

PUBLIC REVIEW DRAFT
INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

FOR THE

LATHROP CROSSROADS
INDUSTRIAL PROJECT
1101 D'Arcy Parkway, Lathrop, CA

September 2022

Prepared for:

City of Lathrop
Community Development Department
390 Towne Centre Drive
Lathrop, CA 95330

Prepared by:

BaseCamp Environmental, Inc.
802 W. Lodi Avenue
Lodi, CA 95240

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LIST OF ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

AB	Assembly Bill
ACE	Altamont Commuter Express
APN	Assessor's Parcel Number
ARB	California Air Resources Board
BMP	Best Management Practice
CalEEMod	California Emissions Estimator Model
CalEnviroScreen	California Communities Environmental Health Screening
CALGreen	California Green Building Code
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalent
CUPA	Certified Unified Program Agency
dB	decibel
dBA	A-weighted decibel
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
ETRIP	Employer Trip Reduction Implementation Plan
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
IS/MND	Initial Study/Mitigated Negative Declaration
ITMM	Incidental Take Minimization Measure
kWh	kilowatt-hour
L _{dn}	Day-Night Average Level
L _{eq}	Equivalent Sound Level
LOS	Level of Service
mgd	million gallons per day
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer system
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
OPR	Governor's Office of Planning and Research
PM ₁₀	particulate matter 10 microns or less in diameter
PM _{2.5}	particulate matter 2.5 microns or less in diameter
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SEIR	Supplement to the Environmental Impact Report
SJCOG	San Joaquin Council of Governments

SJMSCP	San Joaquin County Multi-Species Open Space and Habitat Conservation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
UPRR	Union Pacific Railroad
USGS	United States Geological Survey
VMT	vehicle miles traveled

NEGATIVE DECLARATION

A. General Project Information

Project Title:	Lathrop Crossroads Industrial Project
Lead Agency Name and Address:	City of Lathrop Community Development Department 390 Towne Centre Drive Lathrop, CA 95330
Contact Person and Phone Number:	Trent DaDalt, Assistant Planner 209-941-7261
Project Location:	1101 D’Arcy Parkway, Lathrop, CA
Project Sponsor Name and Address:	Richland Communities, Inc. 601 University Avenue, Suite 125 Sacramento, CA 95825
General Plan Designation:	GI (General Industrial)
Zoning:	IG (General Industrial)
Project Description:	The project proposes to develop approximately 25 acres of vacant land currently used for percolation of treated wastewater. Two development options are proposed: 1) a single building of approximately 453,904 square feet of floor area; 2) development of three buildings with a total floor area of 396,179 square feet. Under both options, the buildings would be available for manufacturing or warehouse activities. Access would be provided from adjacent D’Arcy Parkway. New on-site water and sewer lines would be connected to existing City mains in the adjacent street vicinity; the project proposes a storm drainage collection system that would include detention ponds and that would ultimately discharge into the City’s storm drainage system.
Surrounding Land Uses and Setting:	The project site is in the eastern portion of the Crossroads Industrial Park in southern Lathrop. Existing industrial and warehouse buildings are west of the project site, and a City wastewater

treatment plant is to the southwest. A City water storage tank is adjacent to and south of the project site. Land north and east of the project site is predominantly vacant but designated for industrial use.

Other Public Agencies Whose Approval is Required:

None

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

The Northern Valley Yokuts tribe had requested consultation with the City of Lathrop. The City met with the tribe and concluded consultation by letter on September 16, 2022.

B. Environmental Factors Potentially Affected

The environmental factors checked below may be significantly affected by this project, involving at least one impact that is a “Potentially Significant Impact” prior to mitigation. Mitigation measures that would avoid potential effects or reduce them to a less than significant level have been prescribed for each of these effects, as described in the checklist and narrative on the following pages, and in the Summary Table at the end of Chapter 1.0.

	Aesthetics		Agriculture/Forestry Resources		Air Quality
✓	Biological Resources	✓	Cultural Resources		Energy
✓	Geology/Soils		Greenhouse Gas Emissions		Hazards/Hazardous Materials
✓	Hydrology/Water Quality		Land Use		Mineral Resources
	Noise		Population/Housing		Public Services
	Recreation	✓	Transportation	✓	Tribal Cultural Resources
	Utilities/Service Systems		Wildfire	✓	Mandatory Findings of Significance

C. Lead Agency Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ✓ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project and/or mitigation measures that would reduce potential effects to a less than significant level have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CITY OF LATHROP
COMMUNITY DEVELOPMENT DEPARTMENT



Mark Meissner, Director

9/26/22

Date

1.0 INTRODUCTION

1.1 Project Brief

This document is an Initial Study/Mitigated Negative Declaration (IS/MND) for the Lathrop Crossroads Industrial Project (project). The project is located at 1101 D’Arcy Parkway in the City of Lathrop, San Joaquin County, California (Figures 1-1 through 1-5). Richland Communities, Inc. (Richland) is the project applicant. The IS/MND has been prepared in compliance with the requirements of the California Environmental Quality Act (CEQA). For the purposes of CEQA, the City of Lathrop (City) is the Lead Agency for the project.

The project proposes to develop approximately 25 acres of vacant land within an existing industrial park. The project is currently used for percolation of treated wastewater. Two development options are proposed: 1) a single building of approximately 453,904 square feet of floor area; or 2) development of three buildings with a total floor area of approximately 396,179 square feet. Under both options, the buildings would be made available primarily for warehouse activities but could also be used for manufacturing purposes. For both alternatives, vehicular access would be provided from the adjacent street, D’Arcy Parkway, and utility service would be obtained from existing City water and sewer lines in the adjacent street. The project proposes an onsite storm drainage collection system that would include detention ponds and that would ultimately discharge into the City’s existing storm drainage system in D’Arcy Parkway; although the system would be slightly different under each development alternative. The project would require Site Plan Review and Lot Line Adjustment approval from the City of Lathrop.

1.2 Purpose of Initial Study

CEQA requires that public agencies document and consider the potential environmental effects of the agency’s actions that meet CEQA’s definition of a “project.” Briefly summarized, a “project” is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency’s direct activities as well as activities that involve public agency approvals or funding. Guidelines for an agency’s implementation of CEQA are found in the CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3).

Provided that a project is not exempt from CEQA, the first step in the agency’s consideration of its potential environmental effects is the preparation of an Initial Study. The purpose of an Initial Study is to determine whether the project would involve “significant” environmental effects, as defined by CEQA, and to describe feasible mitigation measures that would avoid significant effects or reduce them to a level that is less than significant. If the Initial Study does not identify significant effects, then the agency would prepare a Negative Declaration. If the Initial Study describes potentially significant effects and mitigation measures that would reduce these significant effects to a

level that is less than significant, then the agency ordinarily prepares a Mitigated Negative Declaration. If, however, a project would involve significant effects that cannot be readily mitigated, then the agency must prepare an Environmental Impact Report. The agency may also decide to proceed directly with the preparation of an Environmental Impact Report (EIR) without first preparing an Initial Study.

The proposed project is a “project” as defined by CEQA and is not exempt from CEQA consideration. The City has determined that the project may potentially have significant environmental effects and therefore requires preparation of an Initial Study. This Initial Study describes the proposed project and its environmental setting, discusses the potential environmental effects of the project, and identifies feasible mitigation measures that would eliminate any potentially significant environmental effects of the project or reduce them to a level that would be less than significant. The Initial Study considers the project’s potential for significant environmental effects in the following subject areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance (including Cumulative Impacts)

This Initial Study concludes that the project would have potentially significant environmental effects, but all these effects would be avoided or reduced to a level that would be less than significant with identified mitigation measures. Prior to initiating the public review of this document, the project applicant accepted the obligation to implement all the mitigation measures. As a result, the City has prepared a Mitigated Negative Declaration and has issued a Notice of Intent to adopt the IS/MND for the project. The Notice of Intent, located just inside the cover of this document, shows the time available for public comment on the IS/MND.

1.3 Project Background

The project site is within the City-approved Crossroads Industrial Park. Crossroads is located in southern Lathrop east of Interstate 5 and north of the Union Pacific Railroad (UPRR) tracks. The industrial park consists of two distinct areas: a northern parcel of 44 acres at the southeast corner of Interstate 5 and Louise Avenue, and the larger southern parcel of 484 acres, where the project site is located. The 484-acre parcel has been developed primarily with general industrial land uses, mainly as warehousing and distribution centers for various commercial products.

The Crossroads Industrial Park project was approved and its EIR certified by San Joaquin County in 1989, during which time the City of Lathrop was incorporated. The City adopted the land use restrictions applicable within San Joaquin County and applied them to the Crossroads Industrial Park project in a subsequent Development Agreement between the City and the project developers. A Supplemental EIR (SEIR) that addressed minor changes to the industrial park project was certified by the City in 2001. Since its approval, the industrial park has been substantially developed, with the proposed project site being one of the few remaining vacant areas.

The project site is currently owned by Richland Crossroads, L.P. The City had leased four of the parcels composing the site from Richland to construct percolation basins that received recycled water generated by the City of Lathrop Consolidated Treatment Facility on Christopher Way. The lease was subject to a reversionary right in favor of Richland Crossroads when certain conditions were met, including construction of the City's approved Recycled Water River Discharge Project.

On May 16, 2022, the Lathrop City Council approved a lease agreement with Richland Properties that included a quitclaim deed of the parcels, with the understanding that the City would revert the parcels back to Richland once the water discharge project is operating and the Regional Water Quality Control Board (RWQCB) amends the City's discharge permit to eliminate the need for that land. Currently, the percolation basins remain available for use.

1.4 Environmental Evaluation Checklist Terminology

The project's potential environmental effects are evaluated in the Environmental Evaluation Checklist presented in Chapter 3.0 of this IS/MND. The checklist includes a list of environmental considerations against which the project is evaluated. For each question, the City determines whether the project would involve 1) a Potentially Significant Impact, 2) a Less Than Significant Impact with Mitigation Incorporated, 3) a Less Than Significant Impact, or 4) No Impact.

A Potentially Significant Impact occurs when there is substantial evidence that the project would involve a substantial adverse change to the physical environment, i.e., the environmental effect may be significant, and mitigation measures have not been defined that would reduce the impact to a level that would be less than significant. If there is a Potentially Significant Impact entry in the Initial Study, then an EIR is required. No Potentially Significant Impacts are identified in this Initial Study.

An environmental effect that is Less Than Significant with Mitigation Incorporated is a Potentially Significant Impact that can be avoided or reduced to a level that is less than significant with the application of defined mitigation measures. This Initial Study identifies several impacts that are Less than Significant with Mitigation Incorporated.

A Less Than Significant Impact occurs when the project would involve an environmental impact, but the impact would not cause a substantial adverse change to the physical environment that would require mitigation. This Initial Study identifies several impacts that are considered Less than Significant.

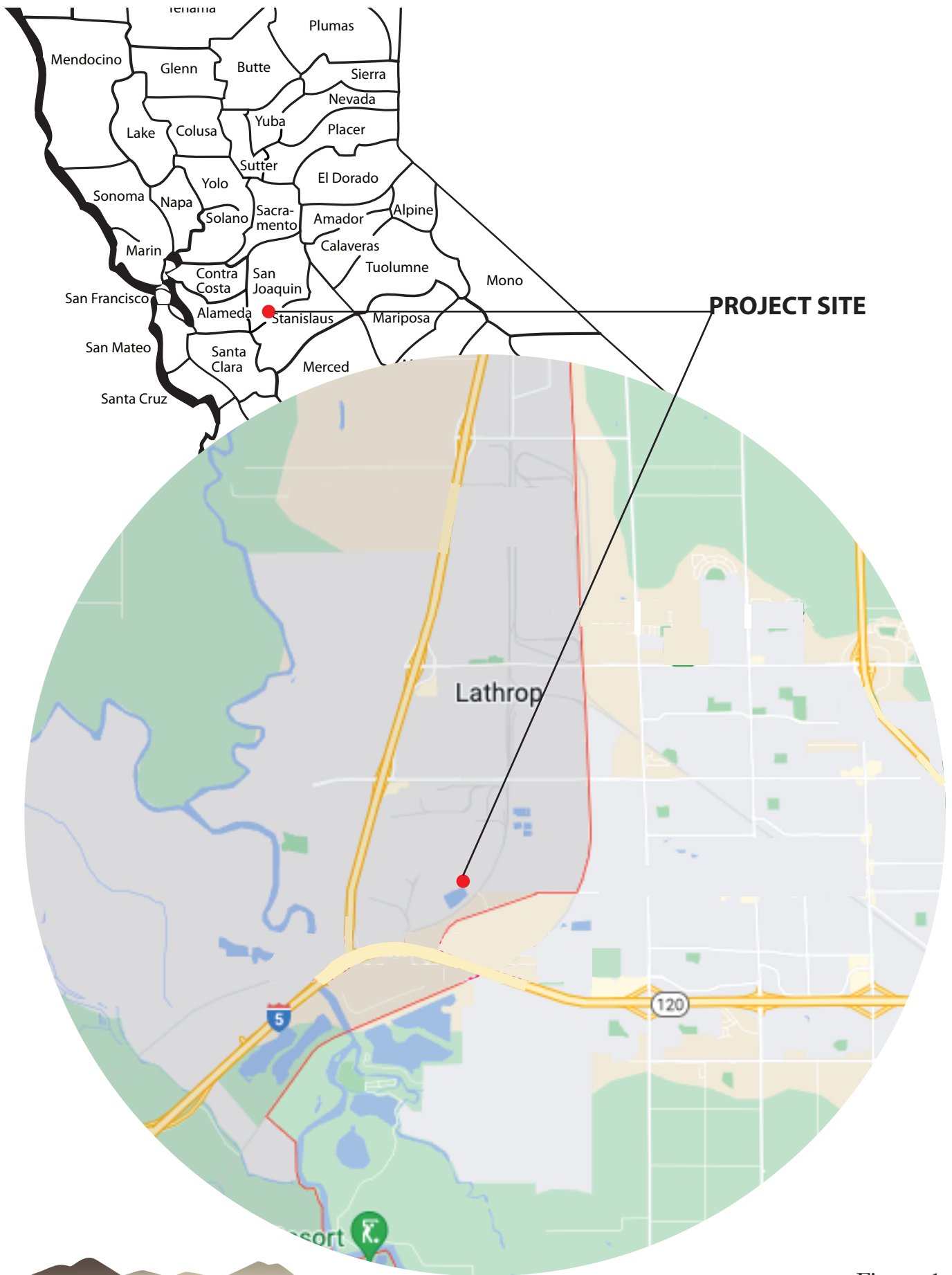
A determination of No Impact is self-explanatory. This Initial Study identifies several areas of environmental concern in which the project would have No Impact.

This IS/MND identifies certain potentially significant environmental effects that would be mitigated by implementation of existing provisions of law and standards of practice related to land use planning and environmental protection. Such provisions are identified and considered in the environmental impact analysis, and the degree to which they would reduce potential environmental effects is discussed. These protections are considered part of the existing regulatory environment and are assumed to counter the potential environmental effects of the project as discussed. Additional mitigation measures are described in this Initial Study when existing environmental protections are not adequate to avoid potential environmental effects or to reduce them to a level that is less than significant. These mitigation measures are summarized in Table 1-1 and discussed in Section 3.0 of this IS/MND.

1.5 Summary of Environmental Effects and Mitigation Measures

Table 1-1, which follows Figures 1-1 through 1-5, summarizes the results of the Environmental Evaluation Checklist and associated narrative discussion in Chapter 3.0 of this IS/MND. The potential environmental impacts of the proposed project are listed in the left-most column of this table. The level of significance of each impact is indicated in the second column. Feasible mitigation measures that are considered necessary to avoid or minimize the impacts are shown in the third column, and the significance of the impact after mitigation measures are applied is shown in the fourth column.

As previously noted, all potentially significant environmental effects identified in the IS/MND would be avoided or reduced to a level that would be less than significant with existing environmental protection measures or mitigation measures recommended in this Initial Study. For other issues, the project would have no impact or would have impacts that are less than significant.

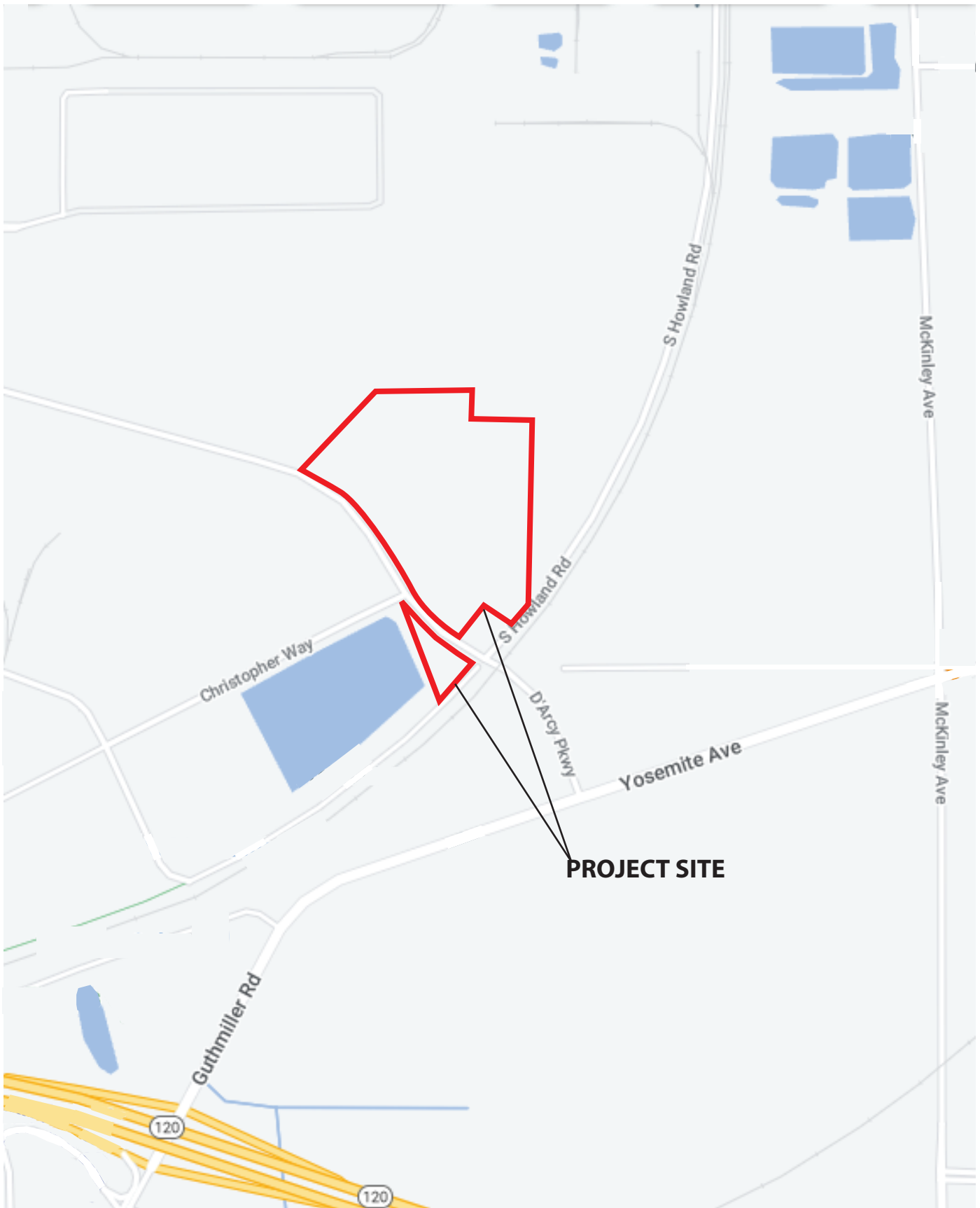


PROJECT SITE

Lathrop

Resort

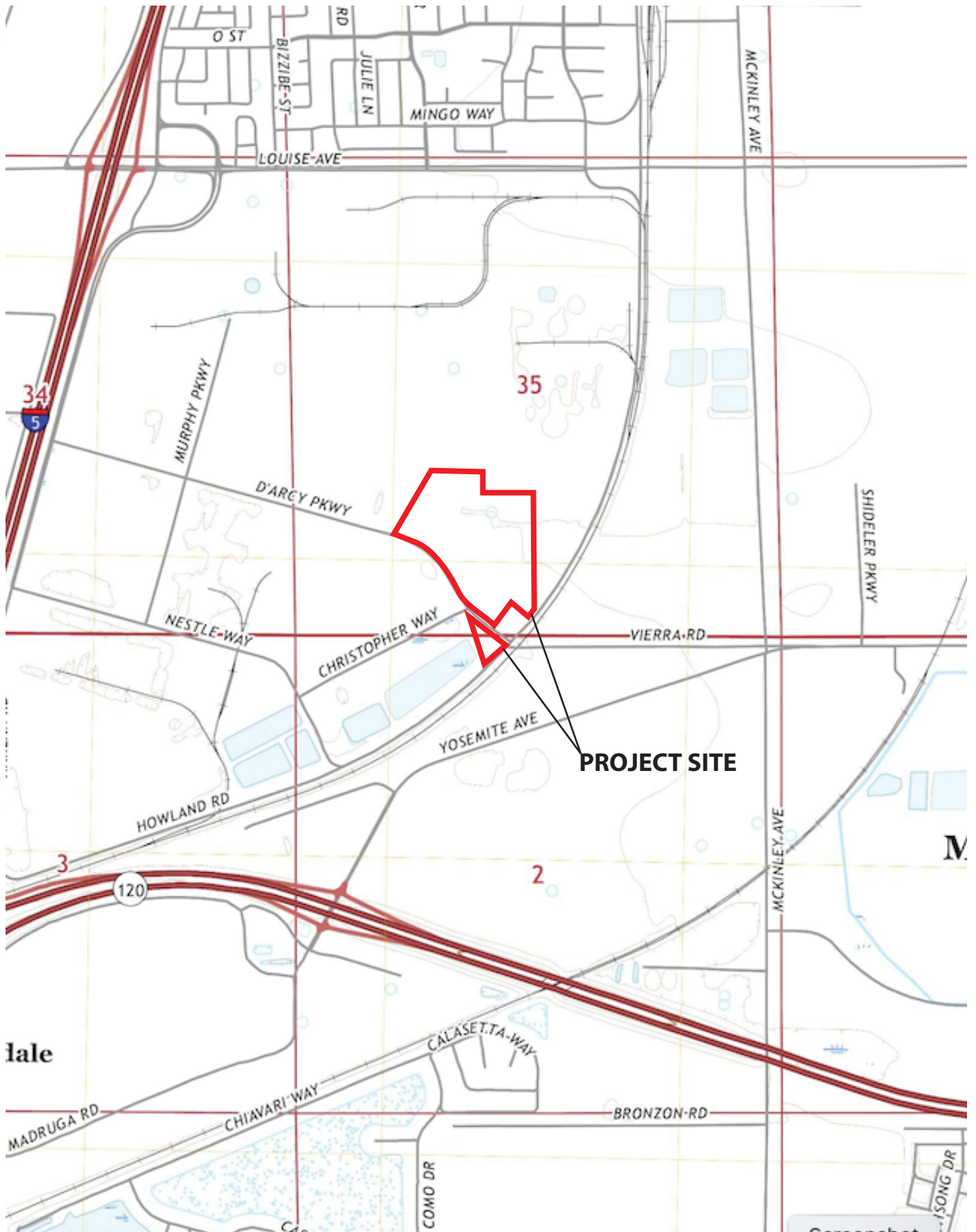
Figure 1-1
REGIONAL LOCATION MAP



SOURCE: Google Maps



Figure 1-2
STREET MAP

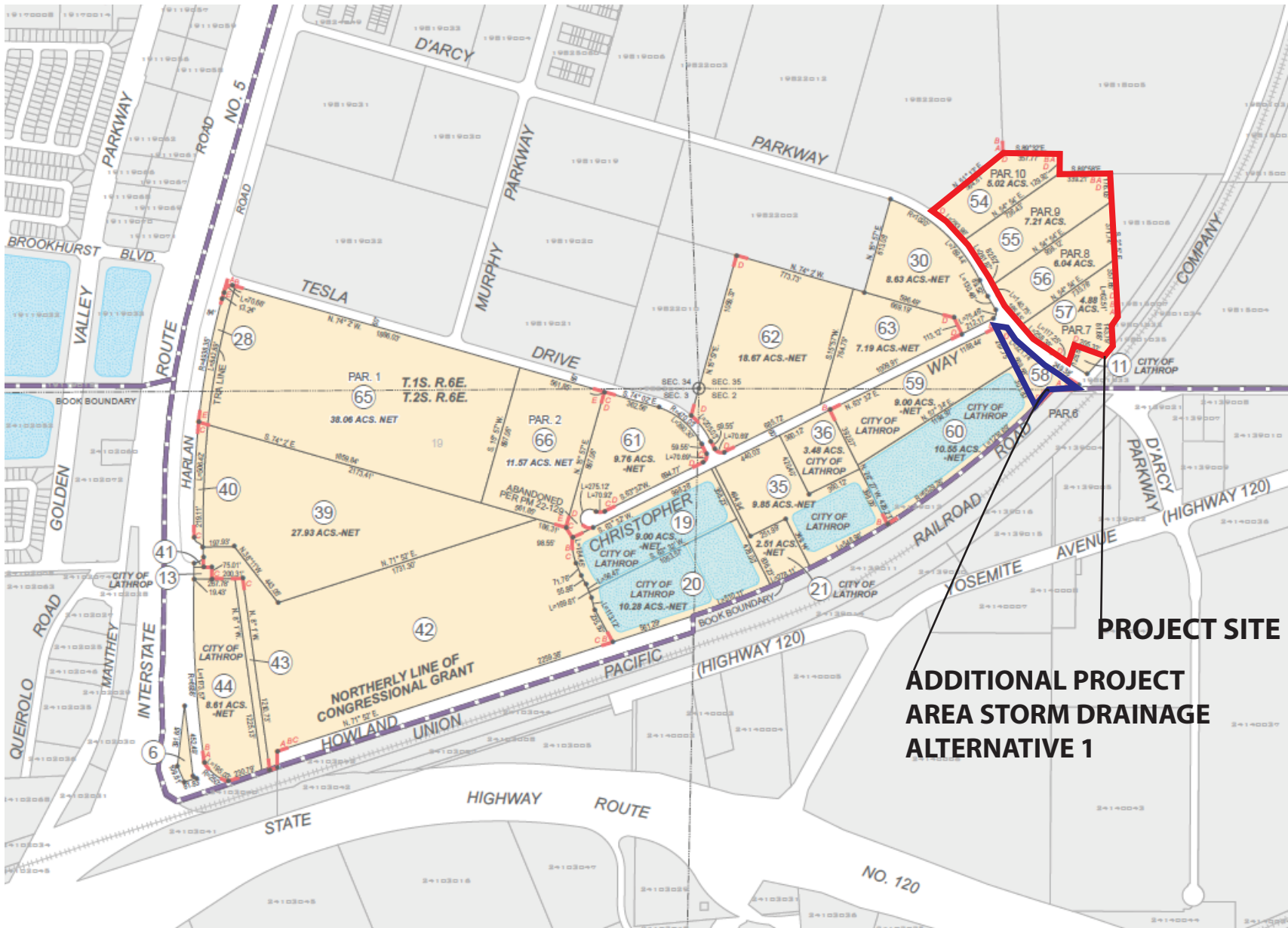




SOURCE: Google Earth



Figure 1-4
AERIAL PHOTO



PROJECT SITE

**ADDITIONAL PROJECT
AREA STORM DRAINAGE
ALTERNATIVE 1**

SOURCE: San Joaquin County Assessor Parcel Office



Figure 1-5
ASSESSOR PARCEL MAP

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.1 AESTHETICS			
a) Scenic Vistas	LS	None required	-
b) Scenic Resources and Highways	NI	None required	-
c) Visual Character and Quality	LS	None required	-
d) Light and Glare	LS	None required	-
3.2 AGRICULTURE AND FORESTRY RESOURCES			
a) Agricultural Land Conversion	LS	None required	-
b) Conflict with Agricultural Zoning or Williamson Act Contract	NI	None required	-
c) Conflict with Forest Land Zoning	NI	None required	-
d) Forest Land Conversion	NI	None required	-
e) Conversion or loss of Farmland, Forestland, and Timberland	NI	None required	-
3.3 AIR QUALITY			
a) Consistency with Air Quality Plans	LS	None required	-
b) Cumulative Emissions	LS	None required	-
c) Exposure of Sensitive Receptors	LS	None required	-
d) Odors and Other Emissions	LS	None required	-

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.4 BIOLOGICAL RESOURCES			
a) Special-Status Species	PS	BIO-1: The project shall participate in and obtain coverage under the San Joaquin County Multi-Species Habitat Conservation and Open Space (SJMSCP). Prior to ground disturbance, the project applicant shall mitigate for the proportionate loss of potential wildlife habitat from the project site by implementing any Incidental Take Minimization Measures (ITMMs) prescribed by the San Joaquin Council of Governments (SJCOG). A biologist representing SJCOG shall visit the project site prior to the issuance of ITMMs to the City and to the project applicant.	LS
b) Riparian and Sensitive Habitats,	NI	None required	-
c) Waters of the U.S. and Wetlands	LS	None required	-
d) Fish and Wildlife Movement	PS	Mitigation Measure BIO-1.	LS
e) Local Biological Requirements	NI	None required	-
f) Habitat Conservation Plans	PS	Mitigation Measure BIO-1.	LS
3.5 CULTURAL RESOURCES			
a) Historic Resources	NI	None required	-
b) Archaeological Resources	PS	CULT-1: If any subsurface cultural resources are encountered during construction of the project, all construction activities within 100 feet of the encounter shall be halted until a qualified archaeologist can examine these materials, determine their significance and, if significant, recommend further mitigation measures that would reduce potential effects to a level that is less than significant. Recommended measures could include, but are not limited to, 1) preservation in place, or 2) excavation, recovery, and curation by qualified professionals. The developer shall be responsible for retaining qualified	LS

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the City's Community Development Department, consistent with the requirements of the CEQA Guidelines.	
c) Human Burials	LS	None required	-
3.6 ENERGY			
a) Consumption of Energy Resources	LS	None required	-
b) Conflict with Energy Plans	LS	None required	-
3.7 GEOLOGY AND SOILS			
a-i) Fault Rupture Hazards	NI	None required	-
a-ii) Seismic Ground Shaking	LS	None required	-
a-iii) Seismic-Related Ground Failure	NI	None required	-
a-iv) Landslides	NI	None required	-
b) Soil Erosion	LS	None required	-
c) Geologic Instability	LS	None required	-
d) Expansive Soils	NI	None required	-
e) Adequacy of Soils for Sewage Disposal	NI	None required	-
f) Paleontological Resources	PS	GEO-1: If any subsurface paleontological resources are encountered during construction of the project, all construction activities within 100 feet of the encounter shall be halted until a qualified paleontologist can examine these materials, determine their significance and, if significant, recommend further mitigation measures that would reduce potential effects to a level that is less than	LS

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		significant. Recommended measures could include, but are not limited to, 1) preservation in place, or 2) excavation, recovery, and curation by qualified professionals. The developer shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the City's Community Development Department, consistent with the requirements of the CEQA Guidelines.	
3.8 GREENHOUSE GAS EMISSIONS			
a, b) Project GHG Emissions and Consistency with GHG Reduction Plans	LS	None required	-
3.9 HAZARDS AND HAZARDOUS MATERIALS			
a) Hazardous Materials Transport, Use and Disposal	LS	None required	-
b) Upset and Accident Conditions	LS	None required	-
c) Release of Hazardous Materials near Schools	NI	None required	-
d) Hazardous Materials Sites	NI	None required	-
e) Public Airports	NI	None required	-
f) Emergency Response and Evacuations	LS	None required	-
g) Wildland Fire Hazards	NI	None required	-
3.10 HYDROLOGY AND WATER QUALITY			
a) Water Quality	PS	HYDRO-1: The project shall provide post-construction BMPs as required to control runoff volumes and reduce pollutant loads in stormwater discharges to acceptable levels, including compliance with the adopted Multi-	LS

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		Agency Post-Construction Stormwater Standards Manual and the City's Storm Water Development Standards.	
b) Groundwater Supplies and Recharge	LS	None required	-
c-i, ii, iii) Drainage Patterns and Runoff	LS	None required	-
c-iv) Flooding Hazards	LS	None required	-
d) Release of Pollutants in Flood, Tsunami, or Seiche Zones	LS	None required	-
e) Conflicts with Water Quality or Groundwater Management Plans	LS	None required	-
3.11 LAND USE AND PLANNING			
a) Division of Established Community	NI	None required	-
b) Conflicts with Land Use Plans, Policies and Regulations	LS	None required	-
3.12 MINERAL RESOURCES			
a, b) Availability of Mineral Resources	NI	None required	
3.13 NOISE			
a) Generation of Noise Exceeding Local Standards	PS	<p>NOISE-1: The City shall establish the following as conditions of approval for any permit that results in the use of construction equipment:</p> <ul style="list-style-type: none"> • Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to between the hours of 7:00 a.m. and 10:00 p.m. Sunday through Thursday and 	LS

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		<p>between 9:00 a.m. and 11:00 p.m. on Friday, Saturday, and legal holidays.</p> <ul style="list-style-type: none"> • Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation. • When not in use, motorized construction equipment shall not be left idling for more than five (5) minutes. • Stationary equipment (power generators, compressors, etc.) shall be located at the furthest practical distance from nearby noise-sensitive land uses or sufficiently shielded to reduce noise-related impacts. 	
b) Exposure to Groundborne Vibrations	LS	None required	-
c) Public Airport and Private Airstrip Noise	NI	None required	-
3.14 POPULATION AND HOUSING			
a) Unplanned Population Growth	NI	None required	-
b) Displacement of Housing or People	NI	None required	-
3.15 PUBLIC SERVICES			
a-i) Fire Protection	LS	None required	-
a-ii) Police Protection	LS	None required	-
a-iii) Schools	LS	None required	-
a-iv) Parks	LS	None required	-

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
a-v) Other Public Facilities	LS	None required	-
3.16 RECREATION			
a, b) Recreational Facilities	LS	None required	-
3.17 TRANSPORTATION			
a) Conflicts with Transportation Programs and Plans	LS	None required	-
b) Conflict with CEQA Guidelines Section 15064.3(b)	LS	None required	-
c) Traffic Hazards	LS	None required	-
d) Emergency Access	LS	None required	-
3.18 TRIBAL CULTURAL RESOURCES			
a, b) Tribal Cultural Resources	PS	Mitigation Measure CULT-1	LS
3.19 UTILITIES AND SERVICE SYSTEMS			
a) Relocation or Construction of Utility Facilities	LS	None required	-
b) Water Supplies	LS	None required	-
c) Wastewater Treatment Capacity	LS	None required	-
d, e) Solid Waste Services	LS	None required	-
3.20 WILDFIRE			
a) Emergency Response Plans and Emergency Evacuation Plans	NI	None required	-

**TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
b) Exposure of Project Occupants to Wildfire Hazards	NI	None required	-
c) Installation and Maintenance of Infrastructure	NI	None required	-
d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes	NI	None required	-
3.21 MANDATORY FINDINGS OF SIGNIFICANCE			
a) Findings on Biological and Cultural Resources	PS	Mitigation measures in Sections 3.4 and 3.5 above.	LS
b) Findings on Cumulatively Considerable Impacts	LS	None required	-
c) Findings on Adverse Effects on Human Beings	LS	None required	-

Notes: NI = No Impact; LS = Less Than Significant; PS = Potentially Significant

2.0 PROJECT DESCRIPTION

2.1 Project Location

The Lathrop Crossroads Industrial Project site is located at 1101 D'Arcy Parkway in the southern portion of the City of Lathrop, San Joaquin County, California (see Figures 1-1 through 1-5). The site consists of four parcels. Table 2-1 identifies each of these parcels by its Assessor's Parcel Number (APN) and acreage. The project site encompasses approximately 25 acres.

TABLE 2-1
PROJECT SITE PARCELS AND ACREAGES

APN	Acres
198-130-54	5.02
198-130-55	7.21
198-130-56	6.04
198-130-57	4.88
198-130-58	1.83
TOTAL	24.98

See Figure 1-5 for parcel locations.

The project site is shown on the U.S. Geological Survey (USGS) Lathrop, California, 7.5-minute quadrangle map within Section 35, Township 1 South, Range 6 East, Mt. Diablo Base and Meridian. The latitude of the project site is approximately 37° 47' 59" North, and the longitude is approximately 121° 16' 52" West.

2.2 Project Details

The Lathrop Crossroads Industrial Project proposes the development of industrial land uses on the project site. Two alternative land use plans are proposed for the site, which are described below. For both development alternatives, potential uses include the following:

- High-Cube Cold Storage Facility
- High-Cube Fulfillment Center
- High-Cube Warehouse
- Manufacturing

A “high cube” facility is a very large shell building, commonly constructed using steel-framed or concrete tilt-up techniques, with a minimum gross floor area of 200,000 square feet, a minimum ceiling height of 24 feet, and a minimum dock-door ratio of 1 door per 10,000 square feet.

Alternative 1 – Single Building

Alternative 1 would involve development of a single building containing 453,094 square feet of floor area, including 5,000 square feet in a mezzanine (Figure 2-1). Approximately 10,000 square feet of the total floor area would be set aside for office space. The clear inside height of the building would be 36 feet. The building includes 50 dock door locations along its rear (northern) line. Several utility rooms are included in the overall square footage.

Alternative 1 proposes the installation of three basins to collect storm drainage. One of these basins would be located on an offsite parcel across D’Arcy Parkway from the building (APN 198-130-58); the other two would be constructed between the parking area in front of the building and adjacent D’Arcy Parkway. Proposed landscaping would cover approximately 10.83 percent of the project site, mainly around the site perimeter. Landscaping would consist of a mix of trees, shrubs, and ground cover.

Vehicular access to the building would be provided by three driveways extending from D’Arcy Parkway. The project proposes the installation of 251 automobile parking spaces, each approximately 9 feet wide by 19 feet long. Eight of these parking spaces would be reserved for vehicles with disabled persons. The project also would provide 144 truck/trailer parking spaces, each approximately 11 feet wide by 53 feet long. Most of these truck/trailer spaces would be to the rear of the building; most of the automobile spaces would be in front of the building. A bicycle parking area for 13 bikes would be provided adjacent to one of the utility rooms. Pedestrian access would be provided to proposed new office areas from a new sidewalk to be constructed along the project frontage on D’Arcy Parkway.

Alternative 2 – Multiple Buildings

Alternative 2 proposes the construction of three buildings totaling 396,179 square feet in floor area, including a total of 10,000 square feet in mezzanine areas (Figure 2-2). The largest of the three buildings is proposed to have a floor area of 217,062 square feet. The two smaller buildings would have floor areas of 106,457 square feet and 72,660 square feet. Approximately 20,000 total square feet would be set aside for office space. The clear inside height of each building would be 32 feet.

The three buildings propose a total of 74 dock door locations. Of these locations, 38 would be part of the largest building and would be located to the rear (northwest side) of that building. Each of the smaller buildings would have 18 dock door locations facing a central area separating the two smaller buildings.

Alternative 2 proposes the installation of two on-site water basins to collect storm drainage, both along D’Arcy Parkway. Landscaping would cover approximately 16.37 percent of the project site and would be installed around each of the buildings and on the site perimeter.

It is expected that, like Alternative 1, landscaping would consist of a mix of trees, shrubs, and ground cover.

As with Alternative 1, vehicular access to the buildings under Alternative 2 would be provided by three driveways off D'Arcy Parkway. The project proposes the installation of 423 automobile parking spaces, each approximately 9 feet wide by 19 feet long, that would be placed throughout the project site as shown on Figure 2-2. Of these parking spaces, 12 would be reserved for vehicles with disabled persons. The project also would provide 62 truck/trailer parking spaces, each approximately 11 feet wide by 53 feet long. These spaces would be to the rear of the largest building. Bicycle parking for 13 bikes would be provided on site. Pedestrian access would also be provided to proposed office areas from a new sidewalk to be constructed along the D'Arcy Parkway frontage.

Other Project Features

Figure 2-3 shows the exterior elevations of the proposed buildings. Although Figure 2-3 focuses on Alternative 1, the single building alternative, it is expected that the buildings constructed under Alternative 2 would have similar elevations and finishings. Under both development alternatives, parapets would be installed as a visual screen for heating, ventilation, and air conditioning equipment installed on the building roof. Both development alternatives also propose the installation of tube steel fencing, approximately eight feet in height, around the project site. Trash enclosures would be installed to conceal trash dumpsters.

Figure 2-4 shows the proposed landscaping plan for the project site under Alternative 1. As noted, the amount of landscaping that would cover the project site would vary by development alternative, with Alternative 2 having more landscape cover. However, the plants that would be used are anticipated to be the same under both development alternatives. These include trees such as white crape myrtle, Chinese pistache, and African sumac, and plants for shrub areas such as big red kangaroo paw, Karl Foerster feather reed grass, and Stella de Oro daylily, among others.

Project site lighting would consist of light poles approximately 30 feet in height installed in the parking areas, along with wall-mounted exterior lights. All exterior lighting would consist of LED lights that are shielded in cast black-painted metal housings.

The project proposes to install three-inch diameter potable water supply lines, six-inch diameter sanitary sewer lines, and 12-inch diameter water lines for firefighting on the site. The site would connect to existing City water and sewer lines beneath the adjacent D'Arcy Parkway. The project proposes the installation of an on-site storm drainage system on the project site consisting of collector pipes and detention basins, the configuration of which would depend on the development alternative selected. Ultimately, collected drainage would be discharged into the City's storm drainage system. Figure 2-5 shows the utility plan for the project, while Figure 2-6 shows the proposed storm drainage plan for Alternative 1 development. As noted, under Alternative 2, only two onsite basins would be installed.

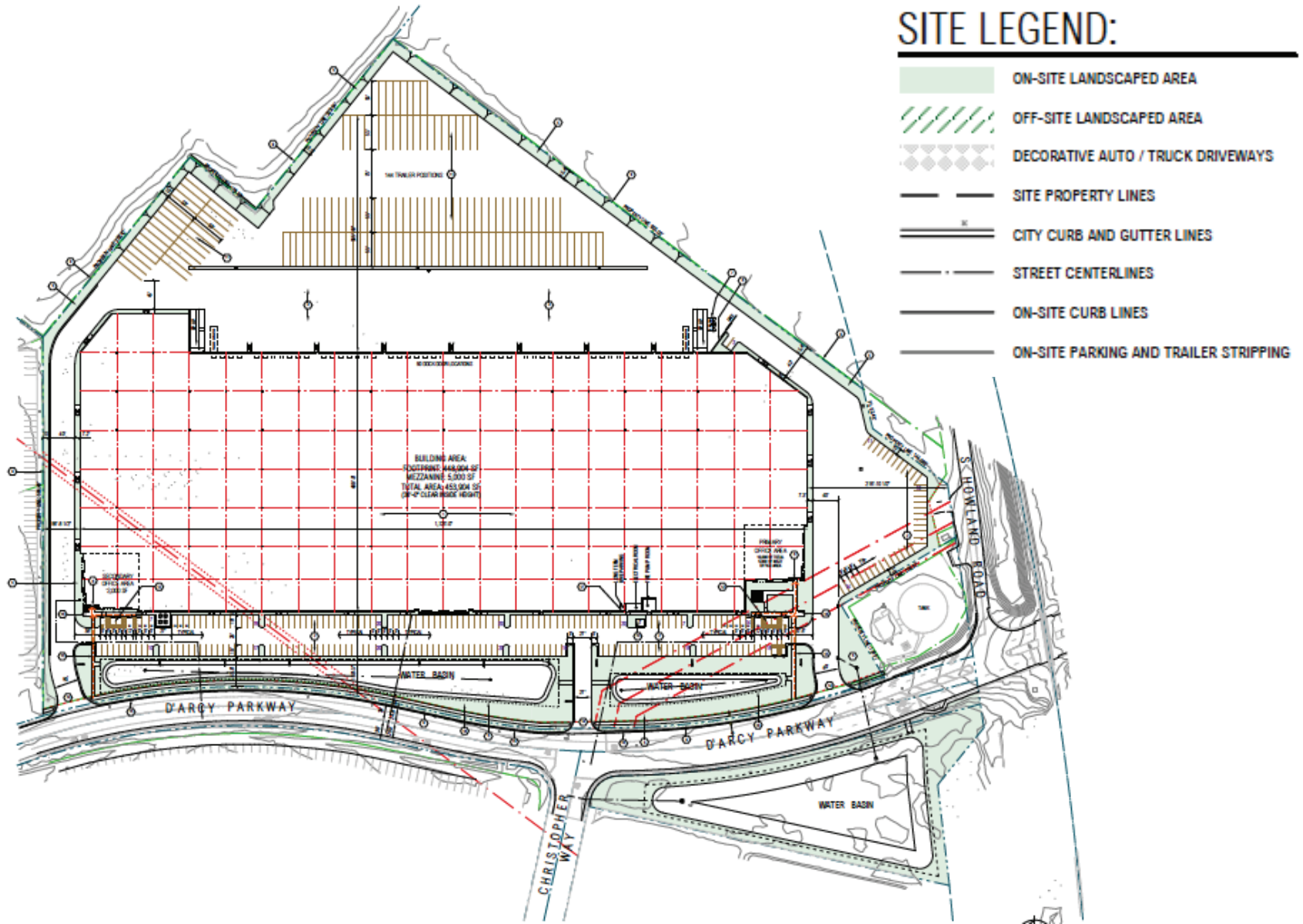
Pacific Gas and Electric Company (PG&E) has existing electrical and natural gas facilities in the vicinity of the project site. The project proposes to connect to these facilities, utilizing existing utility vaults and boxes. One of the utility vaults is proposed to be removed.

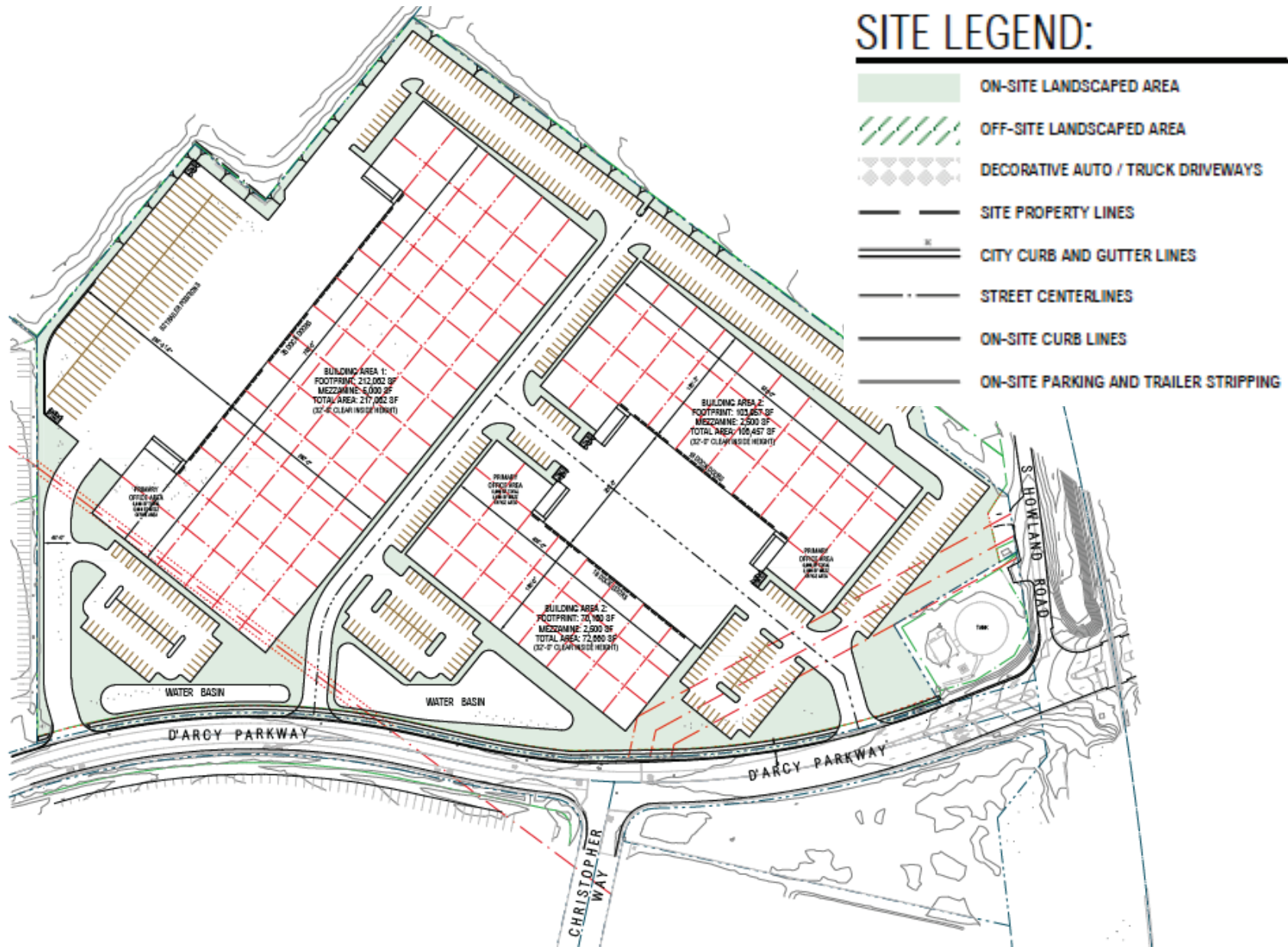
2.3 Permits and Approvals

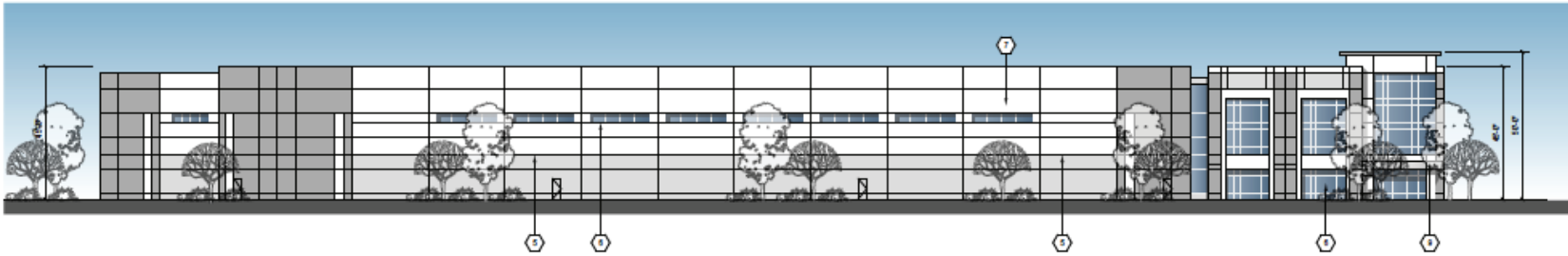
The project site is designated by the Lathrop General Plan as General Industrial and is zoned by the City as IG, General Industrial. The proposed uses on the project site would be consistent with the existing Lathrop General Plan and zoning designations. As such, the project would require Site Plan Review approval by the City of Lathrop, along with encroachment permits for any project work within local streets.

As a condition of approval, the City would require the project to complete a Lot Line Adjustment to combine the four parcels east of D'Arcy Parkway into one parcel. Applications for a Lot Line Adjustment are submitted to the City's Community Development Department, and City staff makes the decision on these applications.

Other permits and approvals that would likely be required for this project from other agencies include the Construction General Permit from the State Water Resources Control Board (SWRCB) and participation in the County special-status species conservation plan with the San Joaquin Council of Governments (SJCOG).

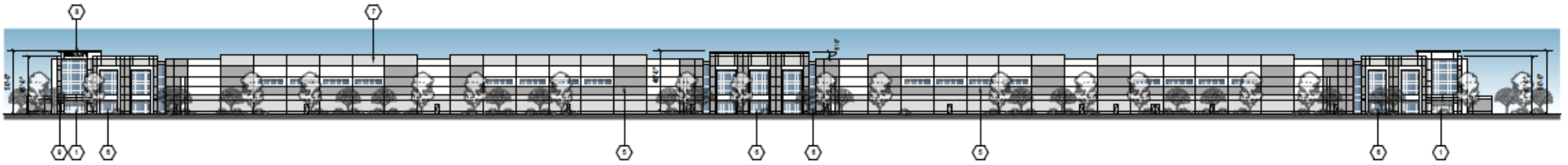






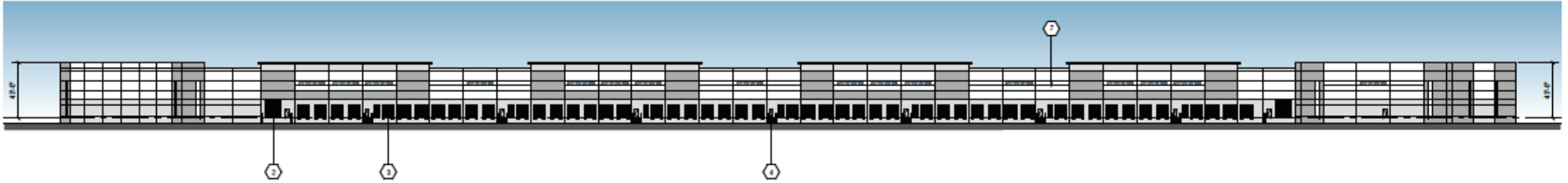
NORTH ELEVATION

SCALE: 1/4"=1'-0"

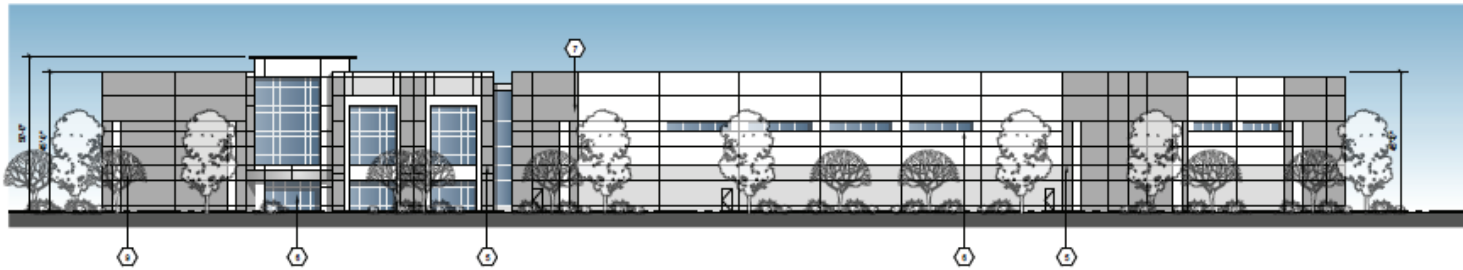


WEST ELEVATION

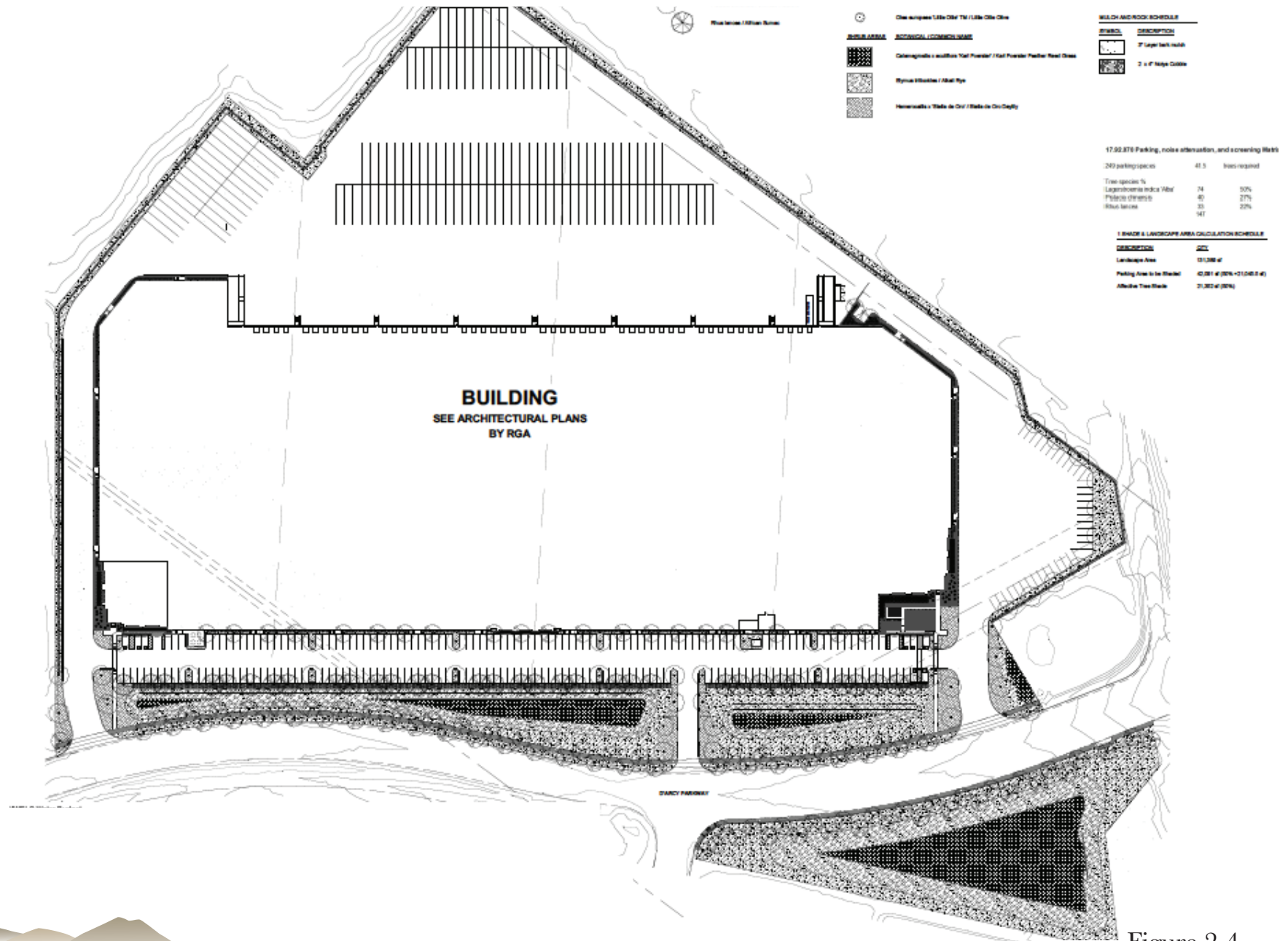
SCALE: 1/4"=1'-0"

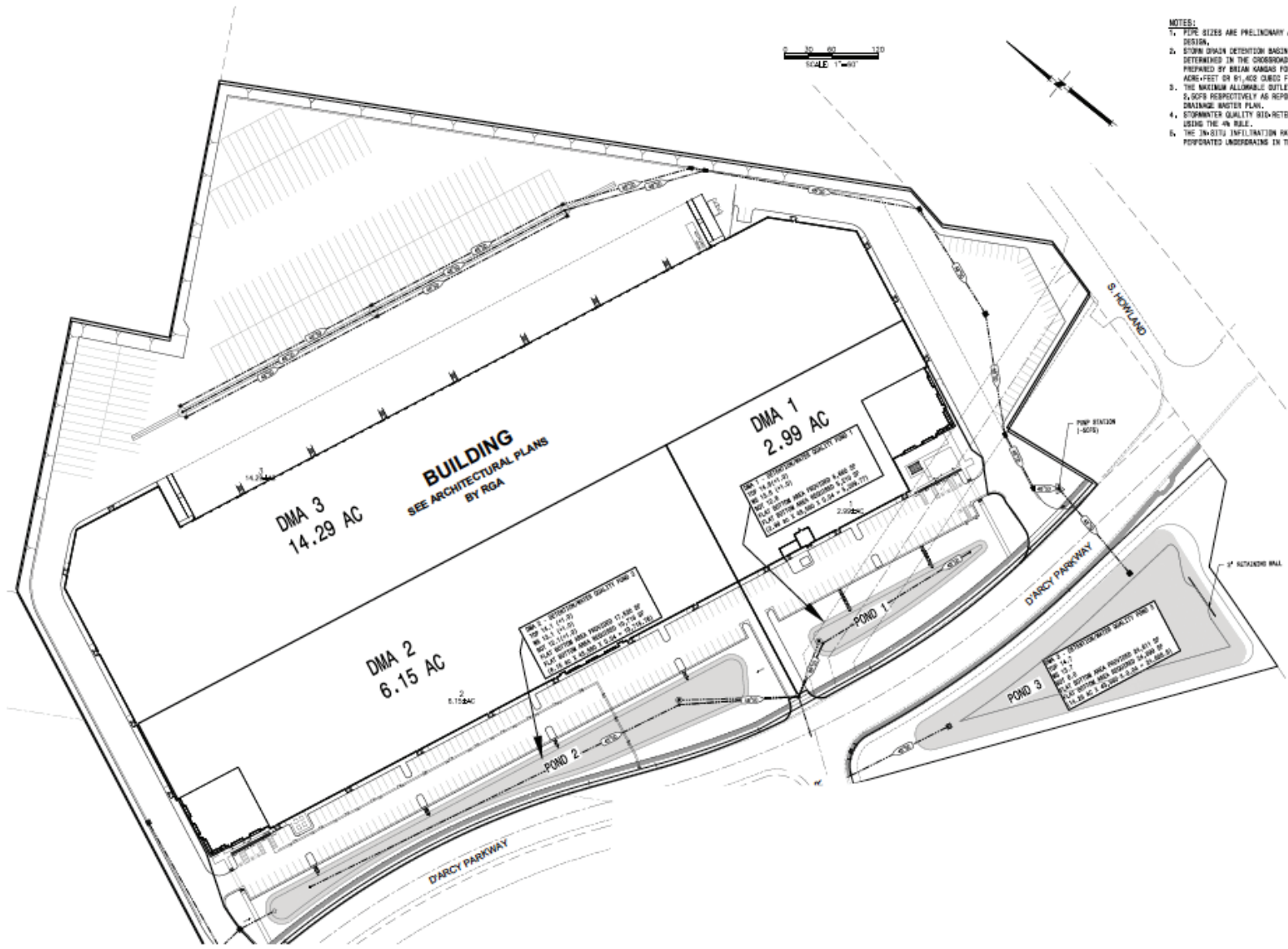


EAST ELEVATION
SCALE: 1"=48'-0"

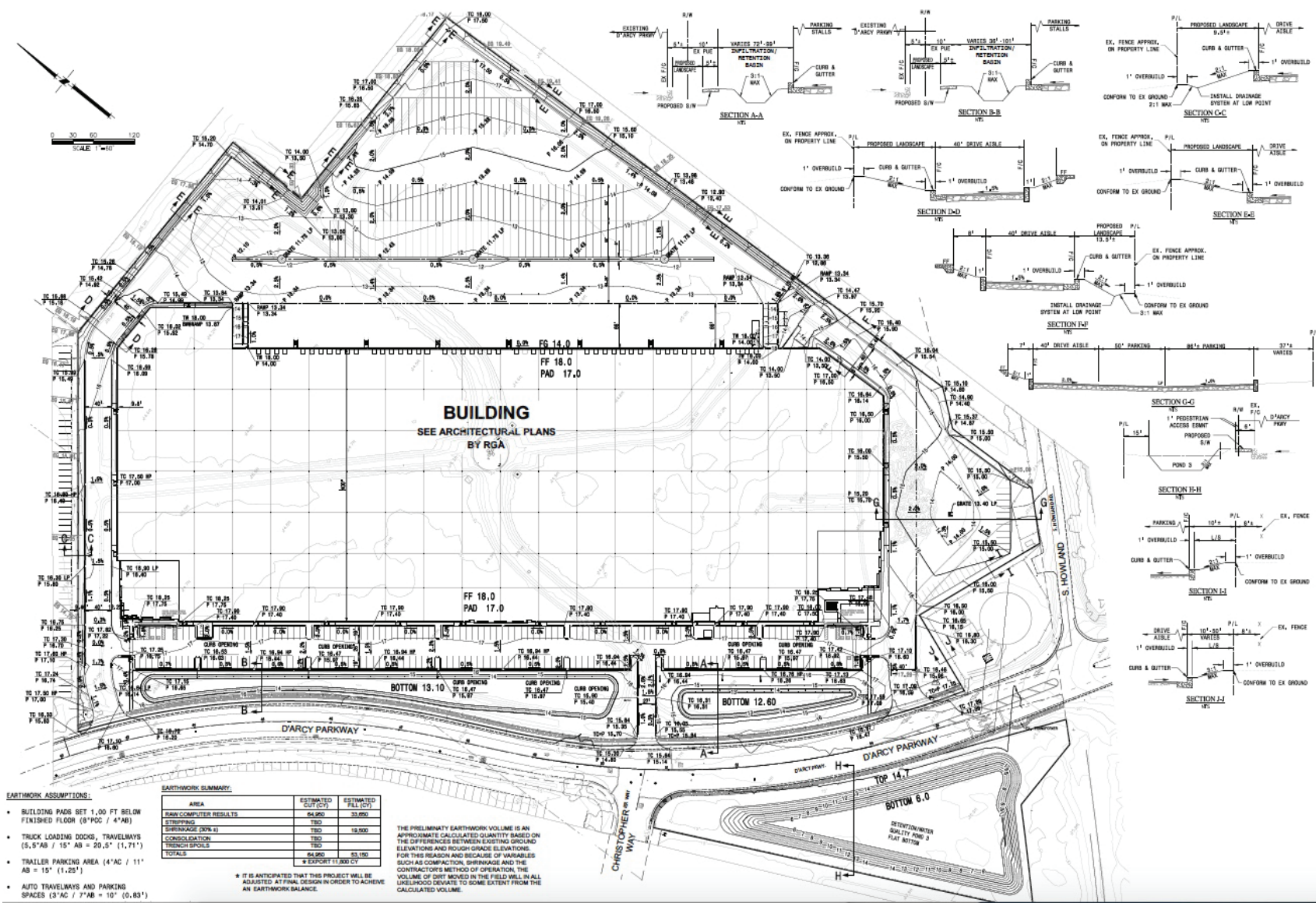


SOUTH ELEVATION
SCALE: 1"=36'-0"





- NOTES:**
- PIPE SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL DESIGN.
 - STORM WATER DETENTION BASIN SIZING WAS PREVIOUSLY DETERMINED IN THE CROSSROADS STORM DRAINAGE MASTER PLAN PREPARED BY BRIAN KANGAS POLK DATED MARCH 12, 1999, 2/2000 ADJUSTED BY 61,402 CUBIC FEET OF DETENTION IS REQUIRED.
 - THE MAXIMUM ALLOWABLE SUTLEY SIZES AND SIZES ARE 5,000'S AND 5,000'S RESPECTIVELY AS REPORTED IN THE CROSSROADS STORM DRAINAGE MASTER PLAN.
 - STORMWATER QUALITY RETENTION BASINS HAVE BEEN SIZED USING THE 4% RULE.
 - THE IN-SITU INFILTRATION RATE REQUIRES THE USE OF PERFORATED UNDERDRAINING IN THE BIO-RETENTION BASINS.



BUILDING
SEE ARCHITECTURAL PLANS
BY RGA

EARTHWORK ASSUMPTIONS:

- BUILDING PADS SET 1.00 FT BELOW FINISHED FLOOR (8" PCC / 4" AB)
- TRUCK LOADING DOCKS, TRAVELWAYS (5.5' AB / 15" AB = 20.5' (1,71'))
- TRAILER PARKING AREA (4' AC / 11' AB = 15' (1,25'))
- AUTO TRAVELWAYS AND PARKING SPACES (3' AC / 7' AB = 10' (0,83'))

EARTHWORK SUMMARY:

AREA	ESTIMATED CUT (CY)	ESTIMATED FILL (CY)
GRAVITY COMPUTER RESULTS	84,892	33,690
STRENGTH	YES	YES
SURFACEAGE (20% S)	YES	19,900
CONCRETE FOUNDATION	YES	YES
TRENCH SPILLS	YES	YES
TOTALS	84,892	53,590
	3 EXPORT 11,882 CY	

THE PRELIMINARY EARTHWORK VOLUME IS AN APPROXIMATE CALCULATED QUANTITY BASED ON THE DIFFERENCES BETWEEN EXISTING GROUND ELEVATIONS AND PROPOSED GRADE ELEVATIONS. FOR THIS REASON AND BECAUSE OF VARIABLES SUCH AS COMPACTION, SWELLAGE AND THE CONTRACTOR'S METHOD OF OPERATION, THE VOLUME OF SOFT MOVED IN THE FIELD WILL, IN ALL LIKELIHOOD DEVIATE TO SOME EXTENT FROM THE CALCULATED VOLUME.

* IT IS ANTICIPATED THAT THIS PROJECT WILL BE ADJUSTED AT FINAL DESIGN IN ORDER TO ACHIEVE AN EARTHWORK BALANCE.

3.0 ENVIRONMENTAL CHECKLIST FORM

The following environmental evaluation considers the potential environmental effects of City approval of the proposed project, as described in Chapter 2.0, Project Description. The format of this evaluation is based on the Environmental Checklist presented in CEQA Guidelines Appendix G.

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?			✓	

NARRATIVE DISCUSSION

Environmental Setting

The project site is vacant of buildings, essentially flat with defined percolation basins, and has scattered vegetation of mostly grasses and weeds. There are no trees on the project site. The most prominent visual feature within the project site is a pumping facility in the center.

The project site is adjacent to an urban landscape. The areas west and south of the project site are developed with industrial and warehouse buildings that are part of the Crossroads Industrial Park, along with a City wastewater treatment plant and a City water storage tank. Mostly vacant land is north and east of the project site. Existing lighting in the immediate

project area consists of streetlights along streets in the vicinity and exterior lighting from existing adjacent development.

California Public Resources Code Section 21099 states that the aesthetic and parking impacts of residential, mixed-use residential, or employment center projects on an infill site within a transit priority area shall not be considered significant. The project site is an employment center project that may be considered infill; however, it is not within a transit priority area. Therefore, it does not meet the criteria of Section 21099, and the aesthetic impacts of the project are analyzed in this document.

Environmental Impacts and Mitigation Measures

a) Scenic Vistas.

The City's General Plan identifies views of the Coast Ranges and the Sierra Nevada as scenic vistas. Views of the Coast Ranges are obstructed by existing urban development to the west, while views of Sierra Nevada, which are more distant, are obstructed by existing urban development in the City and in Manteca to the east. The proposed project structures would be similar to other industrial development in the area and would not add substantial obstruction of views of existing scenic vistas. Project impacts on scenic vistas would be less than significant.

b) Scenic Resources.

Aside from the scenic vistas described in a) above, the City's General Plan identifies only the San Joaquin River as a scenic resource. The project site is not on or near the San Joaquin River; the project would have no direct or indirect effect on this resource. As noted, the project site is vegetated with mostly grasses and weeds, with no trees or other distinctive vegetation.

The Lathrop General Plan does not identify or designate any scenic highways in the area. According to the California Department of Transportation (Caltrans) list of designated scenic highways under the California Scenic Highway Program, there are only two officially designated state scenic highways within San Joaquin County: Interstate 5 from the Stanislaus County Line to Interstate 580, and Interstate 580 from I-5 to the Alameda County Line (Caltrans 2019). Neither of these State Scenic Highways are on or near the project site. The project would have no impact on scenic resources, including scenic highways.

c) Visual Character and Quality.

Public views of the project site are mainly from D'Arcy Parkway along the site's western boundary, with more limited views from Howland Road along the site's southern boundary. Views along D'Arcy Parkway are dominated by adjacent industrial development similar to the proposed project. As noted, the project site is vacant and has no features of distinctive visual character. The project is within the Crossroads Industrial Park boundaries, and proposed development would be similar in character to the existing industrial and warehouse uses in the industrial park.

As part of the project, and per City requirements, proposed building and site improvements would be subject to City design review. The project applicant has prepared architectural and landscaping plans in accordance with City requirements that would provide for the visual quality of the proposed development under either alternative (see Figure 2-4). Project impacts on visual character and quality would be less than significant.

d) Light and Glare.

The project would introduce new building and parking area lighting in a currently vacant area with no lighting. Project lighting would be similar to that at existing development in the area. Adjacent industrial and infrastructure land uses are not sensitive to changes in lighting as would be other land uses such as residential areas. The nearest potentially sensitive land use to project site lighting is a residence approximately 650 feet southeast of the site.

Lathrop Municipal Code Section 17.76.030.E requires preparation of a photometric plan for parking lots with five or more spaces. Parking lots, driveways, trash enclosure/areas shall be illuminated during the hours of darkness with a minimum maintained one footcandle of light and an average not to exceed four footcandles of light. The illumination shall not exceed 10 foot-candles in any one location. The project applicant has prepared a photometric plan in accordance with the Municipal Code (see Figure 2-5). The portions of the project site closest to the residence to the southeast would not exceed 1.3 foot-candles in illumination, which is less than the four-footcandle maximum.

Glare is mainly a result of sunlight reflection off flat building surfaces, with glass and reflective metal surfaces typically contributing to the highest degree of reflectivity. The building surfaces would be painted, and glass area would be limited, so glare generated by proposed development would be limited. Project impacts related to light and glare are less than significant.

3.2 AGRICULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			✓	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland				✓

Production (as defined by Government Code Section 51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
d) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				✓

NARRATIVE DISCUSSION

Environmental Setting

The project site is within a developed urban area. Based on Google Earth aerial photographs, the project site has not been used for agricultural activities for almost three decades. The only land use on the project site during this time has been the percolation ponds.

The Important Farmland Maps, prepared by the California Department of Conservation as part of the Farmland Mapping and Monitoring Program, designate the viability of lands for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland, in decreasing order of soil quality, as "Prime Farmland," "Farmland of Statewide Importance," "Unique Farmland," and "Farmland of Local Importance." The 2018 Important Farmland Map of San Joaquin County designates the project site as Farmland of Statewide Importance (FMMP 2018). The project site was, however, converted to institutional use as a part of the Lathrop wastewater treatment facility.

In 2005, the City of Lathrop adopted an agricultural mitigation program, which requires that future development pay an agricultural mitigation fee if development affects land areas upon which agricultural activities, uses, operations, or facilities exist or could exist at the time of adoption of the program that contain Class I, II, III or IV soils as defined by the United States Department of Agriculture Natural Resource Conservation Service. Half of the fee will be paid to the California Farmland Trust, a private, non-profit, regional land trust that works to preserve farmland through the purchase of agricultural conservation easements from willing landowners. The other half will be collected by the City of Lathrop and may be passed to the California Farmland Trust or other trust or may be retained by the City of Lathrop to be applied to local easements or other agricultural mitigation. The agricultural mitigation fee as of March 2022 is \$3,183 per gross acre for development outside the River Islands and Central Lathrop Specific Plan areas (City of Lathrop 2022).

Environmental Impacts and Mitigation Measures

a) Agricultural Land Conversion.

As noted, the project site is mapped by the California Department of Conservation as Farmland of Statewide Importance, which is Farmland as defined in CEQA Guidelines Appendix G. Technically, therefore, the project may involve conversion of Farmland.

The Crossroads Industrial Park EIR analyzed the impacts of industrial park development, including the project site, on agricultural land. The EIR concluded that development would result in an irreversible loss of agricultural land for which there was at the time no effective mitigation (San Joaquin County 1989). The Lathrop General Plan EIR, certified shortly after the Crossroads Industrial Park EIR, also acknowledged the loss of agricultural land and likewise proposed no feasible mitigation measures to reduce this impact (City of Lathrop 1991). The Lathrop General Plan Update EIR, recently released, also concludes that Farmland conversion impacts of urban development are significant and unavoidable, even with application of the City's agricultural mitigation program (City of Lathrop 2022a).

However, as noted, the project site has not been in use for agriculture in recent decades and has been regraded and used for treated wastewater percolation. The project site is within an approved development area – the Crossroads Industrial Park. Proposed development would be consistent with the intended development of the industrial park.

The two predominant soil types on the project site (see Section 3.7, Geology and Soils) are rated Class IV soils for agriculture when not irrigated and Class III soils when irrigated. As such, the project site would be subject to the City's adopted agricultural mitigation program. Implementation of this program, including fee payments, would provide all available compensation for the loss of Farmland resulting from the project.

According to CEQA Guidelines Section 15152(d), when an EIR has been prepared and certified for a plan, any lead agency for a later project pursuant to or consistent with the plan should limit the project EIR or negative declaration to effects which were not examined as significant effects on the environment in the prior EIR, or are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means. The impacts on agricultural resources associated with the project were examined as significant effects in both EIRs, and the project effects are not susceptible to substantial reduction or avoidance. No new or more severe impacts not otherwise analyzed in the EIRs are associated with the project. Given this and the other information presented above, project impacts on Farmland conversion are considered less than significant.

b) Agricultural Zoning and Williamson Act.

As noted, the project site is designated and zoned for industrial use, not for agricultural use. The Williamson Act preserves agricultural land by means of a contract between the landowner and local government that keeps the contracted land in agricultural use in exchange for a lower property tax assessment. None of the parcels within the project site

are under a Williamson Act contract. The project would have no impact on agricultural zoning or Williamson Act contracts.

c, d) Forest Lands.

There are no forest lands on the project site or in the vicinity. Neither the project site nor any land in the vicinity is zoned as forest land or timberland. The project would have no impact on forest lands.

e) Indirect Conversion of Farmland or Forest Land.

As noted in a) above, the project is within the boundaries of Crossroads Industrial Park, which has been approved for development. The project site is adjacent to and consistent with industrial development that is served with existing street and utility infrastructure. No additional infrastructure, outside of that serving onsite uses, would be constructed. The onsite infrastructure would not extend beyond site boundaries.

Agricultural land is available north and east of the project site. However, the project would not add infrastructure or undertake any other activity that would facilitate the conversion of agricultural land in those areas to non-agricultural uses. The project would have no impact on indirect conversion of agricultural lands. As noted, there are no forest lands in the area, so the project would have no impact on indirect conversion of forest land.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollutant control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?			✓	
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?			✓	
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

NARRATIVE DISCUSSION

Environmental Setting

The project area is within the San Joaquin Valley Air Basin, which includes San Joaquin County and all or part of seven other Central Valley counties. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the Air Basin. The SJVAPCD is tasked with implementing programs and regulations required by both the federal and California Clean Air Acts. Under their respective Clean Air Acts, both the State of California and the federal government have established ambient air quality standards for six criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. California has standards for four additional criteria pollutants under its Clean Air Act.

Table 3-1 shows the current attainment status of the Air Basin relative to the federal and State ambient air quality standards for the criteria pollutants. Except for ozone and particulate matter, the Air Basin is in attainment of, or unclassified for, all federal and State ambient air quality standards. Ozone is not emitted directly into the air but is formed when reactive organic gases (ROG) and nitrogen oxides (NO_x) react in the atmosphere in the presence of sunlight. The SJVAPCD currently has a 2007 Ozone Plan and a 2013 Plan for the Revoked 1-Hour Ozone Standard for the Air Basin to attain federal ambient air quality standards for ozone.

TABLE 3-1
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Primary Standards	State Standards
Ozone - One hour	No Federal Standard	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme	Nonattainment
PM ₁₀	Attainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: SJVAPCD 2020.

Particulate matter is a mixture of solid and liquid particles suspended in air, including dust, pollen, soot, smoke, and liquid droplets. In San Joaquin County, particulate matter is generated by a mix of rural and urban sources, including agricultural operations, industrial emissions, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. Particulate matter less than 10 micrometers in diameter (PM₁₀) and less than 2.5 micrometers in diameter (PM_{2.5}) are subject to regulation, as both can be inhaled into the lungs. The SJVAPCD currently has a 2015 PM_{2.5} Plan for the 1997 federal PM_{2.5} standard, a 2012 PM_{2.5} Plan for the 2006 federal PM_{2.5} standard, a 2016 Moderate Area Plan for the 2012 federal PM_{2.5} standard, and a 2007 PM₁₀ Maintenance Plan to maintain the Air Basin's attainment status of the federal PM₁₀ standard.

CO is an odorless, colorless gas that is toxic in high concentrations. It is formed by the incomplete combustion of fuels and is emitted directly into the air, unlike ozone. The main source of CO in the San Joaquin Valley is on-road motor vehicles (SJVAPCD 2015). The San Joaquin Valley Air Basin is in attainment/unclassified status for carbon monoxide (CO); as such, the SJVAPCD has no CO attainment plans. However, high CO concentrations may occur in areas of limited geographic size referred to as "hotspots," which are ordinarily associated with areas of heavy traffic volumes and congestion.

In addition to the criteria pollutants, the California Air Resources Board (ARB) has also identified other air pollutants as toxic air contaminants (TACs) - pollutants that are carcinogenic (i.e., cause cancer) or that may cause other adverse short-term or long-term health effects. Diesel particulate matter, considered a carcinogen, is the most common TAC, as it is a product of combustion in diesel engines. Other TACs are less common and are typically associated with industrial operations.

The SJVAPCD regulations that are potentially applicable to the project are summarized below.

Regulation VIII (Fugitive Dust PM₁₀ Prohibitions)

Rules 8011-8081 are designed to reduce PM₁₀ emissions, predominantly dust/dirt, generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

Rule 4101 (Visible Emissions)

This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 4601 (Architectural Coatings)

This rule sets limits on the volatile organic compounds, a component of ROG, allowed in various paints and other coatings.

Rule 9410 (Employer Based Trip Reduction)

The purpose of Rule 9410 is to reduce vehicle miles traveled (VMT) by private vehicles used by employees to commute to and from their worksites, which in turn would reduce emissions of NO_x, volatile organic compounds (a component of ozone), and particulate matter. Employers are required to implement an Employer Trip Reduction Implementation Plan (ETRIP) for each worksite with 100 or more eligible employees to meet applicable targets specified in the rule. Employers are required to facilitate participation in the preparation of an ETRIP by providing information to its employees explaining the requirements and applicability of this rule.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule, is intended to reduce or mitigate construction and operational emissions of NO_x and PM₁₀ generated by new development, either directly by the incorporation of mitigation into projects and/or by payment of off-site mitigation fees. Construction emissions of NO_x and PM₁₀ exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM₁₀ must be reduced by 33.3% and 50%, respectively. Rule 9510 applies to commercial development projects of 2,000 square feet and larger; therefore, the proposed project would be subject to this rule.

In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts. The Guide defines an analysis methodology, thresholds of significance, and mitigation measures for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction (SJVAPCD 2015). Table 3-2 shows the CEQA thresholds for significance for pollutant emissions within the SJVAPCD. The significance thresholds apply to emissions from both project construction and project operations.

Environmental Impacts and Mitigation Measures

a) Air Quality Plan Consistency.

The project's construction and annual operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) computer program, a modeling program recommended by SJVAPCD. Some of the inputs for the CalEEMod run were provided by the project's transportation study. The full CalEEMod results for the project are available in Appendix A of this document, and the results are summarized in Table 3-2 below. As indicated by Table 3-2, under both development alternatives, construction and operational emissions would not exceed the SJVAPCD significance thresholds. As the significance thresholds were established in part to ensure consistency with the objectives of the air quality plans adopted by the SJVAPCD, the project would therefore be consistent with these plans.

TABLE 3-2
 SJVAPCD SIGNIFICANCE THRESHOLDS AND PROJECT EMISSIONS

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Significance Thresholds (tons/year)¹	10	10	100	27	15	15
Construction Emissions (tons/year)²						
Alternative 1	1.33	2.19	2.70	<0.01	0.38	0.16
Alternative 2	1.16	2.07	2.45	<0.01	0.28	0.13
Operational Emissions (tons/year)³						
Alternative 1	2.20	2.18	3.84	0.02	1.50	0.42
Alternative 2	1.90	1.88	3.32	0.02	1.30	0.36

¹ Applies to both construction and operational emissions.

² Maximum unmitigated emissions in a calendar year.

³ Annual unmitigated emissions.

Sources: CalEEMod Version 2020.4.0, SJVAPCD 2015.

While project emissions would not be significant, as defined by the SJVAPCD significance thresholds, the project would still be required to observe applicable SJVAPCD rules and regulations. As noted, SJVAPCD Regulation VIII contains measures to reduce fugitive dust emissions during construction. Dust control provisions are also routinely included in site improvement plans and specifications, along with construction contracts. In addition, the project would be subject to SJVAPCD Rule 9510, which requires reductions in NO_x and particulate matter emissions from both project construction and project operations. Implementation of this and other SJVAPCD rules mentioned above would further reduce project emissions that are already considered less than significant without mitigation.

b) Cumulative Emissions.

As noted in a) above, project operational emissions would not exceed SJVAPCD significance thresholds. Future attainment of federal and State ambient air quality standards is a function of successful implementation of the SJVAPCD’s attainment plans. Consequently, the application of significance thresholds for criteria pollutants is relevant to the determination of whether a project’s individual emissions would have a cumulatively significant impact on air quality. Pursuant to the SJVAPCD’s guidance, if project-specific emissions would be less than the thresholds of significance for criteria pollutants, the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAPCD is in nonattainment under applicable federal or State ambient air quality standards. Cumulative impacts on air quality would be less than significant.

c) Exposure of Sensitive Receptors.

“Sensitive receptors” refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time also may be called sensitive receptors; these include schools and schoolyards, parks and

playgrounds, daycare centers, nursing homes, hospitals, and residential communities (SJVAPCD 2015).

The nearest sensitive receptor to the project site is a single-family residence approximately 650 feet east of the project site. As indicated in Table 3-2 above, the project would not emit pollutants at levels that would exceed SJVAPCD significance thresholds. These significance thresholds were established in part to ensure consistency with the objectives of the air quality plans adopted by the SJVAPCD, which were prepared in part to meet federal air quality standards designed to protect human health. In addition, the residence is not on any roadways on which project traffic would travel, so the residence would not be exposed to emissions from project traffic. Thus, emissions associated with the project would likely dissipate before reaching the residence. Project air quality impacts on sensitive receptors would be less than significant.

d) Odors and Other Emissions.

Some industrial raw materials, processes, and products can emit odors that would be considered objectionable, sometimes intensely. The Guide for Assessing and Mitigating Air Quality Impacts states that a project should be evaluated to determine the likelihood that it would result in nuisance odors. It also provides screening levels for potential odor sources, among which are wastewater treatment facilities, petroleum refineries, chemical and fiberglass manufacturing, food processing facilities, and feed lots/dairies (SJVAPCD 2015). No screening levels have been established for warehouses, as they have not been identified by SJVAPCD as significant odor sources.

Proposed project development is not expected to generate significant odors, other than from vehicle emissions. Vehicle emissions, as indicated in the CalEEMod run, would not be substantial. These emissions would be localized and would dissipate rapidly outside the project site. As noted above, the nearest sensitive receptors would be the residence to the east, and this residence would not be exposed to substantial odors from project operations nor to vehicle emissions.

Potential effects related to emissions of diesel particulate matter were considered, as diesel particulate matter is a TAC, and the project would generate truck traffic that would contribute to these emissions. Diesel particulate matter emissions would also be generated by construction equipment and traffic during construction work. Construction emissions would be temporary and would cease when work is completed. The project is within an industrial park, land uses within which are not sensitive to diesel particulate matter emissions.

The SJVAPCD recommends that projects that could emit substantial amounts of carcinogens conduct a Health Risk Assessment if there are nearby sensitive receptors that could be exposed to carcinogenic emissions. To determine if a Health Risk Assessment would be necessary, a “facility prioritization” is conducted on all sources of potential toxic emissions. If a project has a prioritization score of 10 or less, then the project is considered not to exceed the SJVAPCD significance threshold for health impacts and a Health Risk Assessment would not be required. Maximum project operational emissions of on-site diesel particulate matter emissions, including truck idling and on-site movement, would be

approximately 0.72 pounds per year. Based on the facility prioritization methodology adopted by SJVAPCD, the facility prioritization score for this project is 1.66, which is below the threshold score of 10. As such, diesel particulate matter emissions from the project are not expected to lead to an increased cancer risk.

As noted, the nearest sensitive receptor is approximately 650 feet to the east, and the receptor is not located along any road on which project truck traffic would travel. Therefore, the receptor would not be exposed to diesel particulate matter emissions from truck traffic generated on site or along roads. Project impacts related to odor and other emissions are considered less than significant.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
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?			✓	
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 Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?		✓		

NARRATIVE DISCUSSION

Environmental Setting

The Crossroads Industrial Park SEIR found that the development would have a negligible impact on biological resources, as the industrial park site had been historically modified and used for agriculture. Two vegetation types were identified in the industrial park area: ruderal/disturbed and landscape/ornamental, the latter associated with buildings and other developed areas (City of Lathrop 2001). As noted in Section 3.1, Aesthetics, the project site is mostly covered by grasses and weeds; there are no trees or other distinctive vegetation. This is consistent with vegetation found on vacant portions of Crossroads Industrial Park.

The site has been regraded and shaped for percolation of treated wastewater. As a result, the biological attributes that previously existed on the project site had been eliminated. These attributes have been replaced by the existence of open water habitat that occurs occasionally with discharges from the wastewater treatment plant to the percolation ponds. When the ponds contain water, this habitat is used by waterfowl, wading birds, and terrestrial wildlife able to use the ruderal vegetation along the pond levees.

Wildlife occurring in the Crossroads Industrial Park consist of species common to disturbed, ruderal, and agricultural landscapes and tolerant of nearby development and human disturbance. Typical bird species include yellow-billed magpie, European starling, killdeer, mourning dove, northern mockingbird, and American crow. The dominant mammal species is black-tailed hare, with ground squirrel and western pocket gopher also present. One reptile, western fence lizard, was observed in the area (City of Lathrop 2001).

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) is a comprehensive program for assessing and mitigating the biological impacts of converting open space or biologically sensitive lands to urban development in San Joaquin County, including the City of Lathrop. The San Joaquin Council of Governments (SJCOG) implements the SJMSCP on a project-by-project basis.

For the conversion of open space to non-open space uses that affect covered plant, fish, and wildlife species, the SJMSCP provides three compensation methods: preservation of existing sensitive lands, creation of new comparable habitat on the project site, or payment of fees that would be used to secure preserve lands outside the project site. In addition to fee payments, the SJMSCP identifies and requires the applicants to abide by Incidental Take Minimization Measures (ITMMs), which are protection measures that avoid direct impacts of development on special-status species (SJCOG 2000). The project site is in the Category A - No Pay Zone, within which projects are exempted from SJMSCP fees; the project may nonetheless obtain coverage under the SJMSCP for potential biological impacts.

Environmental Impacts and Mitigation Measures

a) Effects on Special-Status Species.

Special-status species include plant and/or wildlife species that are legally protected under the federal Endangered Species Act, the California Endangered Species Act, or other regulations, or are considered rare enough by the scientific community and trustee agencies to warrant special consideration.

The project is in an urban area with substantial existing development, so the site is not expected to support substantial plant and wildlife beyond what currently exists. Previous research and field surveys did not identify any special-status plant species in the area (City of Lathrop 2001). The Lathrop General Plan Update EIR likewise did not identify any occurrence of special-status species on the project site; the potential presence of such species has been identified in the vicinity (City of Lathrop 2022a).

Of the special-status wildlife species identified as potentially occurring in the Crossroads Industrial Park area, Swainson's hawk and burrowing owl were identified as the only species that have the potential to occur on more than a transitory or very occasional basis (Moore Biological Consultants 2018). Swainson's hawk, listed as threatened under the California Endangered Species Act, has been observed in the area. Burrowing owl, a State Species of Special Concern, was not observed during the cited study, but the project site contains potentially suitable habitat for this species.

Although the project would not be required to pay SJMSCP fees, the project would be required to participate in the SJMSCP, as required by City policy and specified in the mitigation measure below. The SJMSCP contains Incidental Take Minimization Measures (ITMMs) for both Swainson's hawk and burrowing owl, and SJCOG has previously applied ITMMs to the North Crossroads project. Implementation of the mitigation measure, with the applicable ITMMs, would reduce project impacts on special-status species to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-1: The project shall participate in and obtain coverage under the San Joaquin County Multi-Species Habitat Conservation and Open Space (SJMSCP). Prior to ground disturbance, the project applicant shall mitigate for the proportionate loss of potential wildlife habitat from the project site by implementing any Incidental Take Minimization Measures (ITMMs) prescribed by the San Joaquin Council of Governments (SJCOG). A biologist representing SJCOG shall visit the project site prior to the issuance of ITMMs to the City and to the project applicant.

Significance After Mitigation: Less than significant

b) Riparian and Other Sensitive Habitats.

As there are no streams on or near the project site, there is no riparian habitat. The Crossroads Industrial Park SEIR did not identify any sensitive natural communities on the project site or in the vicinity (City of Lathrop 2001). The Lathrop General Plan Update EIR identified five sensitive natural communities in the area: Coastal and Valley Freshwater Marsh, Great Valley Cottonwood Riparian Forest, Great Valley Cottonwood Riparian Forest, Great Valley Oak Riparian Forest, and Elderberry Savanna. Only one of these communities have been documented within one mile of Lathrop (City of Lathrop 2022a), and none of these are present on or near the project site. The project would have no impact on riparian or other sensitive habitats.

c) Wetlands and Waters of the U.S.

Waters of the U.S. include navigable waterways, their tributaries, and adjacent wetlands. More specifically, Waters of the U.S. encompass territorial seas, tidal waters, and non-tidal waters, along with perennial and intermittent creeks and drainages; lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Under Section 404 of the Clean Water Act, a permit issued by the U.S. Army Corps of Engineers must be secured prior to the discharge of dredged or fill materials into these waters. Waters of the State, subject to oversight by the State Water Resources Control Board (SWRCB) and by the RWQCB with jurisdiction over the affected water, include isolated wetlands not covered by federal regulations.

The National Wetlands Inventory, maintained by the U.S. Fish and Wildlife Service, indicates the presence of two Freshwater Pond sites on the project site (USFWS 2022). These two pond sites are in the area of the percolation basins, which are artificially created sites to dispose of recycled water. A field survey of the basins during the preparation of this document found no water in them. Since use of the percolation basins is planned to be discontinued, there would be no water source for these pond sites. As such, these water areas would be eliminated.

As the project site has been disturbed in the past, it is unlikely that any intact natural wetlands would be on the project site. Project impacts on State or federally protected wetlands or waters would be less than significant.

d) Fish and Wildlife Movement.

As noted, there are no streams on or near the project site. The project site is not a known wildlife migration corridor and is unlikely to be one, given its location amid urban development and its lack of trees or other vegetation communities. The project would have no impact on fish or wildlife movement.

As noted in a) above, the project site contains potentially suitable habitat for burrowing owl, which may find ground squirrel burrows on the site to use as nests. Implementation of Mitigation Measure BIO-1, which would require the implementation of ITMMs for burrowing owl should SJCOG determine them to be necessary, would reduce project impacts on burrowing owl nesting habitat to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measure BIO-1.

Significance After Mitigation: Less than significant

e) Local Biological Requirements.

Lathrop Municipal Code Section 12.28 contains provisions designed to protect water courses. As there are no water courses on the project site, this section would not apply to the project. Other potentially applicable local requirements are the City’s Street Tree Ordinance and the Master Street Tree Plan. However, as there are no trees on the project site or within the adjacent public right-of-way, these requirements would not apply. The project would have no impact on local biological requirements.

f) Conflict with Habitat Conservation Plans.

As discussed in a) above, the project would implement Mitigation Measure BIO-1, which would require compliance with the SJMSCP, including implementation of any applicable Incidental Take Minimization Measures. No other habitat conservation plans apply to the project site. The project would not conflict with applicable habitat conservation plans with implementation of mitigation.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measure BIO-1.

Significance After Mitigation: Less than significant

3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				✓
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?			✓	

NARRATIVE DISCUSSION

Environmental Setting

The Lathrop area is within the traditional territory of the Northern Valley Yokuts. Section 3.18, Tribal Cultural Resources, discusses the Yokuts in more detail.

The northern section of the City of Lathrop is on a portion of the Rancho Campo de los Franceses, a Spanish land grant area named for the early camp first occupied by French-Canadian trappers employed by the Hudson's Bay Company in 1832. Much of the remainder of the City is on a portion of the El Pescadero land grant.

Lathrop was a station on the Central Pacific Railroad, established in 1869 when the last stretch of the transcontinental railroad was built from Sacramento through this region, crossing the San Joaquin River at Mossdale to reach the Bay Area. The site of Lathrop was first known as Wilson's Station, after one of the landowners. Due to conflicts in the City of Stockton that infuriated Leland Stanford, the Central Pacific switched many operations to Wilson's Station, later re-named for Charles Lathrop, Stanford's brother-in-law (City of Lathrop 2019).

The Town's growth through the 1870s was steady, reaching a population of about 600 by 1879. However, with the transfer of the railroad roundhouse and machine shop to Tracy, the transfer of rural postal customers to Manteca and a major fire in 1911, Lathrop's population and economy dwindled until World War II. In 1942, the Lathrop Holding and Reconsignment Point was established in the Lathrop vicinity on what had been a sheep ranch, holding supplies for shipment through Bay Area ports. After the end of World War II, a new name was applied: Sharpe General Depot. In the 1950s, several industrial plants were built in the Lathrop area, providing additional employment in the region. Beginning in the 1980s, improvements to community infrastructure and the attractive pricing of homes brought even more growth. The pattern of rapid growth continues to this day, with industrial and commercial development in the area, as well as many residents commuting daily to the Bay Area. The City of Lathrop incorporated in 1989 (City of Lathrop 2019).

Environmental Impacts and Mitigation Measures

a) Historical Resources.

Research on potential onsite cultural resources was conducted by the Central California Information Center at California State University Stanislaus. A report on the results of the research is available in Appendix B of this document. The Central California Information Center found no formal record of any historic archaeological resources or historic buildings or structures on the project site. The project site is currently vacant and has had extensive ground disturbance associated with the installation of the percolation ponds. Therefore, it is unlikely that any historical resources are on the project site. The project would have no impact on historical resources.

b) Archaeological Resources.

The Central California Information Center report states that no prehistoric archaeological resources have been recorded on the project site. The CCIC did not recommend further survey or archaeological study of the site. Given its extensive disturbance, the project site is not expected to contain any intact archaeological resources.

However, the report notes that archaeological features have been recorded elsewhere within the boundary of the Lathrop USGS quadrangle map. A potentially significant impact could occur if previously unknown subsurface resources are uncovered during project construction. Mitigation described below would require work to be stopped when cultural resources are uncovered until these resources can be evaluated by a qualified archaeologist and recommendations made for their proper disposition. Implementation of this mitigation measure would reduce archaeological resource impacts to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

CULT-1: If any subsurface cultural resources are encountered during construction of the project, all construction activities within 100 feet of the encounter shall be halted until a qualified archaeologist can examine these materials, determine their significance and, if significant, recommend further mitigation measures that would reduce potential effects to a level that is less than significant. Recommended measures could include, but are not limited to, 1) preservation in place, or 2) excavation, recovery, and curation by qualified professionals. The developer shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the City's Community Development Department, consistent with the requirements of the CEQA Guidelines.

Significance After Mitigation: Less than significant

c) Human Burials.

Given its extensive disturbance, the project site is not expected to contain any human burials, particularly those of Native Americans. However, it is conceivable that excavation associated with the project could uncover a previously unknown burial. CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. All work in the vicinity of the find shall be halted, and the County Coroner shall be notified to determine if an investigation of the death is required, in accordance with California Health and Safety Code Section 7050.5.

If it is determined that the remains are Native American in origin, then the County Coroner must contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the most likely descendants of the deceased Native American, and the most likely descendants may make recommendations on the disposition of the remains and any associated grave goods with appropriate dignity. If a most likely descendant cannot be identified, the descendant fails to make a recommendation, or the landowner rejects the recommendations of the most likely descendant, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.

Compliance with the provisions of CEQA Guidelines Section 15064.5(e) would ensure that any human remains and associated grave goods encountered during project construction would be treated with appropriate dignity. Project impacts on human remains would be less than significant.

3.6 ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			✓	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✓	

NARRATIVE DISCUSSION

Environmental Setting

Electricity is a major energy source for residences and businesses in California. In San Joaquin County, electricity consumption in 2020 totaled approximately 5,737 million kilowatt-hours (kWh), of which approximately 3,621 million kWh were consumed by non-residential uses and the remainder by residential uses (CEC 2022a). Natural gas is another major energy source. In 2020, natural gas consumption in California totaled approximately 12,331 million therms. In San Joaquin County, natural gas consumption in 2020 totaled approximately 184 million therms, of which approximately 95 million therms were consumed by non-residential uses and the remainder by residential uses (CEC 2022b).

Motor vehicle trips also account for substantial energy usage. The SJCOG estimated countywide daily VMT was 17,868,785 miles in 2015, which led to the consumption of approximately 511 million gallons of gasoline and diesel fuel (SJCOG 2018a).

The State of California has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Code of Regulations, Title 24. Part 6 of Title 24 is referred to as the California Energy Code. In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code, also known as CALGreen, which became mandatory in 2011. CALGreen sets forth mandatory measures, applicable to new residential and nonresidential structures as well as additions and alterations, on water efficiency and conservation, building material conservation, and interior environmental quality. It also mentions energy efficiency, although CALGreen defers to the Energy Code for actions. The City has adopted the 2019 versions of both the California Energy Code and CALGreen.

California also has adopted a Renewables Portfolio Standard, the intent of which in part is to reduce the use of fossil fuels, a main source of greenhouse gas (GHG) emissions. The Renewables Portfolio Standard requires electricity retailers in the state to generate 33% of electricity they sell from renewable energy sources (i.e., solar, wind, geothermal, hydroelectric from small generators, etc.) by the end of 2020. In 2018, Senate Bill (SB) 100 was signed into law, which increased the electricity generation requirement from renewable sources to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

Environmental Impacts and Mitigation Measures

a) Project Energy Consumption.

Project construction would involve fuel consumption and use of other non-renewable resources. Construction equipment used for such improvements typically runs on diesel fuel or gasoline. The same fuels typically are used for vehicles that transport equipment and workers to and from a construction site. The ARB is actively working to reduce emissions from construction equipment by requiring such equipment to meet zero and near-zero emission standards. However, construction-related fuel consumption would be finite, short-term, and consistent with construction activities of a similar character. This energy use would not be considered wasteful, inefficient, or unnecessary.

Electricity may be used for equipment operation during construction activities. It is expected that more electrical construction equipment would be used in the future, as it would generate fewer air pollutant emissions. This electrical consumption would be consistent with construction activities of a similar character; therefore, the use of electricity in construction activities would not be considered wasteful, inefficient, or unnecessary, especially since fossil fuel consumption would be reduced. Moreover, under California's Renewables Portfolio Standard, a greater share of electricity would be provided from renewable energy sources over time, so less fossil fuel consumption to generate electricity would occur. Section 3.8, Greenhouse Gas Emissions, discusses the Renewables Portfolio Standard in detail.

According to the 2012 Commercial Buildings Energy Consumption Survey by the U.S. Energy Information Administration, the most recent such survey conducted, warehouse and storage facilities consumed on average 6.6 kWh of electricity per square foot annually and 19.4 cubic feet of natural gas per square foot annually (EIA 2012). Based upon these

factors, it is estimated that proposed development under Alternative 1 would consume 3,028,766 kWh of electricity and 8,902,738 cubic feet of natural gas annually. Energy consumption under Alternative 2 would be 2,614,781 kWh of electricity and 7,685,873 cubic feet of natural gas annually.

As indicated in the CalEEMod run (see Appendix A), the maximum VMT generated by traffic associated with project development (under Alternative 1) would be 3,882,805 annually under unmitigated conditions, or approximately 10,638 miles daily. Based on estimates by SJCOG, such vehicle traffic would consume approximately 304,212 gallons of gasoline and diesel fuel daily. With the project features and regulations that would mitigate GHG emissions, as described in Chapter 10.0, Greenhouse Gas Emissions, total annual maximum VMT would be 3,254,657, or 8,917 miles daily. Project vehicle traffic under this condition would consume approximately 254,998 gallons of gasoline and diesel fuel daily - a decrease of approximately 16.2% from business-as-usual conditions. Under the Alternative 2 scenario, daily gasoline and diesel fuel consumption under unmitigated and mitigated conditions would be approximately 262,632 gallons and 220,957 gallons, respectively.

The project would be required to comply with the adopted California Energy Code and CALGreen in effect at the time of project approval. Compliance with these standards would reduce energy consumption associated with project operations, although reductions from compliance cannot be readily quantified. Overall, project construction and operations would not consume energy resources in a manner considered wasteful, inefficient, or unnecessary. Project impacts related to energy consumption are considered less than significant.

b) Consistency with Energy Plans.

The City does not have adopted plans for renewable energy or energy efficiency. However, the City has adopted the 2019 versions of the California Energy Code and CALGreen, which contain provisions that promote energy efficiency. The project would be required to comply with the requirements of these two codes, which are designed to forward State energy conservation goals. Project impacts related to energy plans would be less than significant.

3.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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.)				
ii) Strong seismic ground shaking?			✓	
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?			✓	
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?			✓	
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?				✓
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

NARRATIVE DISCUSSION

Environmental Setting

The project site lies in the San Joaquin Valley in central California. The San Joaquin Valley is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. Large alluvial fans have developed on each side of the Valley. The project site is underlain by the Modesto Formation (Wagner et al. 1991). The Modesto Formation, ranging in depth from 10 to 200 feet, consists primarily of sand, silt, and clay seams deposited by rivers (DWR 2014).

The project site is relatively flat with minimal slope. The soil on the project site consists of three types, the locations of which are shown on Figure 3-1 (SCS 1992, NRCS 2022):

- Timor loamy sand, 0-2 percent slopes (254 on Figure 3-1). This moderately well-drained, nearly level soil is deep to a hardpan. It was formed in alluvium derived from granitic rock sources. Permeability of the soil is rapid, and runoff is slow. The soil has a slight water erosion hazard but a severe wind erosion hazard. The shrink-

swell (expansive) potential of this soil is low. This soil is found in the southern portion of the project site. Timor loamy sand is rated a Class IV soil when not irrigated and a Class III soil when irrigated (see Section 3.2, Agriculture and Forestry Resources).

- Tinnin loamy coarse sand, 0-2 percent slopes (255 on Figure 3-1). This very deep, well-drained, nearly level soil was formed in alluvium derived from granitic rock sources. Permeability of the soil is rapid, and runoff is slow. The soil has a slight water erosion hazard but a severe wind erosion hazard. The shrink-swell potential of this soil is low. This soil occupies the majority of the project site. Tinnin loamy coarse sand is rated a Class IV soil when not irrigated and a Class III soil when irrigated
- Urban land (260 on Figure 3-1). This consists of closely built-up areas in cities. The landscape has been so altered by urbanization that identification of soil properties is not feasible. This soil is concentrated along the northern boundary of the project site.

The closest known fault classified as active by the California Geological Survey is the Greenville fault, located approximately 20 miles to the west. The Vernalis Fault, approximately six miles to the southwest, has had movement as recently as the Quaternary Period, and thus is considered a potentially active fault. Other faults that could potentially affect the City include the Mount Diablo, Calaveras, Hayward, Ortigalita, and San Andreas Faults. No significant earthquakes have occurred in Lathrop (City of Lathrop 2019).

Environmental Impacts and Mitigation Measures

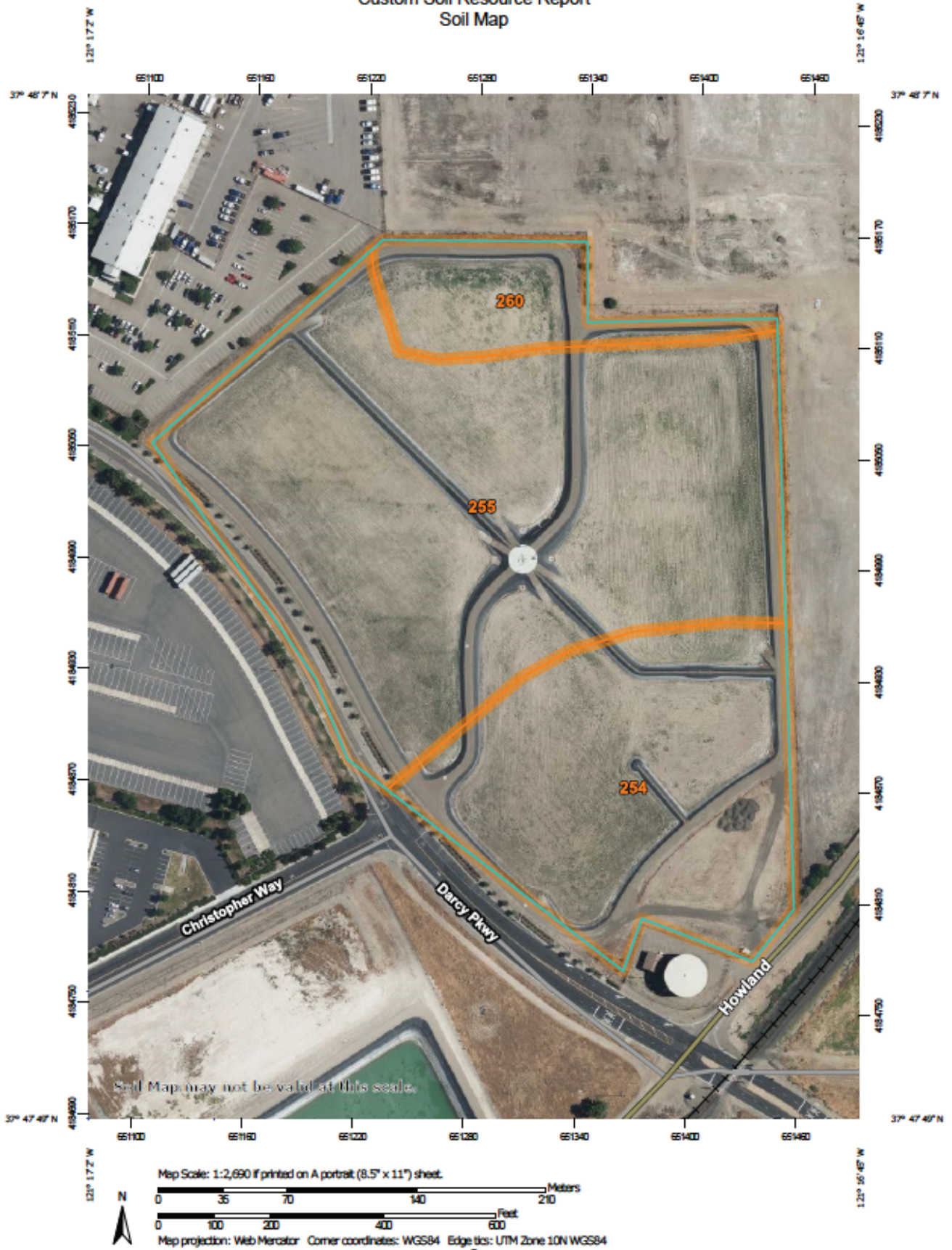
a-i) Fault Rupture Hazards.

The project site is not on or near a known earthquake fault. The Alquist-Priolo Earthquake Fault Zoning Act, enacted in 1972 and subsequently amended, requires the delineation of Special Studies Zones along known active faults in California. Cities and counties must regulate certain development projects within the zones. The project site is not within an Alquist-Priolo Special Studies Zone (California Geological Survey 2021). The Seismic Hazards Mapping Act, passed in 1990, requires mapping of seismic hazard zones. The project site is not within a seismic hazard zone map prepared under the Seismic Hazards Mapping Act (California Geological Survey 2021). Based on this information, the project would have no impact related to fault rupture hazards.

a-ii) Seismic Ground Shaking.

The project site is potentially subject to seismic shaking, mainly from earthquakes occurring outside San Joaquin County. The City has adopted the 2019 California Building Code, which contains seismic design criteria that must be incorporated into project design to ensure that improvements can withstand anticipated ground shaking from maximum credible earthquakes on active faults within the region. Compliance with the adopted California Building Code would reduce seismic ground shaking impacts to a level that would be less than significant.

Custom Soil Resource Report
Soil Map



a-iii) Seismic-Related Ground Failure.

The Crossroads Industrial Park SEIR stated that no potential seismic-related ground failure hazards, such as liquefaction, were identified on the project site (City of Lathrop 2001). As noted, the City has adopted the 2019 California Building Code, 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 (City of Lathrop 2022a). The project would have no impact related to ground failure hazards, especially with compliance with the adopted California Building Code.

a-iv) Landslides.

The project site and vicinity are in a topographically flat area. The Crossroads Industrial Park SEIR stated that no potential landslide hazards were identified on the project site (City of Lathrop 2001). The project would have no impact related to landslides.

b) Soil Erosion.

The construction and grading associated with site preparation and construction of the project would temporarily increase the exposure of soils on the project site to water and wind erosion. As noted, Tinnin soils have a slight water erosion potential, but a severe wind erosion potential.

Dust control measures noted in Chapter 6.0, Air Quality, would reduce potential wind erosion impacts of the project, particularly the watering of exposed soils. Also, the project would be required to follow the Multi-Agency Post-Construction Storm Water Standards Manual and comply with the City's Storm Water Development Standards, as required by the Central Valley RWQCB. An erosion control plan is required as part of compliance with the Storm Water Development Standards, which utilizes Best Management Practices (BMPs) to limit erosion during and after construction.

In addition, construction activities that would disturb more than an acre of land would need to obtain a Construction General Permit from the SWRCB. The Construction General Permit would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer. The SWPPP would include implementation of BMPs to avoid or minimize adverse water quality impacts from erosion and sedimentation. BMPs fall within the categories of Temporary Soil Stabilization, Temporary Sediment Control, Wind Erosion Control, Tracking Control, Non-Storm Water Management, and Waste Management and Materials Pollution Control.

With implementation of Construction General Permit conditions, the erosion control plan required by Storm Water Development Standards, and dust control measures, potential erosion resulting from construction activities would be minimized. No erosion is expected after project work is completed, with the project site being mostly paved and landscaped. Project impacts related to erosion would be less than significant.

c) Geologic Instability.

As noted, the Crossroads Industrial Park SEIR did not identify any potential seismic-related hazards, such as liquefaction or landslides. The geologic conditions and soil characteristics were considered well suited for industrial development (City of Lathrop 2001). As noted, the project would be subject to the 2019 California Building Code, which would address potential geologic instability issues. Project impacts related to geologic instability would be less than significant.

d) Expansive Soils.

As noted, both the Timor and Tinnin soils have low shrink-swell potentials. The Urban Land soil unit has not been assessed for its expansive potential; however, the extent of this soil is limited. The Crossroads Industrial Park SEIR stated that no expansive soils were located within the industrial park site (City of Lathrop 2001). The project would have no impact related to expansive soils.

e) Adequacy of Soils for Sewage Disposal.

The project would not require an onsite sewage disposal system, as it would connect to the City's wastewater system. The project would have no impact related to soil adequacy for sewage disposal.

f) Paleontological Resources.

The project site has no unique geologic features, and there are no known existing paleontological resources on the project site. Given past disturbance of the project site, it is unlikely that intact paleontological resources would be found. However, the project site is underlain by the Modesto Formation, which has in the past been associated with paleontological resources. It is conceivable that ground disturbance associated with the project could unearth paleontological materials of significance. The establishment of procedures to address the occurrence of paleontological discoveries would reduce any potential impacts to a less than significant level. These procedures are set forth in the mitigation measure presented below. Implementation of this mitigation measure would reduce paleontological resource impacts to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

GEO-1: If any subsurface paleontological resources are encountered during construction of the project, all construction activities within 100 feet of the encounter shall be halted until a qualified paleontologist can examine these materials, determine their significance and, if significant, recommend further mitigation measures that would reduce potential effects to a level that is less than significant. Recommended measures could include, but are not limited to, 1) preservation in place, or 2) excavation, recovery, and curation by qualified professionals. The developer shall be responsible for retaining qualified

professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the City’s Community Development Department, consistent with the requirements of the CEQA Guidelines.

Significance After Mitigation: Less than significant

3.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

NARRATIVE DISCUSSION

Environmental Setting

Background

A greenhouse gas (GHG) is a gas that absorbs and emits radiation within the thermal infrared range, trapping heat in the earth’s atmosphere. There are several types of GHGs, which are both naturally occurring and generated by human activity. Increased atmospheric concentrations of GHGs are considered a primary contributor to global climate change, which is a subject of concern for the State of California. Potential climate change impacts occurring in the San Joaquin Valley include more intense and frequent heat waves, higher frequency of catastrophic floods, more intense and frequent drought, and more severe and frequent wildfires (Westerling et al. 2018).

Unlike the criteria air pollutants described in Section 3.3, Air Quality, GHGs have no “attainment” standards established by the federal or State government. In fact, GHGs are not generally thought of as traditional air pollutants because their impacts are global in nature and not directly health-related, while air pollutants mainly affect the general region of their release to the atmosphere and can have adverse human effects. Nevertheless, the U.S. Environmental Protection Agency has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act due to their impacts associated with climate change (EPA 2009).

GHG emissions in California in 2019, the most recent year for which data are available, were estimated at approximately 418.2 million metric tons carbon dioxide equivalent

(CO₂e) – a decrease of approximately 14.6% from the peak level in 2004. Transportation was the largest contributor to GHG emissions in California, with almost 40% of total emissions. Other significant sources include industrial activities, with approximately 21% of total emissions, and electric power generation, both in-state and imported, with approximately 14% of total emissions (ARB 2021).

GHG Reduction Plans

The State of California has implemented GHG emission reduction strategies through Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, which requires total statewide GHG emissions to reach 1990 levels by 2020, or an approximately 29% reduction from 2004 levels. The 2019 state GHG emissions were almost 13 million metric tons CO₂e below the 2020 target established by AB 32 (ARB 2021).

In 2016, SB 32 was enacted. SB 32 extended the GHG reduction objectives of AB 32 by mandating statewide reductions in GHG emissions to levels that are 40% below 1990 levels by the year 2030. The State has adopted an updated Scoping Plan that sets forth strategies for achieving the SB 32 target, which is 260 million metric tons CO₂e. The 2017 Scoping Plan proposes various measures to achieve the 2030 target. Most of these are State measures, such as use of the cap-and-trade program, the Short-Lived Climate Pollutant Plan, and achievement of the 50% renewable sources of electricity in the Renewables Portfolio Standard. The updated Scoping Plan continues many existing programs such as low-carbon fuel standards, renewable energy, and methane reduction strategies, along with a proposed 20% reduction in GHG emissions from refineries. It also addresses for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2017). The 2017 Scoping Plan is in the process of being updated.

The City of Lathrop does not have an adopted GHG reduction plan, also known as a Climate Action Plan. The current Lathrop General Plan has no policies that explicitly address GHG issues. However, the General Plan update, a draft version of which has been released for public review, proposes a goal of preparing the community to adapt to climate change, along with associated policies and implementing actions.

Environmental Impacts and Mitigation Measures

a, b) Project GHG Emissions and Consistency with GHG Reduction Plans.

GHG emissions from project construction and operations were estimated using CalEEMod. Detailed results are available in Appendix A of this IS/MND and are provided in Table 3-3 below. As shown in Table 3-3, construction GHG emissions generated by project development under Alternative 1 were estimated at approximately 1,243 metric tons CO₂e. Under Alternative 2, construction GHG emissions generated by project development were approximately 1,024 metric tons CO₂e. Under both development alternatives, there was practically no difference between the “unmitigated” construction GHG emissions modeled by CalEEMod and the GHG emissions that included actions that would mitigate emissions (“mitigated”).

TABLE 3-3
PROJECT GHG EMISSIONS

GHG Emission Type	Unmitigated Emissions (metric tons CO ₂ e)	Mitigated Emissions (metric tons CO ₂ e)
<i>Alternative 1</i>		
Construction ¹	1,243	1,243
Operational ²	3,031	2,552
<i>Alternative 2</i>		
Construction ¹	1,024	1,024
Operational ²	2,619	2,209

¹ Maximum GHG emissions for calendar year.

² Annual emissions.

Source: California Emissions Estimator Model v. 2020.4.0.

CalEEMod estimated that maximum “business-as-usual” (unmitigated) GHG emissions from project operations would be approximately 3,031 metric tons CO₂e annually under Alternative 1, and approximately 2,619 metric tons CO₂e annually under Alternative 2. Under both development alternatives, the project contains features that would reduce GHG emissions, and it must comply with other requirements that would likewise reduce emissions. These include the following:

- Increase in jobs per job acre.
- Proximity to job center (Crossroads Industrial Park).
- Implementation of employee trip reduction program, which is required by SJVAPCD Rule 9410 (see Section 3.3, Air Quality).
- In accordance with SB X7-7, new development would implement water conservation measures that lead to a 20% reduction in indoor and outdoor water use.
- In accordance with AB 341, new development would divert 75% of its solid waste stream through recycling and other measures.

With these features and requirements, mitigated project operational GHG emissions under Alternative 1 would be approximately 2,552 metric tons CO₂e annually - a reduction of approximately 15.8% from the business-as-usual level. Under Alternative 2, mitigated project operational GHG emissions would be approximately 2,209 metric tons CO₂e annually - a reduction of approximately 15.6% from the business-as-usual level.

However, nearby air districts such as the Bay Area Air Quality Management District and the Sacramento Metropolitan Air Quality Management District have established a quantitative threshold of 1,100 metric tons CO₂e to determine significance of project GHG emissions for CEQA purposes (BAAQMD 2017, SMAQMD 2021). This threshold applies

to both construction and operational emissions. CEQA Guidelines Section 15064.7 allows for the use of significance thresholds established by other agencies. The GHG construction emissions of the proposed project are below the threshold of 1,100 metric tons CO₂e. Based on this threshold, project GHG construction emissions are less than significant. In any event, GHG construction emissions would be limited due to the length of time of construction activity, and these emissions would cease once work is completed. However, project operational GHG emissions, both mitigated and unmitigated, would be above this significance threshold. Therefore, further analysis is required.

As the City has no GHG reduction plan, analysis of project impacts will be based on the 2017 California Scoping Plan. Most of the measures the 2017 Scoping Plan proposes to achieve the 2030 target are State measures. Based on estimates in the 2017 Scoping Plan, State actions would account for 89.8% of GHG reductions needed by 2030, with local actions accounting for approximately 9.3% of reductions. Applying this ratio to the percentage reduction for 2030, approximately 6.0% of the reduction from 2030 business-as-usual levels would be achieved by local measures. Therefore, a project that can show GHG reductions greater than 6.0% can be said to be consistent with the reduction goals of SB 32.

With application of the project features listed above, project GHG operational emissions would be approximately 16.0% less than business-as-usual levels under Alternative 1, and approximately 15.9% under Alternative 2. Both would exceed the 6.0% local reduction share. Therefore, under either development alternative, the project would be consistent with the reduction goals of SB 32.

The State of California has comprehensive GHG regulatory requirements, with laws and regulations requiring reductions that affect project emissions. The project is subject to several State regulations applicable to project design, construction, and operation that would reduce GHG emissions, increase energy efficiency, and ensure compliance with the Scoping Plan. Legal mandates to reduce GHG emissions from vehicles, for example, would reduce project-related vehicular emissions. Other mandates that would reduce GHG emissions include reducing per capita water consumption and imposing waste management standards to reduce methane and other GHGs from solid wastes.

Additionally, the project is expected to implement measures that would lead to a decrease in vehicle miles traveled (VMT). A reduction in VMT would reduce the amount of GHG emissions that would be generated by project vehicle traffic. Section 3.17, Transportation, discusses VMT and project impacts related to it in detail.

As discussed in Section 3.6, Energy, the project would be subject to codes that require energy efficiency measures, which would reduce the demand for electricity produced by fossil fuels – a major source of GHG emissions. Also, as discussed in Section 3.6, attainment of the targets of the Renewables Portfolio Standard would reduce the amount of electricity generated by fossil fuels, further reducing GHG emissions from energy sources.

Based on the information provided above, the project would be consistent with GHG reduction plans of the State. Project impacts related to GHG emissions and consistency with GHG emission reduction plans would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
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?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
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?				✓
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?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

NARRATIVE DISCUSSION

Environmental Setting

Hazardous material sites of all statuses are recorded in the GeoTracker database, maintained by the SWRCB, and the EnviroStor database, maintained by the Department of Toxic Substances Control (DTSC). A search of the GeoTracker and EnviroStor databases found no record of active hazardous material sites on the project site (SWRCB 2022, DTSC 2022). Only two active sites were recorded as being within one mile of the project site. These sites, recorded in the EnviroStor database, are the J.R. Simplot site and the Oxychem site. Both are north of the project site, with the Oxychem site being the closer of the two.

The regulation of hazardous materials at the federal level is primarily under the Resource Conservation and Recovery Act, which creates a framework for the transport, storage, and disposal of hazardous wastes. The U.S. Department of Transportation sets regulations for the transport of hazardous materials, such as gasoline and diesel fuels. Several state agencies regulate the transportation and use of hazardous materials, including the California Environmental Protection Agency and the Office of Emergency Services. The California Highway Patrol and Caltrans enforce regulations specifically related to hazardous materials transport. Within the California Environmental Protection Agency, the DTSC has primary authority to enforce hazardous materials regulations.

On the local level, the San Joaquin County Environmental Health Department was approved by the State as a Certified Unified Program Agency (CUPA). A CUPA administers several programs to minimize potential risks to public health and safety. Among these programs is the Hazardous Material Business Plan program. A Hazardous Material Business Plan is required for all activities that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid. The requirements of the plan include an inventory of hazardous materials, an emergency plan addressing the release of hazardous materials, and a training program for employees.

Environmental Impacts and Mitigation Measures

a) Hazardous Material Transportation, Use, and Storage.

Proposed project development would likely require the storage, transport, use, and disposal of hazardous materials, generally cleaning products, fuels, solvents, and products designed to maintain warehouse equipment. Proposed development also could lead to the storage of finished goods or raw materials that may be considered hazardous to human health.

Project site activities that would transport or store hazardous materials would be required to do so in compliance with applicable local, state, and federal regulations. The project also would be required to submit a Hazardous Material Business Plan should it store hazardous materials of specific quantities. Compliance with existing hazardous material regulations and Hazardous Material Business Plan provisions would reduce impacts related to routine transport, use, and storage of hazardous materials to a level that would be less than significant.

b) Upset and Accident Conditions.

Construction activities on the project site may involve the use of hazardous materials such as fuels and solvents, and thus create a potential for hazardous material spills. Construction and maintenance vehicles would transport and use fuels in ordinary quantities. Fuel spills, if any occur, would typically be minimal and would not typically have significant adverse effects. In accordance with SWPPP requirements (see Section 3.7, Geology and Soils), contractors have absorbent materials at construction sites to clean up minor spills. All construction work will be required to follow the existing City of Lathrop ordinances related to construction-related hazards, materials usage, and disposal.

As noted in a) above, hazardous materials transportation and storage on the project site would be subject to federal, state, and local regulations that would ordinarily prevent release of hazardous materials to the soil and/or groundwater and the creation of new hazardous material or waste sites. These requirements would include preparation and implementation of a Hazardous Materials Business Plan, which provides basic information to “first responders” (fire, police) so that threats to public safety or the environment can be minimized in the event of a release or threatened release.

If the project does not propose to store hazardous materials in quantities requiring a Hazardous Materials Business Plan, the most likely source of releases would be leaks of fluids from motor vehicles and spills of cleaning products and solvents used in warehouse operations. Spills of these materials would be minimal and would occur on building floors and pavement, which would prevent these materials from directly entering the soil. Project impacts related to upset and/or accident conditions involving the release of hazardous materials would be less than significant.

c) Release of Hazardous Materials near Schools.

There are no schools within one-quarter mile of the project site. The closest existing schools are the “one.Lathrop” community school, more than one mile north of the project site, and Mossdale Elementary School, approximately 1.25 miles to the west. As noted in a) above, hazardous materials transportation and storage on the project site would be subject to federal, state, and local regulations that would prevent release of hazardous materials to the soil and/or groundwater and the creation of new hazardous material or waste sites. The project would have no impact related to hazardous material releases near schools.

d) Hazardous Material Sites.

As noted, the project site does not have a recorded hazardous material site regulated by the State of California. The nearest recorded active site is the Oxychem site to the north. This site has been recorded as affecting groundwater. A report in 2006 indicated that groundwater gradient control has been adequately maintained in all three zones of the aquifer and control of the impacted groundwater plume continues to be maintained (DTSC 2022). The project would not disturb or be constructed on this or any other hazardous material site. The project would have no impact on hazardous material sites.

e) Public Airports.

The nearest public airport, Stockton Metropolitan Airport, is approximately seven miles to the north. The project site is not within any of the airport's safety zones, and it is outside the Airport Area of Influence, as indicated in the Airport Land Use Compatibility Plan for Stockton Metropolitan Airport (Coffman Associates 2016). The project would not affect, or be affected by, Stockton Metropolitan Airport operations. The project would have no impact related to public airports.

f) Emergency Response and Evacuations.

Project construction activity, including infrastructure work within D'Arcy Parkway and, to a lesser extent, construction equipment and vehicle traffic, could potentially disrupt vehicle traffic flow. This could potentially affect emergency vehicles responding to calls from the project vicinity, and it also could hinder any evacuations that may use D'Arcy Parkway as an evacuation route.

All construction work in City streets shall comply with the encroachment permit issued by the City. Lathrop Municipal Code Chapter 12.08 sets forth provisions regarding encroachment, including compliance with the general law regulating travel over a public street, which would include posted signs or notices which limit speed or direction of travel. Compliance with the provisions of the encroachment permit would reduce construction impacts on traffic flow on D'Arcy Parkway. Also, construction work within City streets ordinarily involves coordination with the Lathrop Police Department and other City departments, along with the Lathrop-Manteca Fire District. These agencies, if necessary, would recommend actions to reduce potential impacts on emergency responses.

Once construction work is completed, emergency vehicle traffic on D'Arcy Parkway would not be obstructed by any project features, nor would the project interfere with any evacuations that may use D'Arcy Parkway. Project impacts on emergency response and evacuations would be less than significant.

g) Wildland Fire Hazards.

The project site is in a predominantly developed area and therefore is not susceptible to wildland fire hazards. Additionally, the project would reduce the existing fire hazard on the currently vacant parcel by replacing the existing grasses and weeds with urban development. The project would have no impact related to wildland fire hazards. Refer to Section 3.20, Wildfire, for additional discussion.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		✓		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river runoff or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?			✓	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			✓	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
iv) Impede or redirect flood flows?			✓	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

NARRATIVE DISCUSSION

Environmental Setting

Surface Waters

As discussed in Section 3.4, Biological Resources, there are no surface streams or wetlands on or near the project site. The San Joaquin River is located approximately 1.3 miles west-southwest of the site, beyond the I-5/SR 120 interchange.

Surface water quality issues in Lathrop and the Crossroads area are a function of the storm water quality management. Surface water quality is maintained through the City's compliance with the SWRCB's Water Quality Order No. 2013-0001-DWQ, which is a general permit issued to small municipal separate storm sewer systems (MS4) statewide, as part of the National Pollutant Discharge Elimination System (NPDES) program authorized by the federal Clean Water Act.

The City of Lathrop, in collaboration with San Joaquin County and the Cities of 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 MS4 permit requirements. The Stormwater Standards Manual includes site design measures to preserve, create, or restore areas that provide important water quality benefits, source control measures to minimize the transport of and/or eliminate potential sources of pollution to stormwater runoff, and Low Impact Development control measures to reduce and/or eliminate the volume of stormwater runoff and pollutants leaving the project site. For this project, the post-construction stormwater runoff flow rate shall not exceed the pre-construction stormwater runoff flow rate for the 2-year, 24-hour design storm event (Larry Walker Associates 2015).

Currently, wastewater generated by urban development in Lathrop is treated to a tertiary level at the nearby Lathrop Consolidated Treatment Facility; a portion of the flows have been discharged to percolation basins on the project site, where the recycled water percolates into the groundwater system. The discharge of recycled water to the percolation basins is subject to the provisions of Central Valley RWQCB Order No. R5-2016-0028, which sets forth the Waste Discharge Requirements for the recycled water and includes a Master Recycling Permit. Discharge to percolation bins will shortly be replaced by the City's approved CIP WW20-17 Recycled Water River Discharge Project. The river discharge will replace the existing use of percolation ponds on the project site and make the project site available for industrial development. The River Discharge Project is under construction.

Groundwater

The project site is within the legal boundaries of the Tracy Groundwater Subbasin. The Tracy Subbasin covers an area of approximately 373 square miles in southwestern San Joaquin County. Groundwater levels have been recorded at more than 226 wells in the Tracy Subbasin, several of which are in the City. Currently, groundwater levels in the vicinity of the project site range from 10 to 15 feet below ground surface (GEI Consultants 2021). The City draws a substantial amount of its drinking water supply from groundwater sources (see Section 3.19, Utilities and Service Systems).

The State's Sustainable Groundwater Management Act requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally based Groundwater Sustainability Plans for sustainable use of groundwater and avoidance of overdraft. Plans for "critically overdrafted" basins must be completed and adopted by January 31, 2020, while plans for high- and medium-priority basins have an adoption deadline of January 31, 2022. In 2019, the City established the City of Lathrop Groundwater Sustainability Agency, which covers the entire City that is

not part of the Stewart Tract, which has its own agency. The 2019 action also detached the City from the Eastern San Joaquin Groundwater Subbasin and added it to the Tracy Subbasin, designated a medium-priority basin.

A Groundwater Sustainability Plan for the Tracy Subbasin has been adopted. The Groundwater Sustainability Plan has separate goals and actions for the portions of the Subbasin within the Delta and portions outside the Delta. The sustainability goal for the non-Delta portions of the Subbasin is to provide reliable and sustainable groundwater resources for existing and future needs of all beneficial users in the Subbasin that does not degrade or decrease over-time and will continue to be sustained through continued local adaptive management of the resources. This goal would be accomplished in part with the implementation of two projects that would reduce pumping and increase recharge for the affected aquifers. Ongoing refinement of the groundwater model used for the Groundwater Sustainability Plan may lead to other projects being implemented (GEI Consultants 2021). Neither of the proposed projects are applicable to new development in Lathrop.

Flooding

Potential flooding hazards are designated on maps prepared by the Federal Emergency Management Agency (FEMA). FEMA maps focus on areas potentially subject to inundation by a 100-year flood (i.e., a flood of such magnitude that occurs on average once every 100 years), also known as a Special Flood Hazard Area. According to FEMA Map Panel 06077C0620F, the project site is in Zone X. Zone X indicates the project site is at reduced risk from a 100-year flood due to a levee (FEMA 2009).

SB 5 and related State legislation requires future development to consider the 200-year flood event (i.e., a flood of such magnitude that occurs on average once every 200 years) within certain Central Valley geographies. Most of the City of Lathrop, including the project site, is within a designated floodplain where a 200-year flood greater than three feet in depth would occur (SJAFCA 2021). To comply with the requirements of SB 5 and related legislation, the City of Lathrop amended its General Plan in July 2015 and its Zoning Ordinance in June 2016. It also adopted Findings of Adequate Progress in July 2016, and in April 2017 adopted an Interim Urban Level of Flood Protection Levee Impact Fee under which new development makes a fair-share contribution to the urban-level flood protection planned by the City. The levee impact fee is codified in Lathrop Municipal Code Chapter 3.23.

Lathrop Municipal Code Chapter 17.17 states that new development shall not be approved in the 200-year flood zone as defined by SB 5 unless adequate flood protection is provided or adequate progress is made towards providing such protection, or conditions imposed on the new development will protect the property to the urban level of flood protection in urban and urbanizing areas or the national Federal Emergency Management Agency standard of flood protection in non-urbanized areas. The project site, as is most of Lathrop outside the River Islands area, is within Reclamation District 17, which maintains levees for flood protection. In 2016, the Lathrop City Council adopted an Adequate Progress Report finding that adequate progress was being made towards providing 200-year flood protection within the portion of the City protected by RD 17 levees (City of Lathrop 2016).

The City has made subsequent adequate progress findings every year since, including the latest in 2021.

Environmental Impacts and Mitigation Measures

a) Water Quality.

Project construction work could have an impact on surface water quality due to exposure of soils to potential erosion. As described in Section 3.7, Geology and Soils, construction activities that would disturb more than an acre of land area would need to obtain a Construction General Permit, which would require preparation of a SWPPP that includes construction BMPs to control soil erosion, runoff, and waste discharges, including methods to clean up contaminants if they are released. Implementation of the SWPPP would reduce potential surface water quality impacts from construction activities to a level that would be less than significant.

Storm water would be collected in an on-site system of storm drains and catch basins that would eventually discharge collected storm water to the City's storm drainage system. Project facilities would be required to comply with the City's adopted Storm Water Development Standards and its MS4 NPDES Permit, as well as the Multi-Agency Post-Construction Stormwater Standards Manual. Mitigation described below would require compliance with these standards. Implementation of this mitigation measure would ensure that stormwater generated on the project site would not result in the violation of any water quality standards.

The project proposes to collect on-site runoff in detention basins, where runoff would be held until it can be released into the City's storm drainage system. The basins would be unlined, which would allow for infiltration of storm water into the relatively coarse soils of the project site. Infiltration would reduce the project's effects on groundwater recharge. Due to separation between the basins and the groundwater, the percolation process is expected to remove pollutants from runoff before it reaches the groundwater table. Therefore, the project would not adversely affect groundwater quality. Overall, impacts to surface and groundwater quality resulting from project construction and operations would be less than significant with implementation of the mitigation measure below.

Level of Significance: Potentially significant

Mitigation Measures:

HYDRO-1: The project shall provide post-construction BMPs as required to control runoff volumes and reduce pollutant loads in stormwater discharges to acceptable levels, including compliance with the adopted Multi-Agency Post-Construction Stormwater Standards Manual and the City's Storm Water Development Standards.

Significance After Mitigation: Less than significant

b) Groundwater Supplies and Recharge.

The revised project would connect to the City's water service, which in part relies on groundwater. Water from the City wells currently meets all California Department of Health Services drinking water standards; the only treatment provided is chlorination at the wellhead. As discussed in more detail in Section 3.19, Utilities and Service Systems, the City has adequate existing or anticipated water supplies to support the project.

The project would require the removal of percolation basins where recycled water has previously been sent. As a consequence, the project would eliminate onsite sources of aquifer recharge. However, the project would not eliminate the recharge of the Tracy Groundwater Subbasin by the recycled water; instead, the recycled water would replenish the Subbasin through the River Discharge Project that has been approved. Therefore, the project would not result in a loss of recharge within the Subbasin. As noted in a) above, the project proposes the installation of detention basins that would allow for limited percolation into the ground. Project impacts on groundwater supplies and recharge would be less than significant.

c-i, ii, iii) Drainage Patterns and Runoff.

The project would change drainage patterns and increase runoff due to construction of buildings and other impervious surfaces. An on-site drainage system would collect all runoff generated on the project site and send it to detention basins, from which excess runoff would be discharged to the City's storm drainage system. Because of this, the project would not change drainage patterns such that increased erosion, siltation, or flooding would occur on- or off-site. As discussed in a) above, storm water collected from the project site would ultimately be treated and discharged in a manner consistent with the requirements of the City's MS4 permit and the Multi-Agency Post-Construction Stormwater Standards Manual. Project impacts related to drainage patterns and runoff would be less than significant.

c-iv) Flooding Hazards.

As noted, the FEMA map for the project site designates the site within Zone X, which indicates the project site is at reduced risk from a 100-year flood due to a levee. FEMA generally designates areas at risk from a 100-year flood within Zone A or a variant thereof. Since the project site is not within Zone A, it is not considered by FEMA to be within a Special Flood Hazard Area.

The project site is within a designated 200-year floodplain and thus would be subject to local requirements related to SB 5, among them the levee impact fee. The fee would be applied to flood protection improvements that would bring local levees up to 200-year flood protection standards, as well as reduce the probability of these facilities breaching. Compliance with the levee fee requirement would minimize project impacts related to 200-year flooding hazards to a level that would be less than significant.

d) Release of Pollutants in Flood, Tsunami, or Seiche Zones.

As described in c-iv) above, the project site is within a designated 200-year floodplain, and the project may introduce hazardous materials on the site (see Section 3.9, Hazards and Hazardous Materials). However, payment of the levee impact fee would reduce the probability of flooding impacts, which in turn would reduce the probability of pollutants being released into flood flows from a 200-year flood.

The project site is not on or near any large bodies of water; therefore, the site would not experience tsunami or seiche hazards and thus not be subject to pollutant releases as a result of these events. Project impacts would be less than significant.

e) Conflicts with Water Quality or Groundwater Management Plans.

As discussed in a) above, project wastewater and storm drainage would be subject to the City’s NPDES MS4 permit and the Lathrop Consolidated Treatment Facility’s Waste Discharge Requirements, both of which are intended to maintain water quality. As noted, a Groundwater Sustainability Plan for the Tracy Subbasin has been adopted in accordance with the Sustainable Groundwater Management Act. The project is not expected to interfere with implementation of projects and management actions associated with the Groundwater Sustainability Plan. Project impacts on water quality and sustainable groundwater plans would be less than significant.

3.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				✓
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?			✓	

NARRATIVE DISCUSSION

Environmental Setting

The project site is in the eastern portion of the Crossroads Industrial Park, which has been predominantly developed with industrial and warehouse uses. Chapter 1.0, Introduction, provides an overall description of the Crossroads Industrial Park project. The proposed project site itself is vacant, one of the few remaining vacant parcels within the Crossroads project area. Past land uses on the project site have included agriculture and, more recently, percolation basins for disposal of recycled water.

Land west of the project site, within the Crossroads Industrial Park, has been developed with industrial and warehouse uses. Land southwest of the project site is the City of Lathrop Consolidated Treatment Facility, which treats sewage generated within the City and currently sends a portion of the treated sewage (recycled water) to the percolation basins on the project site. Adjacent to and south of the project site is a water storage tank that is part of the City's potable water system (see Section 3.19, Utilities and Service Systems). Vacant land to the north of the project site is part of the larger J.R. Simplot property. Land to the east of the site is predominantly vacant, with a few scattered structures.

The City of Lathrop General Plan, adopted in 1991 and subsequently amended, guides development within the City and its Planning Area, in part by designating parcels for specific types of development. The land use designation for the project site is GI, General Industrial. This designation allows for the proposed land uses of the project (City of Lathrop 2004). The Lathrop General Plan is in the process of being updated. A Draft General Plan update was released for public review, with the public comment period ending on July 11, 2022. The project site designation under the proposed General Plan update would be General Industrial - the same as under the current General Plan.

The City's Zoning Ordinance (Lathrop Municipal Code Title 17) was adopted to preserve, protect and promote the public health, safety, peace, comfort, convenience, prosperity and general welfare of the City and its residents. It is also intended to implement the land use and other relevant policies of the Lathrop General Plan. The current City zoning for the project site is IG - General Industrial. The warehousing and distribution development proposed by the project is a Permitted Use in the IG zone.

The State has enacted legislation that seeks to address the adverse environmental impacts of projects that disproportionately affect minority and/or lower income communities, particularly those already burdened with environmental problems. The California Office of Environmental Health Hazard Assessment has developed the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify "environmental justice" or "disadvantaged" communities. CalEnviroScreen measures pollution and population characteristics using 20 indicators such as air and drinking water quality, waste sites, toxic emissions, asthma rates, and poverty. It applies a formula to each U.S. Census tract in California to generate a score that rates the level of cumulative impacts on each area. A census tract that scores in the top 25% is considered a disadvantaged community. The project site is within Census Tract 6077005119. According to CalEnviroScreen, the overall score for this census tract is within the top 25%; therefore, the project site is considered to be within a disadvantaged community (OEHHA 2022).

Environmental Impacts and Mitigation Measures

a) Division of Established Community.

A common definition of "community" is a group of people living in the same area. By this definition, the "division of an established community" is a division of an existing residential area. The project would be built on a vacant portion of a parcel with existing industrial buildings. All existing residential communities in Census Tract 6077005119 are west of Interstate 5; project development would not divide or otherwise affect these

residential areas. The project would have no impact related to the division of an established community.

b) Conflicts with Land Use Plans, Policies, and Regulations.

The project is a proposed industrial land use on a site designated for industrial uses. The project is consistent with the existing IG zoning, which allows for the type of development proposed by the project by right.

The Resource Management Element of the Lathrop General Plan contains policies designed to reduce the impacts of development on the local environment. These include preservation of agricultural lands; the retention and enhancement of habitat for fish, wildlife, and vegetation; retention of street trees; mitigation of air quality impacts; and protection of archaeological and cultural resources. The Lathrop Municipal Code has incorporated some of these General Plan policies, such as preservation of street trees (Chapter 12.16), protection of water courses (Chapter 12.18), and agricultural land preservation (Chapter 15.48). The project would not affect street trees or water courses. As discussed in Section 3.2, project impacts on agricultural resources are not considered significant. Therefore, the project would not conflict with the related policies and ordinances.

As noted, Census Tract 6077005119 has an overall CalEnviroScreen score that puts it in the top 25th percentile; therefore, it is considered a disadvantaged community. This census tract has high scores on issues such as groundwater threats, hazardous waste, cleanup sites, impaired waters, drinking water, and solid waste (OEHHA 2022). As such, project impacts on the physical environment that could affect the health and well-being of the residents of this disadvantaged community, particularly one with a high pollution burden score such as this one, could be considered potentially significant.

However, the project site is in an area of Census Tract 6077005119 that has no residents; as noted, residential areas are west of Interstate 5. As discussed in other sections of this chapter, there are no hazardous waste sites on the project site, there are no nearby surface waters, and no groundwater would be used or affected by the project. There are few residences in the project vicinity, and the nearest residence is 650 feet from the project site. Because of this, environmental justice impacts of the project would not be significant. Overall, project impacts regarding conflicts with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant.

3.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓
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?				✓

NARRATIVE DISCUSSION

Environmental Setting

As mandated by the Surface Mining and Reclamation Act, the California Geological Survey has classified mineral resource development potential of lands in counties into an appropriate Mineral Resource Zone (MRZ). The City of Lathrop General Plan indicates the project site is in an area classified by the State of California as MRZ-1 (City of Lathrop 2004). MRZ-1 lands are defined as “areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.”

Oil and natural gas deposits have been identified throughout the Central Valley, with extensive natural gas in the Delta area west of Stockton. The project site contains no active oil or gas wells, although a plugged well is recorded south of the existing industrial building south of the site. The nearest active oil or natural gas field is the McMullin Ranch natural gas field approximately four miles to the south (DOGGR 2021).

Environmental Impacts and Mitigation Measures

a, b) Availability of Mineral Resources.

The project site is within an industrial area which does not have any existing mineral extraction activities. The project site is not in any area delineated by the City of Lathrop’s General Plan as having locally important mineral resources. The project would have no impact on mineral resources.

3.13 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		
b) Generation of excessive groundborne vibration or groundborne noise levels?			✓	
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?				✓

NARRATIVE DISCUSSION

Environmental Setting

The principal noise sources affecting the Crossroads Industrial Park are Interstate 5, Louise Avenue, and State Route (SR) 120. Train traffic on the UPRR tracks is also a significant noise source (San Joaquin County 1989). Traffic associated with industrial park development generates limited additional noise on surface streets. Existing industrial uses are largely contained within buildings and do not generate substantial noise (City of Lathrop 2001).

Information on ambient noise levels at the project site and vicinity is limited. On the segment of D’Arcy Parkway north of Yosemite Avenue, traffic noise levels at the closest sensitive receptor were estimated to be 62.7 decibels (dB) L_{dn} (City of Lathrop 2022a). The noise indicator L_{dn} is the Day-Night Average Level, which equates variable noise levels in the local environment to the same total sound energy being produced over a given period, plus applies a +10-dB weighting to noise occurring between 10:00 p.m. and 7:00 a.m.

The Noise Section of the Hazard Management Element of the Lathrop General Plan provides information on acceptable noise levels based on receiving land uses. For example, a noise level above 50 dB at nighttime and 60 dB at daytime is considered unacceptable for single-family residential areas. A General Plan policy states that new development of industrial, commercial, or other noise-generating land uses will not be permitted if resulting noise levels exceed 60 dB CNEL in areas containing residential or other noise-sensitive land uses.

The City of Lathrop Noise Ordinance (Lathrop Municipal Code Section 8.20.040) sets limits for community noise exposure similar to those outlined in the General Plan. Maximum allowable noise levels in low-density residential areas range from 55 A-weighted decibels (dBA) in the daytime to 45 dBA at night. For General Industrial areas, the maximum allowable noise level is 75 dBA at all times. Additionally, Municipal Code Section 8.20.110 prohibits the operation of construction equipment within a radius of 500 feet from a residential zone in a manner that causes discomfort or annoyance to people residing in the area between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day, or 11:00 p.m. and 9:00 a.m. Fridays, Saturdays, and legal holidays.

Based upon information in the Noise Ordinance, project-related noise levels would be required to not exceed 55 dBA L_{eq} at the nearest existing residential uses in the project vicinity during daytime (7:00 a.m. to 10:00 p.m.) operations and 45 dBA L_{eq} during nighttime (10:00 p.m. to 7:00 a.m.) operations. The noise indicator L_{eq} is the Equivalent Sound Level, 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. Also, based upon recommendations made by the Federal Interagency Committee on Noise, project noise impacts would be significant if noise levels increased by 5 dB or more if ambient noise was less than 60 dB, 3 dB if ambient noise was 60-65 dB, and 1 dB if ambient noise was greater than 65 dB.

Environmental Impacts and Mitigation Measures

a) Generation of Noise Exceeding Local Standards.

The project would likely contribute to an increase in ambient noise levels through vehicle trips to and from the project site, including truck traffic. Ambient noise increases would also occur to loading dock activities, on-site truck circulation, and operation of heating, ventilation, and air conditioning (HVAC) systems. In addition, project construction activities, such as operation of equipment and vehicle traffic, would likely generate a temporary increase in noise levels.

The Lathrop General Plan Update EIR estimated changes in noise levels on various roadway segments based upon anticipated changes in traffic associated with development under the proposed General Plan. Under the proposed General Plan, development on the project site and the Crossroads Industrial Park area would be General Industrial, the same as the current General Plan designation. Under proposed General Plan development, noise levels on D'Arcy Parkway north of Yosemite Avenue would increase to 63.0 dB L_{dn} – an increase of 0.3 dB. The applicable significant criteria would be an increase of 3 dB; therefore, noise level increases on D'Arcy Parkway would not be significant. Since the proposed project development would be consistent with both current and proposed General Plan designations, project operations are not expected to generate a significant increase in traffic noise levels along D'Arcy Parkway.

Temporary noise impacts would occur with project construction, mainly from construction equipment and from worker vehicle traffic. As indicated in Table 3-4, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA at 50 feet.

The project site is within an industrial park, where activities are less sensitive to noise. The nearest residence is approximately 650 feet to the southeast. At that distance, maximum noise levels from construction activities would be in the range of 58-72 dBA, based on noise decreasing by 6 dBA with every doubling of distance from a source (Harris 1991). This would exceed City noise standards. However, it should be noted that construction noise varies widely throughout the day. Because of this, it is unlikely that noise at the high end of the range would occur continuously.

Lathrop Municipal Code Section 8.20.110 sets restrictions related to construction noise that apply to construction within 500 feet of a residential zone. As noted, the nearest residence is approximately 650 feet away. Nevertheless, the project would implement the mitigation measure described below, which incorporates a provision of Section 8.20.110. The mitigation measure would reduce the amount of noise from construction activities that reach the nearest residence to a level that would be less than significant.

TABLE 3-4
CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Maximum Level (dBA at 50 feet)
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Paver	77
Pneumatic Tools	85

Source: FHWA 2006.

Rooftop HVAC units typically generate noise levels of approximately 55 dB at a reference distance of 100 feet from the operating units (ESA 2014). Therefore, noise from HVAC systems to the nearest sensitive receptor would be approximately 43 dB, which is below City noise standards. To assess loading dock activity noise impacts at the nearest potentially affected noise-sensitive land uses, a reference noise level of 60 dB L_{eq} at a distance of 50 feet was used (ESA 2014). At the distance to the nearest sensitive receptor, noise from loading dock operations would be approximately 42 dB L_{eq} , which is below

City noise standards. Project impacts from other noise sources, therefore, are considered less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

NOISE-1: The City shall establish the following as conditions of approval for any permit that results in the use of construction equipment:

- Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to between the hours of 7:00 a.m. and 10:00 p.m. Sunday through Thursday and between 9:00 a.m. and 11:00 p.m. on Friday, Saturday, and legal holidays.
- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- When not in use, motorized construction equipment shall not be left idling for more than five (5) minutes.
- Stationary equipment (power generators, compressors, etc.) shall be located at the furthest practical distance from nearby noise-sensitive land uses or sufficiently shielded to reduce noise-related impacts.

Significance After Mitigation: Less than significant

b) Exposure to Groundborne Vibrations.

The project may generate groundborne vibrations from construction equipment use. Construction vibration impacts include human annoyance and building structural damage. Based on standards set by Caltrans, the threshold for architectural damage to structures is 0.20 inches per second (in/sec) peak particle velocity. A threshold of 0.2 in/sec peak particle velocity is considered a reasonable threshold for short-term construction projects. As noted in a) above, sensitive receptors that could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located no closer than 650 feet from typical construction activities. Therefore, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Project impacts related to groundborne vibrations would be less than significant.

c) Public Airport and Private Airstrip Noise.

As noted in Section 3.9, Hazards, the Stockton Metropolitan Airport is the closest public airport to the project site. The noise contours delineated in the Stockton Metropolitan Airport Land Use Compatibility Plan show the project site is outside both existing and

projected (2028) 55-dBA noise contours, the outermost noise contours mapped in the Plan (Coffman Associates 2016). This is well below the maximum 75 dB considered acceptable for General Industrial land uses. There are no private airstrips in the project vicinity. The project would have no impact related to airport and airstrip noise.

3.14 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				✓
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

NARRATIVE DISCUSSION

Environmental Setting

According to the 2020 U.S. Census, the population of Lathrop was 28,701, which is an increase from the 2010 U.S. Census population of 18,023. The estimated number of housing units in Lathrop in 2022 was 7,802 (U.S. Census Bureau 2021). According to 2022 estimates, approximately 91.3% of the housing units in Lathrop are single-family detached units and 3.0% are multifamily units; the remainder are single-family attached units and mobile homes (California Department of Finance 2022).

Environmental Impacts and Mitigation Measures

a) Unplanned Population Growth.

The proposed project is an industrial/warehouse development within an existing industrial park. The project does not include any residential component. As noted in Section 3.11, Land Use, the project would be on a site designated Industrial by the Lathrop General Plan, so the project would not lead to a direct increase in population not anticipated by the adopted General Plan.

The project would provide employment opportunities, so it may indirectly generate additional population growth. However, most of the employees are expected to come from the existing population of Lathrop or other parts of San Joaquin County. In any case, given the Industrial designation of the project site, the project is not expected to have an impact on population growth not otherwise planned for in the Lathrop General Plan. The project would have no impact related to unplanned population growth.

b) Displacement of Housing or People.

The project site is vacant; therefore, the project would not displace any existing housing or people residing on-site. The project would have no impact on displacement of housing or people.

3.15 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of, or the 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?			✓	
ii) Police protection?			✓	
iii) Schools?			✓	
iv) Parks?			✓	
v) Other public facilities?			✓	

NARRATIVE DISCUSSION

Environmental Setting

Fire protection services for the project site are provided by the Lathrop-Manteca Fire District. The Fire District maintains three fire stations within the City limits: Station 31 at 800 East J Street, Station 34 in Mossdale Landing, and Station 35 in the River Islands area at 19001 Somerston Parkway. Staff has 41 uniformed full-time personnel and 35 reserve personnel. The District-wide fire suppression force is organized into three shifts consisting of 13 members each, on duty for rotating periods of 24 hours. Three members are assigned to each station in the City at all times. In 2020, the Fire District responded to emergency incidents 70% of the time within five minutes at the 90th percentile with all combined responses (City of Lathrop 2022b).

Law enforcement services are provided by the Lathrop Police Department, which commenced operations on June 29, 2022. Prior to this date, the City had contracted with the San Joaquin County Sheriff’s Department for police services. The Police Department

has its station at 940 River Islands Parkway in western Lathrop. It is staffed with 35 sworn officers and 12 non-sworn professional personnel (Lathrop Police Department 2022). The average response time to Priority 1 calls - those involving a violent crime or a threat to life - has been four minutes (City of Lathrop 2022b). Response times from the police station to the project site are anticipated to be at least similar to past response times to emergency calls by the Sheriff's Department.

The project site is within the boundaries of the Manteca Unified School District, which provides public educational services from kindergarten to 12th grade for students residing in Lathrop, Manteca, and other areas. As noted in Section 3.9, Hazards and Hazardous Materials, the closest existing schools are the "one.Lathrop" community school and Mossdale Elementary School. "one.Lathrop" is an alternative education program managed by the San Joaquin County Office of Education, while Mossdale Elementary School is operated by the Manteca Unified School District.

Parks and recreational facilities within Lathrop are managed by the City's Parks and Recreation Department. Section 3.16, Recreation, provides more detail on these facilities. Other public services in Lathrop include a branch of the Stockton/San Joaquin County Public Library on Spartan Way.

Environmental Impacts and Mitigation Measures

a-i) Fire Protection Services.

The proposed project would likely result in an incremental increase in demand for fire protection and emergency services. Stations 31 and 34 are within two miles of the project site. Response times from both stations to the project site are anticipated to be similar to past average response times to emergency calls. The project is subject to the 2019 California Fire Code, which has been adopted by the City. The Fire Code sets requirements for fire flow, fire hydrant locations, and access roads. The project proposes to install a water system specifically for fire protection, including an onsite fire hydrant, which will be subject to Fire Code requirements.

The Fire District reviews all site plans for consistency with Fire District standards. The project would require the same level of service already provided by the Fire District for existing land uses in this area related to fire protection, which would not result in a need for new or expanded fire facilities. Project impacts related to fire protection services would be less than significant.

a-ii) Police Protection Services.

The Lathrop Police Department station is approximately three miles from the project site. The project would not result in a significant impact to public safety or the need for changes in police protection. Response times from the police station to the project site are anticipated to be at least similar to past response times to emergency calls by the Sheriff's Department. The project would require the same level of service already provided for existing land uses in this area, which means that new or expanded police facilities would

not be required. Project impacts related to police protection services would be less than significant.

a-iii) Schools.

The project does not include a residential component, so it would not generate a new direct demand for school services in the Manteca Unified School District. The project would provide employment opportunities, so it may indirectly generate additional population growth and a corresponding increase in a demand for school services. However, most of the employees are expected to come from the existing population of Lathrop or other parts of San Joaquin County, so the project is not expected to generate a substantial demand for school services.

The Manteca Unified School District imposes development impact fees of \$0.66 per square foot of industrial development, revenue from which would be used for school construction. Under State law, the payment of development impact fees is considered adequate mitigation for the potential impact of a project on school facilities. Project impacts related to schools would be less than significant.

a-iv) Parks.

The project would generate a small increase in daytime workers within the area and no direct increase in population; these project-related changes are not expected to generate substantial increase in demand for use of parks and would therefore not result in a significant impact to the City’s park system. The project would not result in a substantial need for new or expanded park facilities. Project environmental impacts related to parks would be less than significant.

a-v) Other Public Facilities.

The project would not generate a substantial additional demand for library services, as most employees at the completed project are expected to come from the local area and are already served by the Lathrop library or other existing libraries in the vicinity. The project would not result in a substantial need for new or expanded library facilities. Project environmental impacts related to library services would be less than significant.

3.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?			✓	

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			✓	
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NARRATIVE DISCUSSION

Environmental Setting

Parks and recreational services are provided by the City of Lathrop and by San Joaquin County in their respective jurisdictions. There are no parks or recreational facilities on or in the vicinity of the project site. The nearest City park to the project site is Manuel Valverde Park, approximately two miles to the north. Recreational facilities available in this park include a baseball diamond, basketball courts, an amphitheater, barbecues, a play structure, and a splash pad. The nearest County parks and recreational facilities are Dos Reis Park northwest of the project site and Mossdale Crossing Park to the southwest.

Environmental Impacts and Mitigation Measures

a, b) Recreational Facilities.

The project does not include any recreational facilities. The project does not include any residential component or potential population growth which could generate a new substantial demand on the City or County park systems such that new or expanded facilities would be required. As noted in Section 3.15, Public Services, the project could generate a small increase in daytime workers within the area; however, most of the project employees can be expected to come from Lathrop or other parts of San Joaquin County and are already served by existing recreational facilities. Project environmental impacts related to parks and recreational facilities would be less than significant.

3.17 TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			✓	
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			✓	
c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	

d) Result in inadequate emergency access?			✓	
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NARRATIVE DISCUSSION

Environmental Setting

Existing Transportation Facilities

The main transportation mode in the project vicinity is motor vehicles and trucks, which use existing roads in the area. The project site is served by the existing road system, including D’Arcy Parkway on which the site has direct frontage. The main regional roads in the project vicinity are Interstate 5 and SR 120. Interstate 5 is the main regional freeway on the West Coast, connecting Lathrop to Los Angeles and San Diego to the south and Sacramento, Oregon, and Washington to the north. SR 120 is a four-lane freeway in the Lathrop and Manteca area that connects Interstate 5 and SR 99.

Local roads that serve Crossroads Industrial Park include D’Arcy Parkway and Christopher Way. Both are two-lane roads that provide automobile and truck traffic access to adjacent development, and both are developed with existing curbs and gutters. Christopher Way intersects D’Arcy Parkway in front of the project site. D’Arcy Parkway connects Harlan Road to the west with Yosemite Avenue to the south. Yosemite Avenue, in turn, connects with SR 120 to the south via an interchange. Howland Road, a two-lane road, southeast of the project site, intersects with D’Arcy Parkway. Howland Road, which is outside Crossroads Industrial Park boundaries, is a little-used, two-lane paved road with some deterioration; no curbs or gutters have been installed along this road.

The analysis in this section relies mainly on the traffic impact report prepared in 2017 for the Murphy Parkway Warehouse IS/MND. The Murphy Parkway Warehouse site is within the Crossroads Industrial Park area. As part of the traffic analysis for the Murphy Parkway Warehouse project, an analysis of cumulative traffic conditions was conducted. Cumulative conditions reflected a Year 2020 horizon, with traffic volumes for 2020 developed using Year 2017 projections from the City’s 2013 traffic study for the Crossroads Industrial Park, of which the project site is a part (Crane Transportation Group 2017). As such, cumulative traffic conditions incorporate anticipated development of the project site.

The Murphy Parkway Warehouse IS/MND analyzed traffic impacts under both existing and cumulative conditions at major intersections in the vicinity. These include intersections on D’Arcy Parkway and Yosemite Avenue that are likely to be used by the proposed project. Cumulative analysis reflects a year 2020 horizon. Traffic volumes for 2020 were developed using year 2017 projections from a 2013 traffic study prepared for the City, with adjustments reflecting likely land use or circulation system changes between 2017 and 2020 (Crane Transportation Group 2017).

Alternative modes of transportation are limited in the project vicinity. The San Joaquin Regional Transit District, which provides public transit service to the City of Lathrop, does

not have bus routes on or near the project site. However, the District has three County Hopper routes in the vicinity. Buses on Hopper routes can deviate from their normal route up to one mile to accommodate disabled passengers. There are no bicycle routes designated in the area. There are no existing sidewalks along the segment of D'Arcy Parkway fronting the project site.

Railroad track owned by the UPRR is southeast of the project site, on the opposite side of Howland Road. The UPRR track is used for goods movement; no passenger service is provided. The nearest passenger rail facility is the Altamont Commuter Express (ACE) track to the south and east. The Lathrop/Manteca ACE station is approximately one mile east of the project site.

Transportation Systems Management

The City of Lathrop manages traffic on City streets and improvement requirements by way of LOS guidelines set forth in the City's General Plan. LOS is a qualitative measure of traffic flow on roadways and delay at intersections. LOS is measured on a scale from A to F, with A representing the best traffic conditions and F the worst. The General Plan requires a minimum LOS of D for signalized intersections and stop signs, and a minimum LOS of E for all unsignalized intersections.

However, the CEQA Guidelines were recently modified to include Section 15064.3, which states that VMT is the preferred metric for evaluating transportation impacts under CEQA, rather than LOS. VMT measures the total miles traveled by vehicle trips generated by a project. While LOS focuses on the capacity of roads to accommodate motor vehicle traffic, VMT accounts for the total transportation impact of a project on transportation, including use of travel modes such as buses or bicycles. Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric. In December 2018, the Governor's Office of Planning and Research (OPR) released its *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory). The Technical Advisory provides advice and recommendations to CEQA lead agencies on how to implement the SB 743 changes. In 2020, the Lathrop City Council adopted thresholds of significance for VMT, based on the recommendations in the OPR Technical Advisory.

The SJCOG adopted the latest version of its Regional Congestion Management Program in 2018. The Regional Congestion Management Program is designed to coordinate land use, air quality and transportation planning to reduce potential congestion from traffic generated by development in San Joaquin County and its cities. The program has designated a local roadway and intersection network on which traffic congestion would be monitored and programs to reduce congestion would be targeted; State statute requires all State highways also be designated as a part of the network. The nearest roadway to the project site that is part of the Regional Congestion Management Program network is Interstate 5 (SJCOG 2018b).

Environmental Impacts and Mitigation Measures

a) Conflicts with Transportation Programs and Plans.

The Murphy Parkway traffic impact study analyzed traffic operations in the vicinity under existing and cumulative conditions. The study focused mainly on intersections on or near Harlan Road, D'Arcy Parkway, and Yosemite Avenue. The conclusion was that intersection operations would maintain acceptable morning and evening peak hour LOS, no lower than LOS D under all conditions, including cumulative (Crane Transportation Group 2017). Based on this, it is expected that project traffic would not adversely affect LOS on nearby intersections, thereby being consistent with LOS standards established in the City's General Plan. The project is also not expected to adversely affect traffic on Interstate 5 or Yosemite Avenue, which are part of the Regional Congestion Management Program network.

The project would not adversely affect transit routes or use, as no fixed routes are located in the area. The project is in an industrial park, where sidewalks are not required; however, the project proposes to install sidewalks along the project frontage on D'Arcy Parkway. The project proposes to install bicycle racks, as required by Lathrop Municipal Code Section 17.76.120. This action would be consistent with General Plan policies that encourage bicycle transportation. The UPRR track would not be affected by the project, as the project would not physically alter the track and no use of this track is planned by project activities. As the ACE track is approximately 0.75-1.00 miles from the project site, the project would not affect the ACE track or station.

In summary, the project would not substantially conflict with applicable plans or policies related to transportation, either for motor vehicles or for alternative modes of transportation. Project impacts related to transportation programs and plans would be less than significant.

b) Conflict with CEQA Guidelines Section 15064.3(b).

The Environmental Checklist in CEQA Guidelines Appendix G requires analysis of the consistency of the project with CEQA Guidelines Section 15064.3(b), which states that VMT is the preferred method for evaluating transportation impacts, rather than the more commonly used LOS. Section 15064.3 subdivision (b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric.

The City of Lathrop has adopted thresholds of significance and screening criteria for the purpose of analyzing transportation impacts under CEQA related to VMT consistent with SB 743 and OPR's Technical Advisory. The Technical Advisory suggests that a project that results in a reduction of VMT per capita of greater than 15 percent would indicate an impact that is less than significant (OPR 2018). In general, the VMT thresholds of significance adopted by the City indicate that a project that does not exceed a level of 15 percent below Citywide per capita or per employee would not have a significant VMT impact. For industrial land uses, 15 percent below VMT per employee is used to determine the significance of VMT impacts. The Lathrop General Plan Update EIR states that VMT

per employee for industrial uses is 77.8; therefore, VMT impacts of an industrial project would be significant if VMT per employee would exceed 66.2 (City of Lathrop 2022a)

As discussed in Section 3.6, Energy, CalEEMod calculated the maximum project VMT (under Alternative 1) for both unmitigated (business-as-usual) and mitigated conditions. The VMT results are available in Appendix A of this IS/MND. Under business-as-usual (unmitigated) conditions for the Alternative 1 development scenario, project VMT would be 10,638 miles daily. Under mitigated conditions, project VMT would be 8,917 miles daily. Based on a U.S. Green Building Council factor of one employee per 2,500 square feet of distribution warehousing (USGBC 2019), the project daily VMT per employee under unmitigated and mitigated conditions would be 58.0 and 48.6, respectively. Under the Alternative 2 development scenario, the project daily VMT per employee under unmitigated and mitigated conditions would be 57.9 and 48.7, respectively.

Under both development alternatives, project daily VMT would be reduced by more than 15% from mitigated conditions, which is below the significance threshold for VMT generated by industrial projects. Therefore, the project would be consistent with the objectives of CEQA Guidelines Section 15064.3, subdivision (b). Project impacts on this issue are considered less than significant.

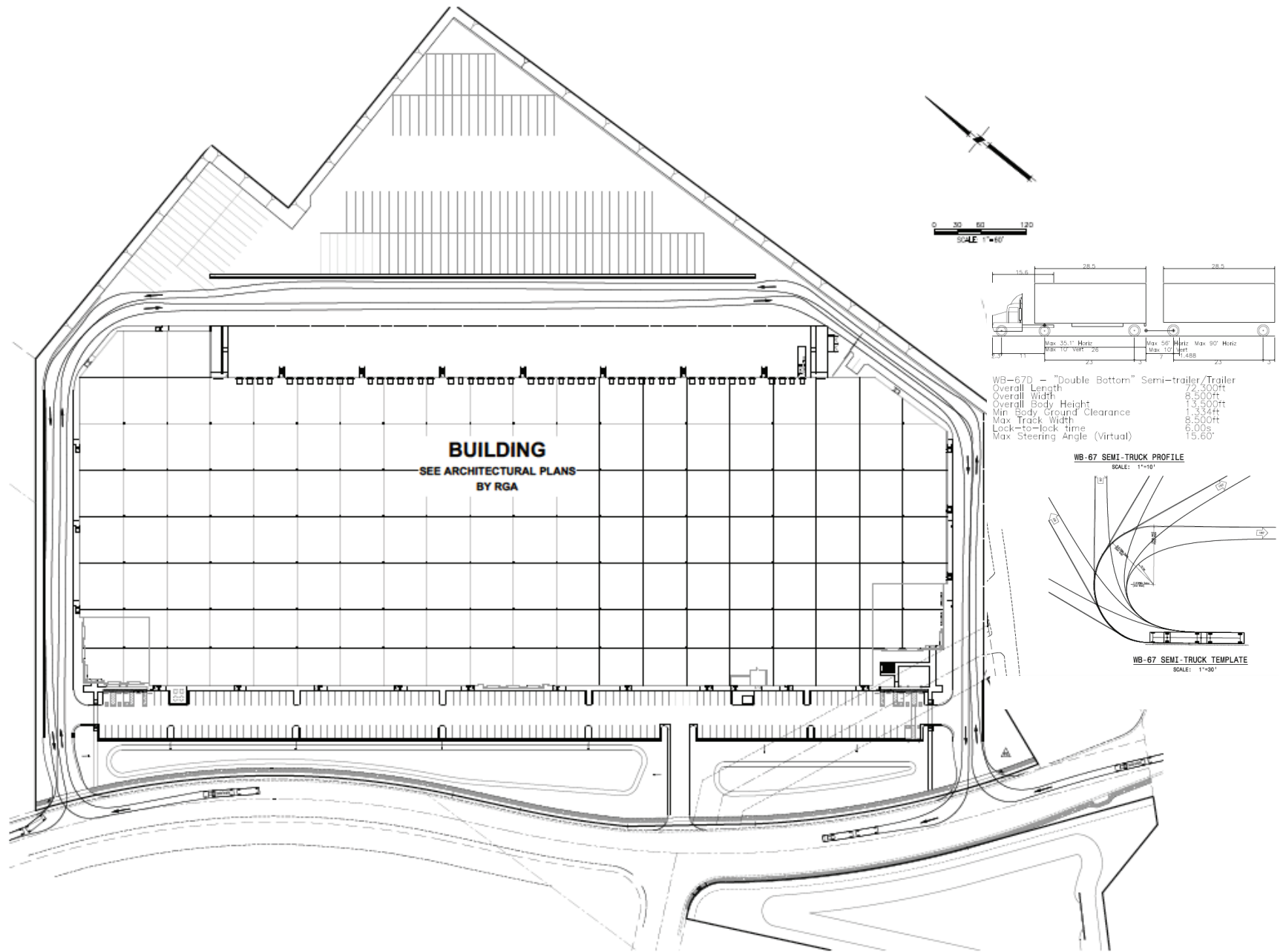
c) Traffic Hazards.

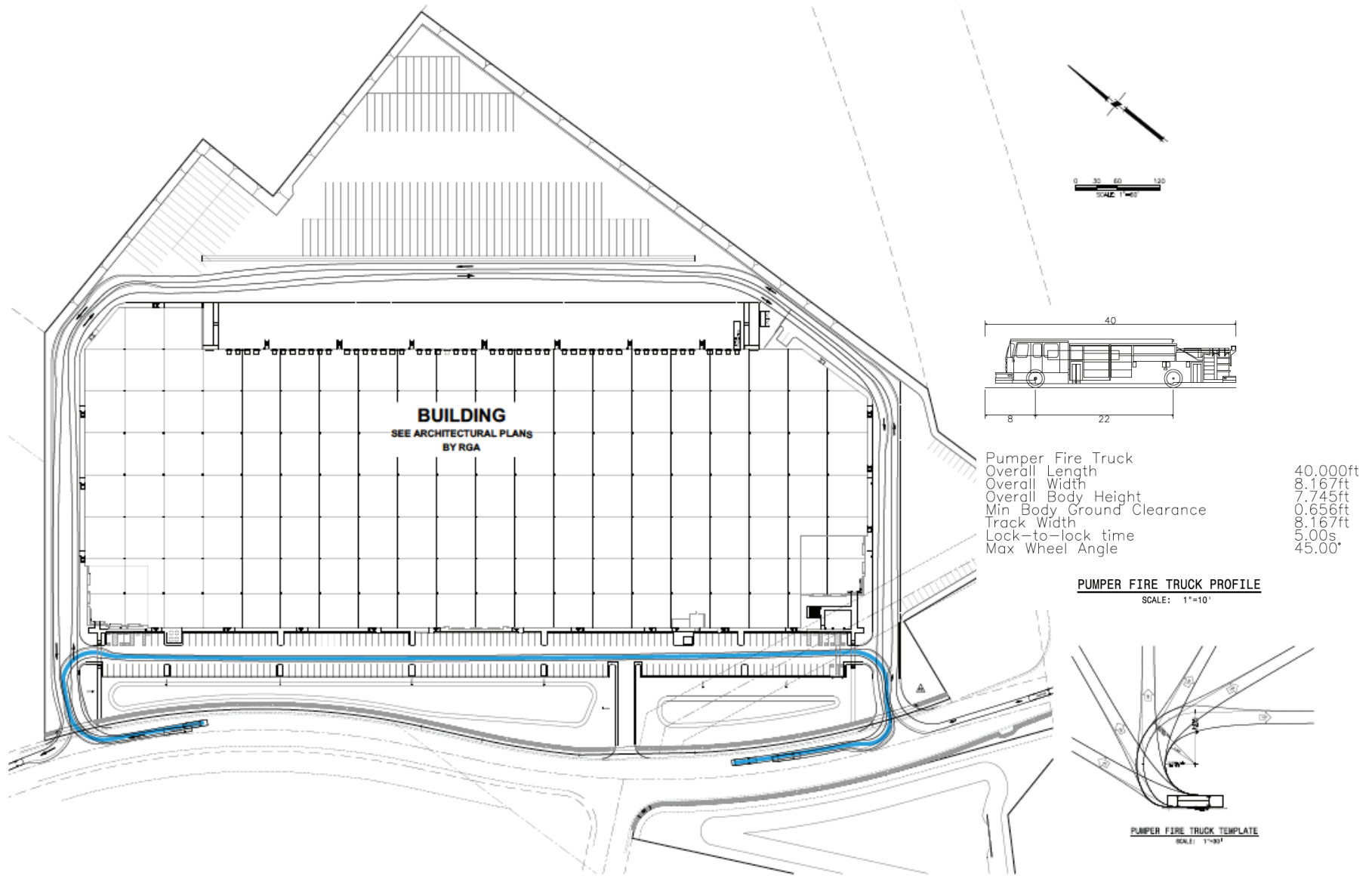
Under both development alternatives, the project proposes three driveways off D’Arcy Parkway to provide access to vehicle and truck traffic. No access from other roads would be provided. The driveways would be installed in accordance with City standard plans and specifications, which are intended to facilitate traffic movement. Compliance with the standard specifications would avoid traffic hazards on D’Arcy Parkway. Internal circulation within the project site would consist of passenger vehicles and trucks. Large trucks may have difficulty turning in areas that do not account for them. The project applicant has prepared an industrial truck access plan that shows adequate turning space would be available for large trucks entering and exiting the project site (Figure 3-2). As such, internal traffic conditions are considered safe for large trucks.

Project traffic would in general be compatible with existing area vehicle and truck traffic, which is generated by similar land uses. Project impacts regarding traffic hazards would be less than significant.

d) Emergency Access.

As discussed in Section 3.9, Hazards, there is a potential for traffic disruption associated with project infrastructure work within D’Arcy Parkway. However, all such work will be required to comply with the encroachment permit issued by the City, including compliance with the general law regulating travel over a public street. After project completion, the three driveways would provide adequate access to the project site for emergency vehicles. The project applicant has prepared a fire truck circulation plan that shows adequate turning space would be available for pumper fire trucks entering and exiting the project site (Figure 3-3). Project impacts regarding emergency access would be less than significant.





3.18 TRIBAL CULTURAL RESOURCES

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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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), or		✓		
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 resource to a California Native American tribe.		✓		

NARRATIVE DISCUSSION

Environmental Setting

As noted in Section 3.5, Cultural Resources, the project site is within the traditional area of the Northern Valley Yokuts. The Northern Valley Yokuts occupied the land within the San Joaquin Valley from the Tehachapi Range in the south to Stockton in the north. Settlements were oriented along the waterways, with their village sites normally placed adjacent to these features for their nearby water and food resources. Economic subsistence was based on the acorn, with substantial dependency on gathering and processing of wild seeds and other vegetable foods. The rivers, streams, and sloughs that formed a maze within the valley provided abundant food resources such as fish, shellfish, and turtles. Game, wild fowl, and small mammals were trapped and hunted to provide protein augmentation of the diet. Trade was well developed, with mutually beneficial interchange of needed or desired goods (City of Lathrop 2019).

In 2015, the California Legislature enacted AB 52, which focuses on consultation with Native American tribes to avoid or mitigate potential impacts on tribal cultural resources, which are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe.” When a tribe requests placement on a notification list for projects that may be within its traditionally and culturally affiliated geographical area, the lead agency must provide the tribe with notice of a proposed project and an invitation to consult within 14 days of a project application being deemed complete or when the lead agency decides to undertake the project if it is the agency’s own project.

The tribe has up to 30 days to respond to the notice and request consultation; if consultation is requested, then the local agency has up to 30 days to initiate consultation.

Matters which may be subjects of AB 52 consultation include the type of CEQA environmental review necessary, the significance of tribal cultural resources, and project alternatives or appropriate measures for preservation or mitigation of the tribal cultural resource that the tribe may recommend to the lead agency. The consultation process ends when either (1) the resource in question is not considered significant, (2) the parties agree to mitigate or avoid a significant effect on a tribal cultural resource, or (3) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. Regardless of the outcome, a lead agency is still obligated under CEQA to mitigate for any significant environmental effects, as explicitly noted in AB 52.

The City sent notification letters dated July 26, 2022 to the Buena Vista Rancheria, the California Valley Miwok and the Northern Valley Yokuts inviting them to consult on the project per AB 52. Consultation was requested by the Northern Valley Yokuts. The City met with the tribe on September 15 and concluded AB 52 consultation by letter on September 16, 2022.

Environmental Impacts and Mitigation Measures

a, b) Tribal Cultural Resources.

As noted in Section 3.5, Cultural Resources, the Central California Information Center prepared a report on a records search for cultural resources on the project site, including those known to have value to local cultural groups such as tribes. The results of the search were negative – no resources known to have value to local cultural groups have been reported.

While there is no recorded evidence of known cultural resources on the project site, there is a potential for unknown resources, including tribal cultural resources, to be uncovered during project construction. Implementation of Mitigation Measure CULT-1, described in Section 3.5, sets forth procedures for the treatment and disposition of uncovered resources. Also, as noted, CEQA Guidelines Section 15064(e) sets forth procedures to be followed should any human remains be uncovered, with special requirements for burials determined to be Native American. Impacts on tribal cultural resources are considered less than significant with mitigation.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measure CULT-1.

Significance After Mitigation: Less than significant

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			✓	
c) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
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 reduction goals?			✓	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

NARRATIVE DISCUSSION

Environmental Setting

Figure 2-8 in Chapter 2.0, Project Description, shows existing utility lines in the project vicinity. The City of Lathrop provides potable water service to City residents and businesses. The City's main sources of potable water are four municipal groundwater wells (two other wells are currently not in service) and surface water provided by the South San Joaquin Irrigation District that is treated to drinking water standard. Total potable water supplied as of 2020 was approximately 5,485 acre-feet, with approximately 3,429 acre-feet provided by the South San Joaquin Irrigation District and approximately 2,055 acre-feet from the City's wells (City of Lathrop 2021). The City's water distribution system consists of a single pressure zone and approximately 142 miles of distribution pipelines ranging from 2 inches to 30 inches in diameter (City of Lathrop 2019). An existing 12-inch diameter water line is installed beneath D'Arcy Parkway.

The City also provides wastewater collection and treatment services for City residents and businesses. The City's wastewater collection system consists of approximately 72 miles of

gravity mains ranging from 6 to 36 inches, 21 miles of force mains ranging from 4 to 18 inches, and 12 pump stations (City of Lathrop 2019). Collected wastewater is sent to one of two treatment plants, depending on location of the wastewater source: the Lathrop Consolidated Treatment Facility and the Manteca-Lathrop Wastewater Quality Control Facility. The project site is within the service area of the Lathrop Consolidated Treatment Facility. This treatment plant currently has a treatment capacity of 2.5 million gallons per day (mgd) of wastewater, and the City plans to increase its capacity to 9.1 mgd in the future (City of Lathrop 2022b). As of 2019, the City generates an average dry weather flow of 1.46 mgd, with 0.54 mgd treated at the Lathrop Consolidated Treatment Facility (City of Lathrop 2019). An existing 8-inch diameter sewer line is installed beneath the segment of D'Arcy Parkway north of the intersection with Christopher Way.

Lathrop's storm water drainage system is managed by the City's Public Works Department. The gravity-based system consists of collection and trunk pipelines, detention basins, pump stations, and surface infrastructure such as gutters, alleys, and storm ditches. Several of the storm water detention basins also function as recreational facilities. Storm water is disposed of by routing it through various interconnected detention basins and discharging it into one of three locations along the San Joaquin River (City of Lathrop 2022b). Existing storm drainage lines are installed beneath a portion of D'Arcy Parkway. As described in Section 3.10, Hydrology, the City's drainage system is subject to SWRCB's Water Quality Order No. 2013-0001-DWQ, which is a general MS4 permit issued as part of the NPDES program.

Solid waste collection services are provided to Lathrop by Allied Waste Service. Solid waste is transported and disposed of primarily at three active sanitary landfills in San Joaquin County. The North County Landfill on East Harney Lane has available capacity to 2048, and the Foothill Sanitary Landfill on North Waverly Road has available capacity to 2082 (CalRecycle 2021). The Forward Landfill on Austin Road near Stockton was to have reached its capacity in 2020; however, the County Board of Supervisors recently approved an expansion of Forward Landfill that would extend its life to 2036 (Crunden 2020).

Pacific Gas & Electric provides electricity and natural gas services to Lathrop. Telephone service is provided by AT&T, while Comcast provides cable television services. Existing utility boxes and vaults have been installed along the D'Arcy Parkway frontage of the project site.

Environmental Impacts and Mitigation Measures

a) Relocation or Construction of Utility Facilities.

The project would not require the extension of sewer mains, water lines, storm water drainage lines, or natural gas pipelines to the project site, as these lines are already available in the vicinity. Only connecting lines from the project site to these existing facilities would be required. Electrical and telecommunication lines are available in the project vicinity and can be extended to the project site as necessary. The existing utility vaults and boxes would remain. The City will require coordination of improvement plans with the utility providers and conformance with their construction requirements. The project proposes to remove existing onsite groundwater wells. However, the removal of the wells would not affect

potable water delivery to the project site, as the project would connect to the City's water system.

The project also proposes to remove an existing pump facility at the center of the project site that delivers recycled water to the percolation basins. As the percolation basins would be eliminated, the pump facility would no longer have any use. The City's water and wastewater management plans will direct increasing amounts of recycled water to landscape irrigation and would discharge any remaining recycled water into the San Joaquin River upon completion of its Recycled Water River Discharge Project. In February 2022, the Central Valley RWQCB issued Order No. R5-2022-0004, which includes the NPDES permit for this improvement and modifies the Waste Discharge Requirements originally imposed by Order No. R5-2016-0028 (see Section 3.10, Hydrology and Water Quality). Project impacts related to relocation or construction of utility facilities would be less than significant.

b) Water Supplies.

The project would be served by the City's water supplies. The City's Urban Water Management Plan indicates that the City would have up to 15,391 acre-feet of potable water available in future years. The City would have adequate water supplies for a single dry year and for multiple dry years until 2040. The City has developed a Water Shortage Contingency Plan and demand management measures that would address potential water shortages should they occur (City of Lathrop 2021). As buildout is based upon the City's General Plan, and since the project would be consistent with the allowable land uses under the General Plan designation, water demand by the project is expected to be consistent with the projected demand at General Plan buildout. The project would not result in the need to expand existing water supplies. Project impacts would be less than significant.

c) Wastewater Treatment Capacity.

The project would result in a small increase in wastewater flows to the City's system. All wastewater from the project would be treated at the Lathrop Consolidated Treatment Facility. The facility has a current treatment capacity of 2.5 mgd, and currently processes only 0.54 mgd of wastewater. According to the City's Wastewater System Master Plan, industrial uses typically generate an average dry weather flow of 355 gallons of wastewater per day per acre (City of Lathrop 2018). Based on this, the project would generate a maximum of approximately 8,868 gallons per day of wastewater, or 0.009 mgd. The Lathrop Consolidated Treatment Facility would have adequate existing capacity to accommodate the anticipated wastewater generated by the project. Project impacts would be less than significant.

d, e) Solid Waste Services.

The project would contribute to the solid waste disposal stream from the City and place demands on existing landfill operations and capacity. CalRecycle posted a solid waste generation rate for manufacturing/warehouse uses from a solid waste guide for development projects in Santa Barbara County. According to this source, the amount of solid waste generated by a manufacturing/warehouse use would be 1.42 pounds per 100

square feet per day (CalRecycle 2019). Based on this, the estimated amount of solid waste that would be generated by project development under Alternative 1 would be approximately 6,516 pounds per day, or approximately 1,189 tons per year. Under Alternative 2, the estimated amount of solid waste that would be generated by project development would be approximately 5,626 pounds per day, or approximately 1,027 tons per year.

Existing landfills to which project waste could be sent would have adequate capacity to accommodate the amount of solid waste that would be generated by the project under either development alternative. The project would comply with applicable state and local statutes and regulations related to solid waste as discussed above. Project impacts on solid waste would be less than significant.

3.20 WILDFIRE

If located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
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?				✓
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?				✓
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?				✓

NARRATIVE DISCUSSION

Environmental Setting

Wildland fires are an annual hazard in San Joaquin County. Wildland fires burn natural vegetation on undeveloped lands and include rangeland, brush, and grass fires. Long, hot, and dry summers with temperatures often exceeding 100°F add to the fire hazard. Human activities are the major causes of wildland fires, while lightning causes the remaining wildland fires. High hazard areas for wildland fires are the grass-covered areas in the east and the southwest foothills of the County (San Joaquin County 2016).

The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program identifies fire threat based on a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined in determining the following Fire Hazard Severity Zones: Moderate, High, Very High, Extreme. These zones apply to areas designated as State Responsibility Areas – areas in which the State has primary firefighting responsibility. The project site is not within a State Responsibility Area; rather, it is within a Local Responsibility Area, where local fire districts or departments have primary firefighting responsibility. The project site and vicinity are not in any designated Local Responsibility Area fire hazard zones (Cal Fire 2007a, 2007b).

Environmental Impacts and Mitigation Measures

a) Emergency Response Plans and Emergency Evacuation Plans.

The project site is not part of a State Responsibility Area, and Cal Fire maps indicate the site is not designated within a Very High Fire Hazard Severity Zone or a zone of higher severity. As discussed in Section 3.9, Hazards, project construction is not expected to substantially obstruct emergency vehicles or any evacuations that may occur in the area, and project operations would not obstruct any roadways. The project would have no impact related to wildfire emergency response plans or emergency evacuation plans.

b) Exposure of Project Occupants to Wildfire Hazards.

The project site is in a predominantly urban area, and the project would reduce the existing fire hazard on the parcel by replacing existing grasses and weeds with industrial development. Cal Fire maps also indicate that the project site is in a low-risk wildfire area. As with the approved project, impacts of the revised project related to wildland fire hazards would be less than significant. The project would have no impact related to exposure of project occupants to wildfire hazards.

c) Installation and Maintenance of Infrastructure.

The project proposes the installation of parking areas and the extension of utilities. The installation of these facilities is not expected to exacerbate the wildfire risk on the project site, as explained in b) above. The project would have no impact related to infrastructural exacerbation of wildfire hazards.

d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes.

The project site is in a topographically flat area. There are no streams or other channels that cross the site. As such, it is not expected that people or structures would be exposed to significant risks from changes resulting from fires in steeper areas, including downslope or downstream flooding or landslides. The project would have no impact related to risks from runoff, post-fire slope instability, or drainage changes.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		
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)?			✓	
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?			✓	

NARRATIVE DISCUSSION

a) Findings on Biological and Cultural Resources.

The potential biological resource and cultural resource impacts of the revised project were described in Sections 3.4, 3.5, and 3.18 of this IS/MND. Potentially significant environmental effects on biological and cultural resources were identified, but implementation of mitigation measures described in Sections 3.4 and 3.5 would reduce these effects to a level that would be less than significant.

b) Findings on Cumulatively Considerable Impacts.

A cumulative impact is an environmental impact that may result from the combination of two or more environmental impacts associated with the proposed project with each other, or the combination of one or more project impacts with related environmental impacts caused by other projects.

As has been noted, the project would be constructed within Crossroads Industrial Park and would be consistent with the planned land uses for the industrial park as approved. The project is consistent with the land use designation of the Lathrop General Plan; as such, the project is not expected to introduce any new or more severe environmental impacts not

otherwise analyzed in the Lathrop General Plan EIR. Potential cumulative effects of the project on traffic were analyzed in the Crane Transportation Group traffic impact study, and no significant cumulative effects were identified (see Section 3.17, Transportation). For project-specific effects identified as potentially significant, mitigation measures would reduce these effects to a level that would be less than significant, so the project would not make a considerable contribution to potential cumulative impacts. None of the potential environmental effects addressed individually in this IS/MND would combine with other effects to result in a cumulatively considerable effect.

c) Findings on Adverse Effects on Human Beings.

Potential adverse project effects on human beings were discussed in Section 3.3, Air Quality; Section 3.7, Geology and Soils (seismic hazards); Section 3.9, Hazards and Hazardous Materials; Section 3.10, Hydrology and Water Quality (flooding); Section 3.17, Transportation (traffic hazards); and Section 3.20, Wildfire. For most aspects of these issues, no potential adverse effects on human beings were identified. Potential adverse effects that were identified would be reduced to levels considered less than significant through compliance with applicable laws, regulations, and City ordinances and standards, along with mitigation measures where necessary.

4.0 REFERENCES

4.1 DOCUMENT PREPARERS

This IS/MND was prepared by BaseCamp Environmental, Inc. for use by and under the supervision of the City of Lathrop Department of Community Development. The following persons were involved in preparation of the IS/MND:

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4.3 PERSONS CONSULTED

Rick Caguiat, Assistant Director, Community Development, City of Lathrop.

Brian Cooley, Richland Communities.

Trent DaDalt, Assistant Planner, City of Lathrop.

Glenn Gebhardt, Engineer, City of Lathrop.

Amanda Karchefski, MacKay & Soms.

Julieann Martin, Richland Communities.

Jeff Matson, MacKay & Soms.

Bellal Nabizadah, Assistant Engineer, City of Lathrop.

Chris Ragan, MacKay & Soms.

5.0 NOTES RELATED TO EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used: Identify and state where they are available for review.
 - b) Impacts Adequately Addressed: Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures: For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures,

which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

APPENDIX A
AIR QUALITY MODELING RESULTS

Richland Crossroads - Alt 1 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Richland Crossroads - Alt 1
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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	458.90	1000sqft	21.43	458,904.00	0
Parking Lot	395.00	Space	3.55	158,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Actual acreage and square footage.
- Construction Phase - No demolition.
- Off-road Equipment - CalEEMod defaults.
- Trips and VMT - No demolition.
- Vehicle Trips - Consistent with other warehouse projects.
- Fleet Mix - Consistent with other warehouse projects.
- Area Coating - Maximum per SJVAPCD Rule 4601.
- Operational Off-Road Equipment - Estimated per equipment factor.
- Construction Off-road Equipment Mitigation - CalEEMod defaults.
- Mobile Commute Mitigation - CalEEMod defaults.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Mitigation - CalEEMof defaults.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	0	50
tblAreaCoating	Area_EF_Nonresidential_Interior	0	50
tblAreaCoating	Area_EF_Parking	0	150
tblAreaCoating	Area_EF_Residential_Exterior	0	150
tblAreaCoating	Area_EF_Residential_Interior	0	150
tblAreaCoating	Area_Nonresidential_Exterior	0	229033
tblAreaCoating	Area_Nonresidential_Interior	0	687098
tblAreaCoating	ReapplicationRatePercent	0	10
tblCommuteMitigation	EmployeeVanpoolPercentModeShare	0	2
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	0	55
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	0	55
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblFleetMix	HHD	0.02	0.11
tblFleetMix	HHD	0.02	0.11
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.05	0.04
tblFleetMix	LDT1	0.05	0.04
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LHD1	0.03	3.6440e-003
tblFleetMix	LHD1	0.03	3.6440e-003
tblFleetMix	LHD2	6.1000e-003	4.1720e-003
tblFleetMix	LHD2	6.1000e-003	4.1720e-003
tblFleetMix	MCY	0.02	4.8090e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MCY	0.02	4.8090e-003
tblFleetMix	MDV	0.15	0.11
tblFleetMix	MDV	0.15	0.11
tblFleetMix	MH	3.3530e-003	6.5100e-004
tblFleetMix	MH	3.3530e-003	6.5100e-004
tblFleetMix	MHD	0.01	0.05
tblFleetMix	MHD	0.01	0.05
tblFleetMix	OBUS	4.6700e-004	1.1830e-003
tblFleetMix	OBUS	4.6700e-004	1.1830e-003
tblFleetMix	SBUS	1.1030e-003	5.9500e-004
tblFleetMix	SBUS	1.1030e-003	5.9500e-004
tblFleetMix	UBUS	3.2200e-004	1.3020e-003
tblFleetMix	UBUS	3.2200e-004	1.3020e-003
tblLandUse	LandUseSquareFeet	458,900.00	458,904.00
tblLandUse	LotAcreage	10.53	21.43
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	CNW_TL	7.30	15.00
tblWaterMitigation	PercentReductionInFlowBathroomFaucet	0	32
tblWaterMitigation	PercentReductionInFlowKitchenFaucet	0	18
tblWaterMitigation	PercentReductionInFlowShower	0	20
tblWaterMitigation	PercentReductionInFlowToilet	0	20
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentReduction	0	6.1

2.0 Emissions Summary

Richland Crossroads - Alt 1 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2551	2.1938	2.3509	6.1700e-003	0.2348	0.0867	0.3214	0.0594	0.0809	0.1403	0.0000	556.2995	556.2995	0.0821	0.0256	565.9918
2024	1.3294	2.1273	2.6979	7.3400e-003	0.3057	0.0770	0.3827	0.0830	0.0724	0.1554	0.0000	664.5324	664.5324	0.0729	0.0367	677.2796
Maximum	1.3294	2.1938	2.6979	7.3400e-003	0.3057	0.0867	0.3827	0.0830	0.0809	0.1554	0.0000	664.5324	664.5324	0.0821	0.0367	677.2796

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2551	2.1938	2.3509	6.1700e-003	0.2202	0.0867	0.3069	0.0578	0.0809	0.1387	0.0000	556.2991	556.2991	0.0821	0.0256	565.9914
2024	1.3294	2.1273	2.6979	7.3400e-003	0.3057	0.0770	0.3827	0.0830	0.0724	0.1554	0.0000	664.5321	664.5321	0.0729	0.0367	677.2793
Maximum	1.3294	2.1938	2.6979	7.3400e-003	0.3057	0.0867	0.3827	0.0830	0.0809	0.1554	0.0000	664.5321	664.5321	0.0821	0.0367	677.2793

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	2.70	0.00	2.07	1.11	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-3-2023	7-2-2023	1.0255	1.0255
2	7-3-2023	10-2-2023	0.7113	0.7113
3	10-3-2023	1-2-2024	0.7212	0.7212
4	1-3-2024	4-2-2024	0.6759	0.6759
5	4-3-2024	7-2-2024	0.6655	0.6655
6	7-3-2024	9-30-2024	0.6582	0.6582
		Highest	1.0255	1.0255

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9093	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163
Energy	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	827.2068	827.2068	0.1299	0.0162	835.2772
Mobile	0.2896	2.1561	3.8104	0.0185	1.4808	0.0199	1.5007	0.3993	0.0189	0.4182	0.0000	1,734.4837	1,734.4837	0.0463	0.1517	1,780.8417
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	87.5642	0.0000	87.5642	5.1749	0.0000	216.9366
Water						0.0000	0.0000		0.0000	0.0000	33.6672	53.1289	86.7961	3.4665	0.0827	198.1015
Total	2.2018	2.1816	3.8396	0.0186	1.4808	0.0219	1.5027	0.3993	0.0208	0.4201	121.2314	2,614.8346	2,736.0660	8.8177	0.2506	3,031.1733

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9093	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163
Energy	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	827.2068	827.2068	0.1299	0.0162	835.2772
Mobile	0.2747	1.8821	3.3694	0.0156	1.2413	0.0168	1.2581	0.3347	0.0159	0.3506	0.0000	1,463.9588	1,463.9588	0.0415	0.1295	1,503.6005
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	21.8911	0.0000	21.8911	1.2937	0.0000	54.2342
Water						0.0000	0.0000		0.0000	0.0000	26.9337	42.5031	69.4369	2.7732	0.0662	158.4812
Total	2.1869	1.9075	3.3986	0.0157	1.2413	0.0188	1.2600	0.3347	0.0179	0.3526	48.8248	2,333.6839	2,382.5087	4.2384	0.2119	2,551.6094

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.68	12.56	11.49	15.48	16.18	14.22	16.15	16.18	14.16	16.08	59.73	10.75	12.92	51.93	15.44	15.82

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/3/2023	4/2/2023	5	0	
2	Site Preparation	Site Preparation	4/3/2023	4/14/2023	5	10	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3	Grading	Grading	4/15/2023	6/2/2023	5	35
4	Building Construction	Building Construction	6/3/2023	11/1/2024	5	370
5	Paving	Paving	11/2/2024	11/29/2024	5	20
6	Architectural Coating	Architectural Coating	11/2/2024	11/29/2024	5	20

Acres of Grading (Site Preparation Phase): 24.98

Acres of Grading (Grading Phase): 24.98

Acres of Paving: 3.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 687,098; Non-Residential Outdoor: 229,033; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42

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Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	259.00	101.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0133	0.0000	0.0133	1.4300e-003	0.0000	1.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0133	6.3300e-003	0.0196	1.4300e-003	5.8200e-003	7.2500e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686
Total	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9600e-003	0.0000	5.9600e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	5.9600e-003	6.3300e-003	0.0123	6.4000e-004	5.8200e-003	6.4600e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686
Total	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0133	0.0000	0.0133	1.4300e-003	0.0000	1.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0581	0.6040	0.4909	1.0900e-003		0.0249	0.0249		0.0229	0.0229	0.0000	95.4366	95.4366	0.0309	0.0000	96.2083
Total	0.0581	0.6040	0.4909	1.0900e-003	0.0133	0.0249	0.0382	1.4300e-003	0.0229	0.0244	0.0000	95.4366	95.4366	0.0309	0.0000	96.2083

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111
Total	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9600e-003	0.0000	5.9600e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0581	0.6040	0.4909	1.0900e-003		0.0249	0.0249		0.0229	0.0229	0.0000	95.4365	95.4365	0.0309	0.0000	96.2082
Total	0.0581	0.6040	0.4909	1.0900e-003	5.9600e-003	0.0249	0.0309	6.4000e-004	0.0229	0.0236	0.0000	95.4365	95.4365	0.0309	0.0000	96.2082

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111
Total	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875
Total	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9900e-003	0.3351	0.0986	1.5200e-003	0.0501	2.1400e-003	0.0522	0.0145	2.0500e-003	0.0165	0.0000	145.9472	145.9472	7.2000e-004	0.0221	152.5404
Worker	0.0564	0.0373	0.4419	1.3300e-003	0.1547	7.6000e-004	0.1555	0.0411	7.0000e-004	0.0418	0.0000	121.5827	121.5827	3.7000e-003	3.4900e-003	122.7154
Total	0.0644	0.3725	0.5405	2.8500e-003	0.2048	2.9000e-003	0.2077	0.0556	2.7500e-003	0.0584	0.0000	267.5299	267.5299	4.4200e-003	0.0256	275.2558

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873
Total	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9900e-003	0.3351	0.0986	1.5200e-003	0.0501	2.1400e-003	0.0522	0.0145	2.0500e-003	0.0165	0.0000	145.9472	145.9472	7.2000e-004	0.0221	152.5404
Worker	0.0564	0.0373	0.4419	1.3300e-003	0.1547	7.6000e-004	0.1555	0.0411	7.0000e-004	0.0418	0.0000	121.5827	121.5827	3.7000e-003	3.4900e-003	122.7154
Total	0.0644	0.3725	0.5405	2.8500e-003	0.2048	2.9000e-003	0.2077	0.0556	2.7500e-003	0.0584	0.0000	267.5299	267.5299	4.4200e-003	0.0256	275.2558

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0340	255.0340	0.0603	0.0000	256.5417
Total	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0340	255.0340	0.0603	0.0000	256.5417

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0115	0.4918	0.1418	2.2000e-003	0.0734	3.1700e-003	0.0766	0.0212	3.0300e-003	0.0243	0.0000	210.7305	210.7305	1.0100e-003	0.0318	220.2387
Worker	0.0763	0.0481	0.5992	1.8800e-003	0.2269	1.0500e-003	0.2280	0.0603	9.7000e-004	0.0613	0.0000	172.1399	172.1399	4.8700e-003	4.7200e-003	173.6697
Total	0.0878	0.5399	0.7411	4.0800e-003	0.3004	4.2200e-003	0.3046	0.0816	4.0000e-003	0.0856	0.0000	382.8704	382.8704	5.8800e-003	0.0365	393.9084

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0337	255.0337	0.0603	0.0000	256.5414
Total	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0337	255.0337	0.0603	0.0000	256.5414

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0115	0.4918	0.1418	2.2000e-003	0.0734	3.1700e-003	0.0766	0.0212	3.0300e-003	0.0243	0.0000	210.7305	210.7305	1.0100e-003	0.0318	220.2387
Worker	0.0763	0.0481	0.5992	1.8800e-003	0.2269	1.0500e-003	0.2280	0.0603	9.7000e-004	0.0613	0.0000	172.1399	172.1399	4.8700e-003	4.7200e-003	173.6697
Total	0.0878	0.5399	0.7411	4.0800e-003	0.3004	4.2200e-003	0.3046	0.0816	4.0000e-003	0.0856	0.0000	382.8704	382.8704	5.8800e-003	0.0365	393.9084

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	4.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144
Total	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	4.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144
Total	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	1.0634	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3900e-003	8.8000e-004	0.0109	3.0000e-005	4.1400e-003	2.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.1419	3.1419	9.0000e-005	9.0000e-005	3.1698
Total	1.3900e-003	8.8000e-004	0.0109	3.0000e-005	4.1400e-003	2.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.1419	3.1419	9.0000e-005	9.0000e-005	3.1698

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3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	1.0634	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3900e-003	8.8000e-004	0.0109	3.0000e-005	4.1400e-003	2.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.1419	3.1419	9.0000e-005	9.0000e-005	3.1698
Total	1.3900e-003	8.8000e-004	0.0109	3.0000e-005	4.1400e-003	2.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.1419	3.1419	9.0000e-005	9.0000e-005	3.1698

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Implement Trip Reduction Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2747	1.8821	3.3694	0.0156	1.2413	0.0168	1.2581	0.3347	0.0159	0.3506	0.0000	1,463.9588	1,463.9588	0.0415	0.1295	1,503.6005
Unmitigated	0.2896	2.1561	3.8104	0.0185	1.4808	0.0199	1.5007	0.3993	0.0189	0.4182	0.0000	1,734.4837	1,734.4837	0.0463	0.1517	1,780.8417

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Refrigerated Warehouse-No Rail	972.87	972.87	972.87	3,882,805	3,254,657
Parking Lot	0.00	0.00	0.00		
Total	972.87	972.87	972.87	3,882,805	3,254,657

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Refrigerated Warehouse-No	9.50	7.30	15.00	59.00	0.00	41.00	92	5	3

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Refrigerated Warehouse-No Rail	0.483580	0.043245	0.188169	0.107110	0.003644	0.004172	0.054876	0.106665	0.001183	0.001302	0.004809	0.000595	0.000651
Parking Lot	0.483580	0.043245	0.188169	0.107110	0.003644	0.004172	0.054876	0.106665	0.001183	0.001302	0.004809	0.000595	0.000651

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	799.5344	799.5344	0.1294	0.0157	807.4403
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	799.5344	799.5344	0.1294	0.0157	807.4403
NaturalGas Mitigated	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6724	27.6724	5.3000e-004	5.1000e-004	27.8369
NaturalGas Unmitigated	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6724	27.6724	5.3000e-004	5.1000e-004	27.8369

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	518562	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6724	27.6724	5.3000e-004	5.1000e-004	27.8369
Total		2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6724	27.6724	5.3000e-004	5.1000e-004	27.8369

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	518562	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6724	27.6724	5.3000e-004	5.1000e-004	27.8369
Total		2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6724	27.6724	5.3000e-004	5.1000e-004	27.8369

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	55300	5.1166	8.3000e-004	1.0000e-004	5.1672
Refrigerated Warehouse-No Rail	8.58609e+006	794.4178	0.1285	0.0156	802.2732
Total		799.5344	0.1294	0.0157	807.4403

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	55300	5.1166	8.3000e-004	1.0000e-004	5.1672
Refrigerated Warehouse-No Rail	8.58609e+006	794.4178	0.1285	0.0156	802.2732
Total		799.5344	0.1294	0.0157	807.4403

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9093	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163
Unmitigated	1.9093	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1062					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8025					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.2000e-004	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163
Total	1.9093	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1062					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8025					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.2000e-004	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163
Total	1.9093	7.0000e-005	7.8300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0153	0.0153	4.0000e-005	0.0000	0.0163

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	69.4369	2.7732	0.0662	158.4812
Unmitigated	86.7961	3.4665	0.0827	198.1015

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	106.121 / 0	86.7961	3.4665	0.0827	198.1015
Total		86.7961	3.4665	0.0827	198.1015

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	84.8965 / 0	69.4369	2.7732	0.0662	158.4812
Total		69.4369	2.7732	0.0662	158.4812

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	21.8911	1.2937	0.0000	54.2342
Unmitigated	87.5642	5.1749	0.0000	216.9366

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	431.37	87.5642	5.1749	0.0000	216.9366
Total		87.5642	5.1749	0.0000	216.9366

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	107.843	21.8911	1.2937	0.0000	54.2342
Total		21.8911	1.2937	0.0000	54.2342

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	20	8.00	260	89	0.20	Electrical

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	396.18	1000sqft	18.81	396,179.00	0
Parking Lot	485.00	Space	4.36	194,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Actual acreage and square footage.
- Construction Phase - No demolition.
- Vehicle Trips - Consistent with other warehouse projects.
- Area Coating - Maximum per SJVAPCD Rule 4601.
- Operational Off-Road Equipment - Consistent with other warehouse projects.
- Construction Off-road Equipment Mitigation - CalEEMod defaults.
- Mobile Commute Mitigation - CalEEMod defaults.
- Water Mitigation - CalEEMod defaults.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	0	50
tblAreaCoating	Area_EF_Nonresidential_Interior	0	50
tblAreaCoating	Area_EF_Parking	0	150
tblAreaCoating	Area_EF_Residential_Exterior	0	150
tblAreaCoating	Area_EF_Residential_Interior	0	150
tblAreaCoating	Area_Nonresidential_Exterior	0	198090
tblAreaCoating	Area_Nonresidential_Interior	0	594269
tblAreaCoating	ReapplicationRatePercent	0	10
tblCommuteMitigation	EmployeeVanpoolPercentModeShare	0	2
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	0	55
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	0	55
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LandUseSquareFeet	396,180.00	396,179.00
tblLandUse	LotAcreage	9.10	18.81
tblVehicleTrips	CNW_TL	7.30	15.00
tblWaterMitigation	PercentReductionInFlowBathroomFaucet	0	32
tblWaterMitigation	PercentReductionInFlowKitchenFaucet	0	18
tblWaterMitigation	PercentReductionInFlowShower	0	20
tblWaterMitigation	PercentReductionInFlowToilet	0	20
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentReduction	0	6.1

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2342	2.0722	2.1754	5.2500e-003	0.1663	0.0857	0.2520	0.0411	0.0800	0.1211	0.0000	469.1815	469.1815	0.0807	0.0173	476.3523
2024	1.1580	1.9507	2.4536	6.0000e-003	0.2068	0.0756	0.2824	0.0561	0.0711	0.1272	0.0000	538.8236	538.8236	0.0710	0.0247	547.9588
Maximum	1.1580	2.0722	2.4536	6.0000e-003	0.2068	0.0857	0.2824	0.0561	0.0800	0.1272	0.0000	538.8236	538.8236	0.0807	0.0247	547.9588

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2342	2.0722	2.1754	5.2500e-003	0.1528	0.0857	0.2385	0.0397	0.0800	0.1197	0.0000	469.1812	469.1812	0.0807	0.0173	476.3519
2024	1.1580	1.9507	2.4536	6.0000e-003	0.2068	0.0756	0.2824	0.0561	0.0711	0.1272	0.0000	538.8232	538.8232	0.0710	0.0247	547.9585
Maximum	1.1580	2.0722	2.4536	6.0000e-003	0.2068	0.0857	0.2824	0.0561	0.0800	0.1272	0.0000	538.8232	538.8232	0.0807	0.0247	547.9585

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	3.62	0.00	2.53	1.50	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-3-2023	7-2-2023	1.0057	1.0057
2	7-3-2023	10-2-2023	0.6503	0.6503
3	10-3-2023	1-2-2024	0.6567	0.6567
4	1-3-2024	4-2-2024	0.6135	0.6135
5	4-3-2024	7-2-2024	0.6065	0.6065
6	7-3-2024	9-30-2024	0.5999	0.5999
		Highest	1.0057	1.0057

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6524	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168
Energy	2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	716.0057	716.0057	0.1124	0.0140	722.9915
Mobile	0.2500	1.8614	3.2896	0.0159	1.2784	0.0172	1.2956	0.3447	0.0163	0.3610	0.0000	1,497.4237	1,497.4237	0.0400	0.1310	1,537.4458
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	75.5959	0.0000	75.5959	4.4676	0.0000	187.2856
Water						0.0000	0.0000		0.0000	0.0000	29.0657	45.8675	74.9332	2.9928	0.0714	171.0261
Total	1.9048	1.8834	3.3161	0.0161	1.2784	0.0189	1.2973	0.3447	0.0180	0.3627	104.6616	2,259.3127	2,363.9743	7.6128	0.2164	2,618.7656

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6524	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168
Energy	2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	716.0057	716.0057	0.1124	0.0140	722.9915
Mobile	0.2374	1.6294	2.9162	0.0135	1.0756	0.0146	1.0901	0.2900	0.0138	0.3038	0.0000	1,268.3423	1,268.3423	0.0359	0.1122	1,302.6771
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	18.8990	0.0000	18.8990	1.1169	0.0000	46.8214
Water						0.0000	0.0000		0.0000	0.0000	23.2526	36.6940	59.9466	2.3942	0.0571	136.8209
Total	1.8922	1.6514	2.9427	0.0136	1.0756	0.0163	1.0918	0.2900	0.0155	0.3055	42.1516	2,021.0578	2,063.2093	3.6595	0.1833	2,209.3275

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.66	12.32	11.26	15.19	15.87	13.92	15.84	15.87	13.90	15.77	59.73	10.55	12.72	51.93	15.27	15.63

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/3/2023	4/2/2023	5	0	
2	Site Preparation	Site Preparation	4/3/2023	4/14/2023	5	10	

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3	Grading	Grading	4/15/2023	6/2/2023	5	35
4	Building Construction	Building Construction	6/3/2023	11/1/2024	5	370
5	Paving	Paving	11/2/2024	11/29/2024	5	20
6	Architectural Coating	Architectural Coating	11/2/2024	11/29/2024	5	20

Acres of Grading (Site Preparation Phase): 23.17

Acres of Grading (Grading Phase): 23.17

Acres of Paving: 4.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 594,269; Non-Residential Outdoor: 198,090; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition		0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation		18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading		20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction		175.00	68.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving		15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating		35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0123	0.0000	0.0123	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0123	6.3300e-003	0.0186	1.3300e-003	5.8200e-003	7.1500e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686
Total	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5300e-003	0.0000	5.5300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	5.5300e-003	6.3300e-003	0.0119	6.0000e-004	5.8200e-003	6.4200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686
Total	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686

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3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0123	0.0000	0.0123	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0581	0.6040	0.4909	1.0900e-003		0.0249	0.0249		0.0229	0.0229	0.0000	95.4366	95.4366	0.0309	0.0000	96.2083
Total	0.0581	0.6040	0.4909	1.0900e-003	0.0123	0.0249	0.0372	1.3300e-003	0.0229	0.0243	0.0000	95.4366	95.4366	0.0309	0.0000	96.2083

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111
Total	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111

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3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5300e-003	0.0000	5.5300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0581	0.6040	0.4909	1.0900e-003		0.0249	0.0249		0.0229	0.0229	0.0000	95.4365	95.4365	0.0309	0.0000	96.2082
Total	0.0581	0.6040	0.4909	1.0900e-003	5.5300e-003	0.0249	0.0305	6.0000e-004	0.0229	0.0235	0.0000	95.4365	95.4365	0.0309	0.0000	96.2082

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111
Total	1.0200e-003	6.7000e-004	7.9600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1907	2.1907	7.0000e-005	6.0000e-005	2.2111

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875
Total	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3800e-003	0.2256	0.0664	1.0200e-003	0.0337	1.4400e-003	0.0351	9.7400e-003	1.3800e-003	0.0111	0.0000	98.2615	98.2615	4.8000e-004	0.0149	102.7005
Worker	0.0381	0.0252	0.2986	9.0000e-004	0.1046	5.2000e-004	0.1051	0.0278	4.7000e-004	0.0283	0.0000	82.1505	82.1505	2.5000e-003	2.3600e-003	82.9158
Total	0.0435	0.2509	0.3650	1.9200e-003	0.1383	1.9600e-003	0.1402	0.0375	1.8500e-003	0.0394	0.0000	180.4120	180.4120	2.9800e-003	0.0172	185.6163

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3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873
Total	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3800e-003	0.2256	0.0664	1.0200e-003	0.0337	1.4400e-003	0.0351	9.7400e-003	1.3800e-003	0.0111	0.0000	98.2615	98.2615	4.8000e-004	0.0149	102.7005
Worker	0.0381	0.0252	0.2986	9.0000e-004	0.1046	5.2000e-004	0.1051	0.0278	4.7000e-004	0.0283	0.0000	82.1505	82.1505	2.5000e-003	2.3600e-003	82.9158
Total	0.0435	0.2509	0.3650	1.9200e-003	0.1383	1.9600e-003	0.1402	0.0375	1.8500e-003	0.0394	0.0000	180.4120	180.4120	2.9800e-003	0.0172	185.6163

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3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0340	255.0340	0.0603	0.0000	256.5417
Total	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0340	255.0340	0.0603	0.0000	256.5417

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7100e-003	0.3311	0.0955	1.4800e-003	0.0494	2.1300e-003	0.0516	0.0143	2.0400e-003	0.0163	0.0000	141.8780	141.8780	6.8000e-004	0.0214	148.2795
Worker	0.0516	0.0325	0.4049	1.2700e-003	0.1533	7.1000e-004	0.1541	0.0408	6.6000e-004	0.0414	0.0000	116.3107	116.3107	3.2900e-003	3.1900e-003	117.3444
Total	0.0593	0.3636	0.5004	2.7500e-003	0.2028	2.8400e-003	0.2056	0.0551	2.7000e-003	0.0578	0.0000	258.1887	258.1887	3.9700e-003	0.0246	265.6239

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3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0337	255.0337	0.0603	0.0000	256.5414
Total	0.1619	1.4788	1.7784	2.9600e-003		0.0675	0.0675		0.0635	0.0635	0.0000	255.0337	255.0337	0.0603	0.0000	256.5414

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7100e-003	0.3311	0.0955	1.4800e-003	0.0494	2.1300e-003	0.0516	0.0143	2.0400e-003	0.0163	0.0000	141.8780	141.8780	6.8000e-004	0.0214	148.2795
Worker	0.0516	0.0325	0.4049	1.2700e-003	0.1533	7.1000e-004	0.1541	0.0408	6.6000e-004	0.0414	0.0000	116.3107	116.3107	3.2900e-003	3.1900e-003	117.3444
Total	0.0593	0.3636	0.5004	2.7500e-003	0.2028	2.8400e-003	0.2056	0.0551	2.7000e-003	0.0578	0.0000	258.1887	258.1887	3.9700e-003	0.0246	265.6239

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3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	5.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0156	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144
Total	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144

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3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	5.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0156	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144
Total	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144

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3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9182					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	0.9200	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	5.9000e-004	7.3600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1147	2.1147	6.0000e-005	6.0000e-005	2.1335
Total	9.4000e-004	5.9000e-004	7.3600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1147	2.1147	6.0000e-005	6.0000e-005	2.1335

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3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9182					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	0.9200	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	5.9000e-004	7.3600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1147	2.1147	6.0000e-005	6.0000e-005	2.1335
Total	9.4000e-004	5.9000e-004	7.3600e-003	2.0000e-005	2.7900e-003	1.0000e-005	2.8000e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.1147	2.1147	6.0000e-005	6.0000e-005	2.1335

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Implement Trip Reduction Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2374	1.6294	2.9162	0.0135	1.0756	0.0146	1.0901	0.2900	0.0138	0.3038	0.0000	1,268,342 ₃	1,268,342 ₃	0.0359	0.1122	1,302,677 ₁
Unmitigated	0.2500	1.8614	3.2896	0.0159	1.2784	0.0172	1.2956	0.3447	0.0163	0.3610	0.0000	1,497,423 ₇	1,497,423 ₇	0.0400	0.1310	1,537,445 ₈

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Refrigerated Warehouse-No Rail	839.90	839.90	839.90	3,352,124	2,820,206
Parking Lot	0.00	0.00	0.00		
Total	839.90	839.90	839.90	3,352,124	2,820,206

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Refrigerated Warehouse-No	9.50	7.30	15.00	59.00	0.00	41.00	92	5	3

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.483580	0.043245	0.188169	0.107110	0.003644	0.004172	0.054876	0.106665	0.001183	0.001302	0.004809	0.000595	0.000651
Refrigerated Warehouse-No Rail	0.483580	0.043245	0.188169	0.107110	0.003644	0.004172	0.054876	0.106665	0.001183	0.001302	0.004809	0.000595	0.000651

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	692.1157	692.1157	0.1120	0.0136	698.9595
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	692.1157	692.1157	0.1120	0.0136	698.9595
NaturalGas Mitigated	2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8900	23.8900	4.6000e-004	4.4000e-004	24.0320
NaturalGas Unmitigated	2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8900	23.8900	4.6000e-004	4.4000e-004	24.0320

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	447682	2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8900	23.8900	4.6000e-004	4.4000e-004	24.0320
Total		2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8900	23.8900	4.6000e-004	4.4000e-004	24.0320

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	447682	2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8900	23.8900	4.6000e-004	4.4000e-004	24.0320
Total		2.4100e-003	0.0220	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8900	23.8900	4.6000e-004	4.4000e-004	24.0320

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	67900	6.2824	1.0200e-003	1.2000e-004	6.3445
Refrigerated Warehouse-No Rail	7.41251e+006	685.8333	0.1110	0.0135	692.6150
Total		692.1157	0.1120	0.0136	698.9595

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	67900	6.2824	1.0200e-003	1.2000e-004	6.3445
Refrigerated Warehouse-No Rail	7.41251e+006	685.8333	0.1110	0.0135	692.6150
Total		692.1157	0.1120	0.0136	698.9595

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6524	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168
Unmitigated	1.6524	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5598					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.4000e-004	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168
Total	1.6524	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168

Richland Crossroads - Alt 2 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5598					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.4000e-004	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168
Total	1.6524	7.0000e-005	8.0800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0158	0.0158	4.0000e-005	0.0000	0.0168

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	59.9466	2.3942	0.0571	136.8209
Unmitigated	74.9332	2.9928	0.0714	171.0261

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91.6166 / 0	74.9332	2.9928	0.0714	171.0261
Total		74.9332	2.9928	0.0714	171.0261

Richland Crossroads - Alt 2 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	73.2933 / 0	59.9466	2.3942	0.0571	136.8209
Total		59.9466	2.3942	0.0571	136.8209

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Richland Crossroads - Alt 2 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.8990	1.1169	0.0000	46.8214
Unmitigated	75.5959	4.4676	0.0000	187.2856

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	372.41	75.5959	4.4676	0.0000	187.2856
Total		75.5959	4.4676	0.0000	187.2856

Richland Crossroads - Alt 2 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	93.1025	18.8990	1.1169	0.0000	46.8214
Total		18.8990	1.1169	0.0000	46.8214

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	20	8.00	260	89	0.20	Electrical

Richland Crossroads - Alt 2 - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

APPENDIX B
CENTRAL CALIFORNIA INFORMATION CENTER
REPORT

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System

Department of Anthropology – California State University, Stanislaus

One University Circle, Turlock, California 95382

(209) 667-3307



Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 7/20/2022

Records Search File #: 12243L

Project: Richland Industrial ISMND
Lathrop, CA; APN 198-130-540, 550, 560,
570, 580

Rayanna Beck
BaseCamp Environmental, Inc.
802 W. Lodi Avenue
Lodi, CA 95240
209-224-8213

Invoice to: Rayanna Beck
rbeck@basecampenv.com

Dear Ms. Beck:

We have conducted a non-confidential extended records search as per your request for the above-referenced project area located on the Lathrop USGS 7.5-minute quadrangle map in San Joaquin County.

Search of our files includes review of our maps for the specific project area and the immediate vicinity of the project area, and review of the following:

National Register of Historic Places (NRHP)
California Register of Historical Resources (CRHR)
California Inventory of Historic Resources (1976)
California Historical Landmarks
California Points of Historical Interest listing
Office of Historic Preservation Built Environment Resource Directory (BERD) and the
Archaeological Determinations of Eligibility (ADOE)
Survey of Surveys (1989)
Caltrans State and Local Bridges Inventory
General Land Office Plats
Other pertinent historic data available at the CCaIC for each specific county

The following details the results of the records search:

Prehistoric or historic resources within the project area:

- There are no formally recorded prehistoric or historic archaeological resources or historic buildings or structures within the project area.
- The General Land Office Survey Plat for T1S R6E (dated 1865) shows the SW ¼ of Section 35 within an area of “Overflow Swampland.”

- The General Land Office Survey Plats for T1S R6E (dated 1870 and 1879) show the SW ¼ of Section 35 as a 160-acre parcel.
- The Map of the County of San Joaquin, California (dated 1883) references William B. Moss as the landowner of the SW ¼ of Section 35, T1S R6E, and depicts the route of the Southern Pacific Railroad adjacent to the southern edge of the project area.
- The 1915 edition of the Lathrop USGS quadrangle shows the street layout east of the Southern Pacific Railroad.
- The 1952 edition of the Lathrop USGS quadrangle shows a road and several buildings on or adjacent to the northern portion of the project area. We have no further information on file regarding these possible historical resources that would be 70 years in age (or older).

Prehistoric or historic resources within the immediate vicinity of the project area: There are no formally recorded prehistoric or historic archaeological resources or historic buildings within the immediate vicinity of the project area. Segments of the Southern Pacific Railroad in San Joaquin County have been recorded elsewhere as P-39-000002.

Resources that are known to have value to local cultural groups: None has been formally reported to the Information Center.

Previous investigations within the project area: No project-specific survey has been conducted on the property, but there are three overview documents on file that discuss the general Lathrop area that include the project:

Caruso, Glenn and Alison MacDougall (PG&E Building and Land Service Department)
 1994 *Cultural Resources Investigation of PG&E's Proposed Lathrop Area Increase San Joaquin County, California.*
CCa IC Report SJ-02515

Gross, C. H. (EDAW, Inc.)
 2003 *Cultural Resources Assessment for the Lathrop Water Recycling Plant No. 1, Phase I Expansion Project.*
CCIC Report SJ-05003

EDAW, Incorporated (EDAW, Incorporated)
 2005 *Central Lathrop Specific Plan, Cultural Resources Inventory, San Joaquin County, California.*
CCIC Report SJ-05803

Recommendations/Comments:

Please be advised that a historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. Since the area has not been subject to previous investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

If the current project does not include ground disturbance, further study for archaeological resources is not recommended at this time. If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the resource/s be assessed by a professional familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive.

If at any time you might require the services of a qualified professional the Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at <http://chrisinfo.org>

If archaeological resources are encountered during project-related activities, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the State Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain

information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Thank you for submitting the signed **Access Agreement Short Form**.

Note: Billing will be transmitted separately via email from the Financial Services office (\$150.00), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

<https://commerce.cashnet.com/ANTHROPOLOGY>

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services