(veh)	-	-	1.7	-	36.2	17.3	0.3

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

05/08/2023

Intersection												
Int Delay, s/veh	67.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↗			↗			↙	↗			
Traffic Vol, veh/h	130	810	0	0	550	540	250	0	310	0	0	0
Future Vol, veh/h	130	810	0	0	550	540	250	0	310	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	0	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	2	2	2	2	2	6	2	2	2	2	2
Mvmt Flow	130	810	0	0	550	540	250	0	310	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	1090	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.2	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.25	-	-
Pot Cap-1 Maneuver	619	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	619	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	\$ 310.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	109	595	619	-	-	-
HCM Lane V/C Ratio	2.294	0.521	0.21	-	-	-
HCM Control Delay (s)	\$ 673.8	17.4	12.4	-	-	-
HCM Lane LOS	F	C	B	-	-	-
HCM 95th %tile Q(veh)	21.9	3	0.8	-	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	367.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↔			↘	↗		↘	↗
Traffic Vol, veh/h	140	860	120	110	770	170	200	70	140	190	80	120
Future Vol, veh/h	140	860	120	110	770	170	200	70	140	190	80	120
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	140	860	120	110	770	170	200	70	140	190	80	120
Number of Lanes	1	1	1	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	618.2	329.5	63.9	65.9
HCM LOS	F	F	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	74%	0%	100%	0%	0%	22%	0%	70%	0%
Vol Thru, %	26%	0%	0%	100%	0%	78%	69%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%	0%	31%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	140	140	860	120	495	555	270	120
LT Vol	200	0	140	0	0	110	0	190	0
Through Vol	70	0	0	860	0	385	385	80	0
RT Vol	0	140	0	0	120	0	170	0	120
Lane Flow Rate	270	140	140	860	120	495	555	270	120
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.913	0.432	0.459	2.699	0.353	1.552	1.689	0.916	0.372
Departure Headway (Hd)	15.956	14.828	12.619	12.097	11.366	13.884	13.533	16.082	14.973
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	229	245	287	310	318	267	272	227	242
Service Time	13.656	12.528	10.319	9.797	9.066	11.584	11.233	13.782	12.673
HCM Lane V/C Ratio	1.179	0.571	0.488	2.774	0.377	1.854	2.04	1.189	0.496
HCM Control Delay	82.4	28.3	25.6	798.1	20.1	299.3	356.5	83.5	26.3
HCM Lane LOS	F	D	D	F	C	F	F	F	D
HCM 95th-tile Q	7.6	2	2.3	67.7	1.5	24.1	28.8	7.7	1.6

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	118	169	0	0	30
Future Vol, veh/h	36	118	169	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	90	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	118	169	0	0	30

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	169	0	-	0	359 169
Stage 1	-	-	-	-	169 -
Stage 2	-	-	-	-	190 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1409	-	-	-	640 875
Stage 1	-	-	-	-	861 -
Stage 2	-	-	-	-	842 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1409	-	-	-	623 875
Mov Cap-2 Maneuver	-	-	-	-	623 -
Stage 1	-	-	-	-	839 -
Stage 2	-	-	-	-	842 -

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1409	-	-	-	875
HCM Lane V/C Ratio	0.026	-	-	-	0.034
HCM Control Delay (s)	7.6	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

HCM 6th TWSC  
 14: Manthey Rd & Ashley Dwy #3

05/08/2023

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	108	68	55	50	6
Future Vol, veh/h	7	108	68	55	50	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	108	68	55	50	6

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	244	53	56	0	0
Stage 1	53	-	-	-	-
Stage 2	191	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	744	1014	1549	-	-
Stage 1	970	-	-	-	-
Stage 2	841	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	711	1014	1549	-	-
Mov Cap-2 Maneuver	711	-	-	-	-
Stage 1	927	-	-	-	-
Stage 2	841	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	4.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1549	-	988	-	-
HCM Lane V/C Ratio	0.044	-	0.116	-	-
HCM Control Delay (s)	7.4	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-



HCM 6th TWSC  
15: Manthey Rd & Ashley Dwy #4

05/08/2023

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	14	0	0	66	49	31
Future Vol, veh/h	14	0	0	66	49	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	90	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	100	2	2	2	2	100
Mvmt Flow	14	0	0	66	49	31

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	131	65	80	0	0
Stage 1	65	-	-	-	-
Stage 2	66	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	676	999	1518	-	-
Stage 1	758	-	-	-	-
Stage 2	757	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	676	999	1518	-	-
Mov Cap-2 Maneuver	676	-	-	-	-
Stage 1	758	-	-	-	-
Stage 2	757	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1518	-	676	-	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	0	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4608	3429	3455	3337	5394	4042
Vehs Exited	4443	3178	3232	2954	5198	3800
Starting Vehs	596	636	713	601	575	619
Ending Vehs	761	887	936	984	771	868
Travel Distance (mi)	2627	1979	1995	1894	3048	2309
Travel Time (hr)	3200.0	3881.4	3943.7	3867.6	2802.9	3539.1
Total Delay (hr)	3117.5	3819.3	3880.8	3808.2	2707.7	3466.7
Total Stops	10995	9079	9487	9427	12542	10306
Fuel Used (gal)	810.9	945.9	960.6	935.9	732.2	877.1

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1444	1066	1017	1142	1409	1213
Vehs Exited	1308	866	865	892	1274	1038
Starting Vehs	596	636	713	601	575	619
Ending Vehs	732	836	865	851	710	796
Travel Distance (mi)	773	534	532	582	752	635
Travel Time (hr)	344.8	426.0	455.1	381.6	337.7	389.0
Total Delay (hr)	320.6	409.2	438.3	363.6	314.2	369.2
Total Stops	3494	2417	2600	2775	3373	2932
Fuel Used (gal)	102.4	113.5	120.0	104.2	100.0	108.0

**Interval #2 Information Recording 2**

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1098	819	690	719	1378	938
Vehs Exited	1090	783	721	665	1323	914
Starting Vehs	732	836	865	851	710	796
Ending Vehs	740	872	834	905	765	821
Travel Distance (mi)	650	487	433	444	794	562
Travel Time (hr)	637.3	787.2	797.2	764.7	589.4	715.2
Total Delay (hr)	617.0	771.9	783.5	750.7	564.6	697.5
Total Stops	2529	2247	1872	2135	3168	2387
Fuel Used (gal)	165.4	194.4	195.3	187.3	158.8	180.2

**Interval #3 Information Recording 3**

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	979	740	829	819	1323	940
Vehs Exited	949	736	800	709	1348	908
Starting Vehs	740	872	834	905	765	821
Ending Vehs	770	876	863	1015	740	844
Travel Distance (mi)	565	465	499	448	775	550
Travel Time (hr)	952.6	1150.8	1163.9	1153.2	815.1	1047.1
Total Delay (hr)	934.7	1136.3	1148.3	1139.1	790.9	1029.8
Total Stops	2269	2156	2450	2462	3038	2477
Fuel Used (gal)	234.7	276.7	281.0	275.8	209.7	255.6

**Interval #4 Information Recording 4**

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1087	804	919	657	1284	948
Vehs Exited	1096	793	846	688	1253	933
Starting Vehs	770	876	863	1015	740	844
Ending Vehs	761	887	936	984	771	868
Travel Distance (mi)	640	492	531	420	728	562
Travel Time (hr)	1265.2	1517.4	1527.4	1568.1	1060.7	1387.8
Total Delay (hr)	1245.2	1502.0	1510.7	1554.8	1038.0	1370.1
Total Stops	2703	2259	2565	2055	2963	2507
Fuel Used (gal)	308.3	361.4	364.4	368.7	263.7	333.3

**Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd**

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	337	402	417	249	369	386	270	426	126	149	386	406
Average Queue (ft)	152	195	220	27	350	354	258	409	20	38	247	366
95th Queue (ft)	280	369	399	147	384	374	271	422	119	108	516	455
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)					92	98		100	0		36	87
Queuing Penalty (veh)					0	0		0	0		0	0
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	0	3			59		100			3	3	
Queuing Penalty (veh)	1	7			41		55			1	2	

**Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd**

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	522	534	523	574	564	656
Average Queue (ft)	470	292	251	483	546	626
95th Queue (ft)	590	586	515	661	560	642
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)	32	3	1	22	78	97
Queuing Penalty (veh)	217	19	5	157	556	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

**Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd**

Movement	EB	EB	EB	B44	B44	B44	WB	WB	SB
Directions Served	T	T	TR	T	T	T	L	T	LTR
Maximum Queue (ft)	266	266	264	1017	1035	1012	539	534	950
Average Queue (ft)	240	239	241	978	993	983	161	512	904
95th Queue (ft)	254	266	253	1017	1021	999	474	531	1027
Link Distance (ft)	168	168	168	969	969	969	491	491	903
Upstream Blk Time (%)	82	71	69	15	23	32	5	66	90
Queuing Penalty (veh)	631	550	536	113	180	246	45	663	0
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B44	B44	NB	NB
Directions Served	L	T	T	R	L	L	T	TR	T	T	L	T
Maximum Queue (ft)	160	611	629	205	520	1060	1045	1013	250	246	1208	1240
Average Queue (ft)	11	566	589	183	518	1043	909	356	198	192	306	1036
95th Queue (ft)	101	694	679	284	523	1053	1288	1008	242	275	1087	1731
Link Distance (ft)		584	584			969	969	969	168	168	1196	1196
Upstream Blk Time (%)		31	81			100	31	0	59	37	4	70
Queuing Penalty (veh)		0	0			697	220	2	623	386	0	0
Storage Bay Dist (ft)	305			125	470							
Storage Blk Time (%)		68	83	1	69	97						
Queuing Penalty (veh)		3	256	3	371	527						

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	NB	NB	SB	SB	SB	SB
Directions Served	R	R	L	T	T	R
Maximum Queue (ft)	1250	350	250	1372	1369	28
Average Queue (ft)	1139	347	245	1083	513	2
95th Queue (ft)	1489	370	261	1654	1551	13
Link Distance (ft)	1196			1320	1320	
Upstream Blk Time (%)	80			42	23	
Queuing Penalty (veh)	0			44	24	
Storage Bay Dist (ft)		300	200			200
Storage Blk Time (%)	70	54	98			
Queuing Penalty (veh)	421	326	25			

Intersection: 5: Manthey Rd & De Lima Rd

Movement	EB	EB
Directions Served	L	R
Maximum Queue (ft)	44	36
Average Queue (ft)	18	9
95th Queue (ft)	42	33
Link Distance (ft)	1206	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		25
Storage Blk Time (%)	2	0
Queuing Penalty (veh)	0	0

Intersection: 7: Golden Valley Pkwy & Dos Reis Rd

Movement	EB	WB	NB
Directions Served	TR	LT	L
Maximum Queue (ft)	443	90	96
Average Queue (ft)	158	13	8
95th Queue (ft)	501	57	51
Link Distance (ft)	492	814	1320
Upstream Blk Time (%)	20		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Manthey Rd & Roth Rd

Movement	WB	NB	B22	SB
Directions Served	L	TR	T	LT
Maximum Queue (ft)	71	243	308	224
Average Queue (ft)	25	164	99	113
95th Queue (ft)	82	759	619	516
Link Distance (ft)	146	985	6453	898
Upstream Blk Time (%)	0	12		4
Queuing Penalty (veh)	0	10		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR	R
Maximum Queue (ft)	29	35	208	149	11	768	778	20
Average Queue (ft)	21	26	185	135	11	762	760	1
95th Queue (ft)	95	119	503	423	35	776	779	13
Link Distance (ft)	146	146	420	420	420	761	761	
Upstream Blk Time (%)	0	17	40	20		99	100	
Queuing Penalty (veh)	0	28	107	53		0	0	
Storage Bay Dist (ft)								25
Storage Blk Time (%)							100	0
Queuing Penalty (veh)							55	0

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	B32
Directions Served	L	T	T	T	TR	LT	R	T
Maximum Queue (ft)	112	98	83	47	90	314	132	113
Average Queue (ft)	76	85	6	36	76	244	99	99
95th Queue (ft)	285	362	87	111	227	647	426	241
Link Distance (ft)	420	420	420	155	155	490	490	179
Upstream Blk Time (%)		18	0		40	40	17	55
Queuing Penalty (veh)		39	0		198	0	0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	91	125	108	200	314	371	412	34	422	46
Average Queue (ft)	25	79	60	154	286	316	368	9	345	33
95th Queue (ft)	71	165	184	255	387	506	801	33	757	59
Link Distance (ft)		155	155	260	260	361	596		564	
Upstream Blk Time (%)	0	20	19	0	86	84	57		55	
Queuing Penalty (veh)	0	79	76	0	0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	0	22					59		25	45
Queuing Penalty (veh)	0	24					29		25	49

Intersection: 12: Dos Reis Rd & Ashley Dwy #1

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	18	35
Average Queue (ft)	1	14
95th Queue (ft)	9	39
Link Distance (ft)		413
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	90	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Manthey Rd & Ashley Dwy #3

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	54	17
Average Queue (ft)	27	1
95th Queue (ft)	49	7
Link Distance (ft)	444	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		90
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Manthey Rd & Ashley Dwy #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	122
Average Queue (ft)	61
95th Queue (ft)	103
Link Distance (ft)	382
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 8728
------------------------------------



Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:45	3:45	3:45	3:45	3:45	3:45
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	3341	5237	5261	5180	5371	4880
Vehs Exited	2907	5044	4957	4969	5141	4602
Starting Vehs	666	671	619	641	671	648
Ending Vehs	1100	864	923	852	901	927
Travel Distance (mi)	1891	2770	2815	2808	2854	2628
Travel Time (hr)	5062.0	4042.3	4071.9	4135.5	4068.6	4276.1
Total Delay (hr)	5003.0	3955.4	3983.7	4047.5	3978.9	4193.7
Total Stops	9207	12120	12497	12152	12651	11727
Fuel Used (gal)	1207.9	1007.3	1015.1	1028.4	1015.4	1054.8

Interval #0 Information Seeding

Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording 1

Start Time	4:00
End Time	4:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1151	1483	1345	1409	1527	1382
Vehs Exited	940	1372	1243	1321	1383	1251
Starting Vehs	666	671	619	641	671	648
Ending Vehs	877	782	721	729	815	785
Travel Distance (mi)	615	754	740	761	786	731
Travel Time (hr)	519.8	481.6	461.2	490.9	477.9	486.3
Total Delay (hr)	500.7	458.0	438.3	467.1	453.1	463.4
Total Stops	2641	3260	2942	3077	3272	3036
Fuel Used (gal)	136.8	133.5	127.7	135.4	133.1	133.3

**Interval #2 Information Recording 2**

Start Time	4:15
End Time	4:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	745	1229	1330	1298	1368	1190
Vehs Exited	643	1166	1214	1234	1302	1111
Starting Vehs	877	782	721	729	815	785
Ending Vehs	979	845	837	793	881	863
Travel Distance (mi)	416	674	691	705	726	642
Travel Time (hr)	1006.4	834.4	839.2	844.7	821.6	869.3
Total Delay (hr)	993.3	813.3	817.5	822.7	799.0	849.2
Total Stops	2210	2833	3181	3183	2990	2879
Fuel Used (gal)	241.3	210.6	212.9	214.1	209.5	217.7

**Interval #3 Information Recording 3**

Start Time	4:30
End Time	4:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	715	1299	1343	1318	1249	1181
Vehs Exited	685	1250	1306	1241	1224	1142
Starting Vehs	979	845	837	793	881	863
Ending Vehs	1009	894	874	870	906	908
Travel Distance (mi)	447	688	691	671	669	633
Travel Time (hr)	1508.6	1175.9	1201.8	1204.8	1198.6	1258.0
Total Delay (hr)	1494.7	1154.3	1179.9	1183.6	1177.5	1238.0
Total Stops	2276	2960	3275	2982	3101	2917
Fuel Used (gal)	356.4	289.2	295.8	295.1	293.8	306.1

**Interval #4 Information Recording 4**

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	730	1226	1243	1155	1227	1118
Vehs Exited	639	1256	1194	1173	1232	1099
Starting Vehs	1009	894	874	870	906	908
Ending Vehs	1100	864	923	852	901	927
Travel Distance (mi)	413	654	693	672	673	621
Travel Time (hr)	2027.2	1550.4	1569.7	1595.1	1570.5	1662.6
Total Delay (hr)	2014.3	1529.9	1548.0	1574.2	1549.3	1643.1
Total Stops	2080	3067	3099	2910	3288	2887
Fuel Used (gal)	473.5	374.0	378.7	383.8	378.9	397.8

Intersection: 1: S Harlan Rd & W Lathrop Rd/W Lathrop Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	336	416	391	250	365	369	270	430	177	169	389	397
Average Queue (ft)	152	169	194	24	342	348	260	407	27	89	202	286
95th Queue (ft)	286	354	373	140	394	366	272	425	144	176	439	453
Link Distance (ft)		534	534		346	346		404	404		367	367
Upstream Blk Time (%)					84	98		100	0		15	29
Queuing Penalty (veh)					0	0		0	0		0	0
Storage Bay Dist (ft)	300			240			220			100		
Storage Blk Time (%)	1	2			51		100	0		13	5	
Queuing Penalty (veh)	6	5			67		105	0		10	10	

Intersection: 2: I-5 NB Off Ramp/I-5 NB On Ramp & W Lathrop Rd

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	T	T	TR	LTR
Maximum Queue (ft)	525	542	513	591	563	655
Average Queue (ft)	501	314	271	428	543	626
95th Queue (ft)	529	618	545	732	556	643
Link Distance (ft)	491	491	491	534	534	612
Upstream Blk Time (%)	45	5	1	22	82	98
Queuing Penalty (veh)	288	34	6	158	601	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: I-5 SB On Ramp/I-5 SB Off Ramp & Spartan Way/W Lathrop Rd

Movement	EB	EB	EB	B37	B37	B37	WB	WB	SB
Directions Served	T	T	TR	T	T	T	L	T	LTR
Maximum Queue (ft)	275	263	271	1013	1028	1013	498	528	947
Average Queue (ft)	243	239	244	948	966	964	79	512	921
95th Queue (ft)	259	262	262	1109	1108	1092	330	527	935
Link Distance (ft)	168	168	168	969	969	969	491	491	903
Upstream Blk Time (%)	90	69	63	12	19	26	2	74	99
Queuing Penalty (veh)	647	493	454	84	139	189	17	733	0
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B37	B37	NB	NB
Directions Served	L	T	T	R	L	L	T	TR	T	T	L	T
Maximum Queue (ft)	178	593	615	205	520	1072	1049	987	237	245	1207	1240
Average Queue (ft)	11	308	342	122	518	1043	925	309	193	194	251	950
95th Queue (ft)	86	608	647	265	529	1055	1306	961	231	266	979	1765
Link Distance (ft)		584	584			969	969	969	168	168	1196	1196
Upstream Blk Time (%)		6	16			100	37	0	60	46	2	64
Queuing Penalty (veh)		0	0			802	300	2	727	559	0	0
Storage Bay Dist (ft)	305			125	470							
Storage Blk Time (%)		23	59	0	66	97						
Queuing Penalty (veh)		1	89	0	506	746						

Intersection: 4: Golden Valley Pkwy & Spartan Way

Movement	NB	NB	SB	SB	SB	SB
Directions Served	R	R	L	T	T	R
Maximum Queue (ft)	1249	350	250	1378	1351	21
Average Queue (ft)	1043	330	247	1279	444	1
95th Queue (ft)	1632	416	259	1530	1451	10
Link Distance (ft)	1196			1320	1320	
Upstream Blk Time (%)	73			70	8	
Queuing Penalty (veh)	0			105	12	
Storage Bay Dist (ft)		300	200			200
Storage Blk Time (%)	59	49	99	0		
Queuing Penalty (veh)	369	307	49	0		

Intersection: 5: Manthey Rd & De Lima Rd

Movement	EB	EB
Directions Served	L	R
Maximum Queue (ft)	54	36
Average Queue (ft)	30	10
95th Queue (ft)	49	35
Link Distance (ft)	1206	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		25
Storage Blk Time (%)	5	0
Queuing Penalty (veh)	1	0

**Intersection: 7: Golden Valley Pkwy & Dos Reis Rd**

Movement	EB	WB	NB
Directions Served	TR	LT	L
Maximum Queue (ft)	519	820	8
Average Queue (ft)	302	392	0
95th Queue (ft)	666	954	3
Link Distance (ft)	492	813	1320
Upstream Blk Time (%)	50	21	
Queuing Penalty (veh)	0	42	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

**Intersection: 8: Manthey Rd & Roth Rd**

Movement	WB	WB	NB	B22	SB
Directions Served	L	R	TR	T	LT
Maximum Queue (ft)	149	33	732	349	920
Average Queue (ft)	74	2	614	111	758
95th Queue (ft)	160	17	948	661	1184
Link Distance (ft)	146	146	985	6453	898
Upstream Blk Time (%)	5		14		68
Queuing Penalty (veh)	15		21		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

**Intersection: 9: I-5 SB On Ramp/I-5 SB Off Ramp & Roth Rd**

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	L	LTR	R
Maximum Queue (ft)	146	193	118	121	791	785	40
Average Queue (ft)	73	161	28	12	768	767	2
95th Queue (ft)	189	186	77	67	785	781	19
Link Distance (ft)	146	146	420	420	761	761	
Upstream Blk Time (%)	0	59			99	100	
Queuing Penalty (veh)	2	214			0	0	
Storage Bay Dist (ft)							25
Storage Blk Time (%)						100	0
Queuing Penalty (veh)						50	0

Intersection: 10: I-5 NB Off Ramps/I-5 NB On Ramp & Roth Rd

Movement	EB	EB	EB	WB	WB	NB	NB	B32
Directions Served	L	T	T	T	TR	LT	R	T
Maximum Queue (ft)	348	474	424	22	32	156	346	76
Average Queue (ft)	102	441	231	0	1	56	191	33
95th Queue (ft)	359	461	556	6	14	125	535	146
Link Distance (ft)	420	420	420	155	155	490	490	179
Upstream Blk Time (%)	1	82	1				20	18
Queuing Penalty (veh)	3	257	5				0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 11: S Harlan Rd & Roth Rd

Movement	EB	EB	EB	WB	WB	B36	NB	NB	SB	SB
Directions Served	L	T	R	LT	TR	T	LT	R	LT	R
Maximum Queue (ft)	150	202	248	215	339	188	334	140	267	59
Average Queue (ft)	97	181	218	111	318	174	181	43	178	35
95th Queue (ft)	203	198	258	239	346	193	516	93	478	66
Link Distance (ft)		155	155	260	260	169	596		564	
Upstream Blk Time (%)	1	85	69	0	99	99	17		18	
Queuing Penalty (veh)	0	476	387	0	0	0	0		0	
Storage Bay Dist (ft)	100							100		25
Storage Blk Time (%)	0	97					25	0	62	5
Queuing Penalty (veh)	4	136					35	0	74	13

Intersection: 12: Dos Reis Rd & Ashley Dwy #1

Movement	EB	WB	B6	SB
Directions Served	L	TR	T	LR
Maximum Queue (ft)	11	413	43	179
Average Queue (ft)	1	83	2	37
95th Queue (ft)	8	355	24	125
Link Distance (ft)		506	330	445
Upstream Blk Time (%)		4		
Queuing Penalty (veh)		6		
Storage Bay Dist (ft)	90			
Storage Blk Time (%)				
Queuing Penalty (veh)				

---

Intersection: 14: Manthey Rd & Ashley Dwy #3

---

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	62	12
Average Queue (ft)	35	0
95th Queue (ft)	56	6
Link Distance (ft)	321	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		90
Storage Blk Time (%)		
Queuing Penalty (veh)		

---

Intersection: 15: Manthey Rd & Ashley Dwy #4

---

Movement	EB
Directions Served	LR
Maximum Queue (ft)	74
Average Queue (ft)	22
95th Queue (ft)	67
Link Distance (ft)	363
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

---

Network Summary

---

Network wide Queuing Penalty: 10360

---

Attachment I: Lathrop Ashley Warehouse CalEEMod output file



# Lathrop Ashley Warehouse Detailed Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
  - 2.4. Operations Emissions Compared Against Thresholds
  - 2.5. Operations Emissions by Sector, Unmitigated
3. Construction Emissions Details
  - 3.1. Site Preparation (2023) - Unmitigated
  - 3.3. Site Preparation (2024) - Unmitigated
  - 3.5. Grading (2024) - Unmitigated
  - 3.7. Building Construction (2024) - Unmitigated

3.9. Building Construction (2025) - Unmitigated

3.11. Paving (2025) - Unmitigated

3.13. Architectural Coating (2025) - Unmitigated

#### 4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.2. Unmitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

#### 4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

#### 4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

#### 4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

#### 4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

### 5. Activity Data

#### 5.1. Construction Schedule

#### 5.2. Off-Road Equipment

5.2.1. Unmitigated

#### 5.3. Construction Vehicles

5.3.1. Unmitigated

#### 5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Lathrop Ashley Warehouse
Construction Start Date	10/1/2023
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	9.00
Location	37.83215690690747, -121.29196103002339
County	San Joaquin
City	Lathrop
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2103
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
------------------	------	------	-------------	-----------------------	------------------------	--------------------------------	------------	-------------

Unrefrigerated Warehouse-No Rail	1,487	1000sqft	89.5	14,866	0.00	0.00	—	—
----------------------------------	-------	----------	------	--------	------	------	---	---

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.43	3.73	36.0	33.9	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,787	6,787	0.28	0.06	0.76	6,813
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.79	4.03	39.8	36.3	0.06	1.81	19.8	21.6	1.66	10.1	11.8	—	6,769	6,769	0.28	0.06	0.02	6,794
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.02	2.54	24.3	22.4	0.04	1.05	9.17	10.2	0.96	4.23	5.19	—	4,374	4,374	0.18	0.04	0.22	4,391
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.55	0.46	4.44	4.09	0.01	0.19	1.67	1.87	0.18	0.77	0.95	—	724	724	0.03	0.01	0.04	727

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------



Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.43	3.73	36.0	33.9	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,787	6,787	0.28	0.06	0.76	6,813
2025	1.38	1.57	10.5	13.4	0.02	0.43	0.14	0.51	0.40	0.03	0.42	—	2,524	2,524	0.10	0.03	0.56	2,537
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.79	4.03	39.8	36.3	0.05	1.81	19.8	21.6	1.66	10.1	11.8	—	5,448	5,448	0.22	0.05	0.02	5,468
2024	4.42	3.72	36.0	33.7	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,769	6,769	0.28	0.06	0.02	6,794
2025	1.38	1.56	10.6	13.3	0.02	0.43	0.14	0.51	0.40	0.03	0.42	—	2,519	2,519	0.10	0.03	0.01	2,531
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.86	0.73	7.17	6.54	0.01	0.32	3.57	3.89	0.30	1.83	2.12	—	982	982	0.04	0.01	0.06	985
2024	3.02	2.54	24.3	22.4	0.04	1.05	9.17	10.2	0.96	4.23	5.19	—	4,374	4,374	0.18	0.04	0.22	4,391
2025	0.83	0.89	6.19	8.13	0.01	0.26	0.06	0.32	0.24	0.01	0.25	—	1,419	1,419	0.06	0.02	0.13	1,425
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.16	0.13	1.31	1.19	< 0.005	0.06	0.65	0.71	0.05	0.33	0.39	—	163	163	0.01	< 0.005	0.01	163
2024	0.55	0.46	4.44	4.09	0.01	0.19	1.67	1.87	0.18	0.77	0.95	—	724	724	0.03	0.01	0.04	727
2025	0.15	0.16	1.13	1.48	< 0.005	0.05	0.01	0.06	0.04	< 0.005	0.05	—	235	235	0.01	< 0.005	0.02	236

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.3	11.8	9.16	82.3	0.18	0.15	14.2	14.4	0.14	3.62	3.76	1,412	18,604	20,016	144	2.47	66.6	24,413

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.2	10.7	10.6	73.7	0.16	0.15	14.2	14.4	0.14	3.62	3.76	1,412	17,323	18,735	144	2.55	1.73	23,093
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.3	10.8	9.97	72.8	0.17	0.15	14.2	14.4	0.14	3.62	3.76	1,412	17,622	19,034	144	2.51	28.8	23,407
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.06	1.97	1.82	13.3	0.03	0.03	2.60	2.63	0.03	0.66	0.69	234	2,918	3,151	23.8	0.42	4.76	3,875

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.2	11.4	9.13	81.7	0.18	0.15	14.2	14.4	0.14	3.62	3.76	—	17,862	17,862	0.81	0.85	66.6	18,203
Area	0.11	0.44	0.01	0.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.66	2.66	< 0.005	< 0.005	—	2.67
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	113	113	0.02	< 0.005	—	114
Water	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Waste	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Total	12.3	11.8	9.16	82.3	0.18	0.15	14.2	14.4	0.14	3.62	3.76	1,412	18,604	20,016	144	2.47	66.6	24,413
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.2	10.4	10.6	73.7	0.16	0.15	14.2	14.4	0.14	3.62	3.76	—	16,584	16,584	0.94	0.93	1.73	16,885
Area	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	113	113	0.02	< 0.005	—	114

Water	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Waste	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Total	11.2	10.7	10.6	73.7	0.16	0.15	14.2	14.4	0.14	3.62	3.76	1,412	17,323	18,735	144	2.55	1.73	23,093
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.2	10.4	9.95	72.5	0.17	0.15	14.2	14.4	0.14	3.62	3.76	—	16,881	16,881	0.88	0.89	28.8	17,198
Area	0.06	0.39	< 0.005	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.32
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	113	113	0.02	< 0.005	—	114
Water	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Waste	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Total	11.3	10.8	9.97	72.8	0.17	0.15	14.2	14.4	0.14	3.62	3.76	1,412	17,622	19,034	144	2.51	28.8	23,407
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.05	1.90	1.82	13.2	0.03	0.03	2.60	2.62	0.03	0.66	0.69	—	2,795	2,795	0.14	0.15	4.76	2,847
Area	0.01	0.07	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.7	18.7	< 0.005	< 0.005	—	18.9
Water	—	—	—	—	—	—	—	—	—	—	—	109	104	213	11.2	0.27	—	573
Waste	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.5	0.00	—	436
Total	2.06	1.97	1.82	13.3	0.03	0.03	2.60	2.63	0.03	0.66	0.69	234	2,918	3,151	23.8	0.42	4.76	3,875

### 3. Construction Emissions Details

#### 3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	7.16	6.39	0.01	0.32	—	0.32	0.30	—	0.30	—	953	953	0.04	0.01	—	957
Dust From Material Movement:	—	—	—	—	—	—	3.54	3.54	—	1.82	1.82	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.31	1.17	< 0.005	0.06	—	0.06	0.05	—	0.05	—	158	158	0.01	< 0.005	—	158
Dust From Material Movement:	—	—	—	—	—	—	0.65	0.65	—	0.33	0.33	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.86	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	153	153	0.01	0.01	0.02	155
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.2	28.2	< 0.005	< 0.005	0.06	28.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.67	4.67	< 0.005	< 0.005	0.01	4.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	9.43	8.63	0.01	0.42	—	0.42	0.39	—	0.39	—	1,389	1,389	0.06	0.01	—	1,393
Dust From Material Movement:	—	—	—	—	—	—	5.15	5.15	—	2.65	2.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.72	1.58	< 0.005	0.08	—	0.08	0.07	—	0.07	—	230	230	0.01	< 0.005	—	231
Dust From Material Movement:	—	—	—	—	—	—	0.94	0.94	—	0.48	0.48	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	1.00	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	165	165	0.01	0.01	0.66	168

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.79	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	149	149	0.01	0.01	0.02	152
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.2	40.2	< 0.005	< 0.005	0.07	40.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.65	6.65	< 0.005	< 0.005	0.01	6.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	14.6	12.8	0.03	0.61	—	0.61	0.57	—	0.57	—	2,802	2,802	0.11	0.02	—	2,812
Dust From Material Movement:	—	—	—	—	—	—	3.91	3.91	—	1.55	1.55	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.66	2.34	< 0.005	0.11	—	0.11	0.10	—	0.10	—	464	464	0.02	< 0.005	—	465
Dust From Material Movement:	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00



Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	1.14	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	189	189	0.01	0.01	0.76	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.90	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	171	171	0.01	0.01	0.02	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	74.3	74.3	< 0.005	< 0.005	0.14	75.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	65.7	65.7	< 0.005	< 0.005	—	65.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.9	10.9	< 0.005	< 0.005	—	10.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.3	53.3	< 0.005	< 0.005	0.01	54.1
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.2	70.2	< 0.005	0.01	< 0.005	73.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	2.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.01	5.00	0.01	0.17	—	0.17	0.15	—	0.15	—	920	920	0.04	0.01	—	923
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	0.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	152	152	0.01	< 0.005	—	153

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.33	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	57.8	57.8	< 0.005	< 0.005	0.21	58.7	
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.0	69.0	< 0.005	0.01	0.19	72.2	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.2	52.2	< 0.005	< 0.005	0.01	52.9	
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.0	69.0	< 0.005	0.01	< 0.005	72.1	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.5	20.5	< 0.005	< 0.005	0.04	20.8	
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.5	26.5	< 0.005	< 0.005	0.03	27.7	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.40	3.40	< 0.005	< 0.005	0.01	3.45	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.38	4.38	< 0.005	< 0.005	0.01	4.58	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

### 3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.20	1.84	2.46	< 0.005	0.09	—	0.09	0.08	—	0.08	—	373	373	0.02	< 0.005	—	374
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.45	< 0.005	0.02	—	0.02	0.01	—	0.01	—	61.7	61.7	< 0.005	< 0.005	—	61.9
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.06	0.04	0.78	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	139	139	0.01	0.01	0.52	141
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	0.01	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.7	31.7	< 0.005	< 0.005	0.05	32.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.25	5.25	< 0.005	< 0.005	0.01	5.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.3	44.3	< 0.005	< 0.005	—	44.4
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.33	7.33	< 0.005	< 0.005	—	7.35
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.04	11.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	< 0.005	10.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.2. Energy



## 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	86.7	86.7	0.01	< 0.005	—	87.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	86.7	86.7	0.01	< 0.005	—	87.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	86.7	86.7	0.01	< 0.005	—	87.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	86.7	86.7	0.01	< 0.005	—	87.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.5	26.5	< 0.005	< 0.005	—	26.5
Total	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.5	26.5	< 0.005	< 0.005	—	26.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.5	26.5	< 0.005	< 0.005	—	26.5
Total	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.5	26.5	< 0.005	< 0.005	—	26.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.38	4.38	< 0.005	< 0.005	—	4.39
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.38	4.38	< 0.005	< 0.005	—	4.39

### 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
--------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.11	0.01	0.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.66	2.66	< 0.005	< 0.005	—	2.67
Total	0.11	0.44	0.01	0.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.66	2.66	< 0.005	< 0.005	—	2.67
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Total	0.01	0.07	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22

## 4.4. Water Emissions by Land Use

## 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Total	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Total	—	—	—	—	—	—	—	—	—	—	—	659	626	1,285	67.6	1.62	—	3,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	109	104	213	11.2	0.27	—	573
Total	—	—	—	—	—	—	—	—	—	—	—	109	104	213	11.2	0.27	—	573

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Total	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Total	—	—	—	—	—	—	—	—	—	—	—	753	0.00	753	75.3	0.00	—	2,635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.5	0.00	—	436
Total	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.5	0.00	—	436

### 4.6. Refrigerant Emissions by Land Use

#### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/1/2023	5/13/2024	5.00	161	—
Grading	Grading	5/14/2024	12/17/2024	5.00	155	—
Building Construction	Building Construction	12/18/2024	7/15/2025	5.00	150	—
Paving	Paving	7/16/2025	11/18/2025	5.00	90.0	—
Architectural Coating	Architectural Coating	7/16/2025	12/31/2025	5.00	121	—

### 5.2. Off-Road Equipment

#### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.24	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	2.44	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.25	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	22,299	7,433	—

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Ton of Debris)	Material Exported (Ton of Debris)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	242	0.00	—
Grading	0.00	0.00	465	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2,798	2,798	2,798	1,021,270	19,982	19,982	19,982	7,293,375

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	22,299	7,433	—

### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO<sub>2</sub> and CH<sub>4</sub> and N<sub>2</sub>O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Natural Gas (kBTU/yr)
----------	----------------------	-----------------	-----------------	------------------	-----------------------

Unrefrigerated Warehouse-No Rail	155,122	204	0.0330	0.0040	82,578
----------------------------------	---------	-----	--------	--------	--------

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	343,777,869	0.00

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,397	—

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
---------------	----------------	-------------	-----	---------------	----------------------	-------------------	----------------

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
----------------	-----------	----------------	---------------	----------------	------------	-------------

### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

### 5.17. User Defined

Equipment Type	Fuel Type
—	—

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------



## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.9	annual days of extreme heat
Extreme Precipitation	2.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	13.4	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
-----------	---------------------------------

Exposure Indicators	—
AQ-Ozone	57.1
AQ-PM	53.2
AQ-DPM	53.5
Drinking Water	98.2
Lead Risk Housing	13.6
Pesticides	84.4
Toxic Releases	47.3
Traffic	56.4
Effect Indicators	—
CleanUp Sites	90.1
Groundwater	99.7
Haz Waste Facilities/Generators	92.3
Impaired Water Bodies	87.0
Solid Waste	84.8
Sensitive Population	—
Asthma	69.4
Cardio-vascular	54.9
Low Birth Weights	67.9
Socioeconomic Factor Indicators	—
Education	55.5
Housing	10.5
Linguistic	58.2
Poverty	45.4
Unemployment	60.6

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	47.86346721
Employed	21.69896061
Median HI	53.50955986
Education	—
Bachelor's or higher	47.7223149
High school enrollment	13.5249583
Preschool enrollment	50.42987296
Transportation	—
Auto Access	85.40998332
Active commuting	18.3498011
Social	—
2-parent households	40.99833184
Voting	72.46246632
Neighborhood	—
Alcohol availability	84.01129219
Park access	41.28063647
Retail density	18.9272424
Supermarket access	35.54471962
Tree canopy	34.71063775
Housing	—
Homeownership	64.8659053
Housing habitability	69.85756448
Low-inc homeowner severe housing cost burden	40.10008982
Low-inc renter severe housing cost burden	74.20762223
Uncrowded housing	60.05389452

Health Outcomes	—
Insured adults	32.31104838
Arthritis	15.6
Asthma ER Admissions	25.2
High Blood Pressure	6.0
Cancer (excluding skin)	24.3
Asthma	46.1
Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	25.1
Diagnosed Diabetes	31.9
Life Expectancy at Birth	48.2
Cognitively Disabled	72.6
Physically Disabled	69.8
Heart Attack ER Admissions	20.0
Mental Health Not Good	48.5
Chronic Kidney Disease	27.1
Obesity	41.7
Pedestrian Injuries	81.9
Physical Health Not Good	43.5
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	41.7
Current Smoker	38.5
No Leisure Time for Physical Activity	42.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	18.1
Elderly	82.5
English Speaking	26.9
Foreign-born	72.3
Outdoor Workers	45.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	72.2
Traffic Density	71.1
Traffic Access	0.0
Other Indices	—
Hardship	56.7
Other Decision Support	—
2016 Voting	47.9

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	42.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Land Use	Warehouse is 1,486,607 square feet.
Construction: Construction Phases	Revised construction schedule based on Project size and an anticipated buildout date of approximately 2025.