

Manthey Road Bridge Replacement Project

Manthey Road Bridge Replacement Project over the San Joaquin River
in the City of Lathrop in San Joaquin County, California

BRLS-5456(016)

Bridge Number 29C-0127

Recirculated Focused Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
City of Lathrop
November 2021

General Information About This Document

What's in this document:

The City of Lathrop has prepared this Recirculated Focused Initial Study, which examines revisions to the potential environmental impacts of alternatives and mitigation measures for threatened and endangered species being considered for the proposed project in the City of Lathrop, San Joaquin County in California. The City of Lathrop is the lead agency under the California Environmental Quality Act (CEQA).

The document presents enhanced mitigation measures to address impacts on Swainson's hawk and riparian brush rabbit, and provides some additional information about these species, in response to comments from the California Department of Fish and Wildlife on the Draft IS/MND. Chapter 1 explains why the project is being proposed, and the alternatives we have considered for the project. The existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures for all other resource areas were presented in the Draft IS/MND/EA.

What you should do:

- Please read the document.
- Additional copies of the document and the related technical studies are available for review at the City of Lathrop offices at 390 Towne Centre Drive, Lathrop, California
- The document can also be downloaded at the following website:
<https://www.ci.lathrop.ca.us/com-dev/page/public-review-documents>.
- Tell us what you think. If you have any comments regarding the proposed project, or the revised findings and migration presented in this document, please send your written comments to the City of Lathrop by the deadline.
- Submit comments via United States mail to: Angel Abarca, City of Lathrop, Planning Department, 390 Towne Centre Drive, Lathrop, California, 95330.
- Submit comments via email to: Aabarca@ci.lathrop.ca.us.
- Be sure to send comments by the deadline: December 13, 2021.

What happens next:

After comments are received from the public and reviewing agencies, the City may: 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, the City of Lathrop could design and construct all or part of the project.


SCH #2020090220
BRLS-5456(016)
Bridge Number 29C-0127

Replace the Manthey Road Bridge over the San Joaquin River in the city of Lathrop in
San Joaquin County

**RECIRCULATED FOCUSED INITIAL STUDY WITH PROPOSED
MITIGATED NEGATIVE DECLARATION**

City of Lathrop
Responsible Agencies under CEQA: State Lands Commission, California Department of
Fish and Wildlife, Regional Water Quality Control Board, Reclamation District 17,
Reclamation District 2062

11-9-2021
Date



Michael King
Director of Public Works
City of Lathrop
CEQA Lead Agency

The following may be contacted for more information about this document:
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DRAFT

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The City of Lathrop (City), in coordination with Caltrans, proposes to replace the Manthey Road bridge over the San Joaquin River in the City of Lathrop to address issues of safety and circulation and to improve bicycle and pedestrian access. The bridge approach would include a portion of the proposed Golden Valley Parkway alignment.

Revised Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is the City's intent to adopt a Mitigated Negative Declaration for this project. This Mitigated Negative Declaration is subject to change based on comments received from interested agencies and the public.

The City and Caltrans circulated a joint Initial Study/Environmental Assessment on September 11, 2020 for a 30-day public review. Based on comments received from the California Department of Fish and Wildlife on mitigation for Swainson's hawk and riparian brush rabbit, the City has prepared a Recirculated Focused Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons. Pursuant to State CEQA Guidelines 15074(b), prior to approving a project, the City shall consider this proposed mitigated negative declaration together with any comments received during the public review process.

The proposed project would have no effect on Land Use and Planning, Population and Housing, Recreation, and Transportation.

The proposed project would have no significant effect on Aesthetics, Agricultural Resources, Air Quality, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, Noise, Public Services, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

The proposed project would have no significant adverse effect on Biological Resources or Cultural Resources because the following five mitigation measures would reduce potential effects to less than significant. The last two mitigation measures below have been added to address concerns raised by California Department of Fish and Wildlife in the original Initial Study/Mitigated Negative Declaration/Environmental Assessment circulated on September 11, 2020.

- Implement a Post Review Discovery and Monitoring Plan
- Compensate for Temporary Effects on and Permanent Loss of Riparian Woodland and Riparian Scrub (Including Shaded Riverine Aquatic Cover)

Mitigated Negative Declaration

- Purchase Channel Enhancement Credits at National Marine Fisheries Service-Approved Anadromous Fish and United States Fish and Wildlife Service-Approved Delta Smelt Conservation Bank for Impacts on Critical Habitat
- Purchase Compensatory Mitigation for Permanent Loss of Swainson's Hawk Foraging Habitat
- Mitigate for Loss of Riparian Brush Rabbit Habitat

Michael King
Director of Public Works
City of Lathrop

Date

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Chapter 1 Proposed Project

1.1 Reason for Recirculation

This document is the Recirculated Focused Initial Study with Proposed Mitigated Negative Declaration for the Manthey Road Bridge Replacement Project.

Section 15073.5 of the California Environmental Quality Act (CEQA) State Guidelines provides that an Initial Study and proposed mitigated negative declaration shall be recirculated for public review and comment when the lead agency determines that new measures or project revisions are required to reduce potential impacts to a less-than-significant level. “Recirculation” simply means that agencies and the public are provided an additional opportunity to comment on the new or revised sections of the Recirculated Focused Initial Study/Mitigated Negative Declaration. The Manthey Road Bridge Replacement Project Draft Initial Study/Mitigated Negative Declaration/Environmental Assessment (SCH# 2020090220) (the Draft Environmental Document) has been revised to add mitigation for impacts on Swainson’s hawk and riparian brush rabbit.

Caltrans and the City of Lathrop (City) released the joint Manthey Road Bridge Replacement Project IS/MND/EA for a 30-day public review period between September 11, 2020, and October 11, 2020. Prior to the end of the public comment period, the California Department of Fish and Wildlife contacted the City to indicate that it was in the process of preparing comments and requested that the comment period be extended so they could submit comments. The City and Caltrans declined to extend the public comment period but agreed that it would address comments from California Department of Fish and Wildlife.

On October 26, 2020, California Department of Fish and Wildlife provided a comment letter that included their opinion that impacts on Swainson’s hawk and riparian brush rabbit had not been mitigated to a less-than-significant level by measures provided in the Initial Study/Mitigated Negative Declaration/Environmental Assessment. The City of Lathrop reviewed the measure and agrees to mitigate for Swainson’s hawk foraging habitat and riparian brush rabbit habitat. Therefore, this Recirculated Focused Initial Study/Mitigated Negative Declaration includes additional mitigation for impacts on Swainson’s hawk and riparian brush rabbit, as shown in Section 2.3.1, *Threatened and Endangered Species*, and Section 3.2.1, *Biological Resources*.

While the City has determined that these changes require recirculation under CEQA, Caltrans, the lead agency under the National Environmental Policy Act, as assigned by the Federal Highway Administration, has determined that these revisions do not require a supplemental environmental document under the National Environmental Policy Act.

Resolution of other public comments on the Draft Environmental Document do not result in new or worsened impacts and will be addressed in final joint Initial Study/Environmental Assessment, which will be prepared, per Caltrans standard procedures, after the public comment period for this Recirculated Focused Initial Study/Mitigated Negative Declaration has closed.

The remainder of Chapter 1 is included mostly unchanged, except for minor revisions which are noted, for context.

1.2 Introduction

The City of Lathrop, in coordination with Caltrans, is proposing to replace the Manthey Road Bridge across the San Joaquin River, approximately 0.3 miles northeast of Stewart Road in the city of Lathrop. An environmental assessment has been prepared and is not being supplemented or revised. The City of Lathrop is the lead agency under the California Environmental Quality Act (CEQA).

Manthey Road is a two-lane frontage road that runs southwest–northeast, parallel to Interstate 5 (I-5), with a posted speed limit of 40 miles per hour. It is a local and regional route that crosses the San Joaquin River northwest of I-5, providing connectivity to the River Islands and Mossdale Village developments, which are the City’s two largest development areas (Figures 1-1 and 1-2).

Manthey Road extends from the city of Stockton south to the city of Lathrop, along the west side of I-5 in San Joaquin County. In Lathrop, Manthey Road has been removed between Louise Avenue and Towne Centre Drive. From Towne Centre Drive, the road continues south and crosses the San Joaquin River, providing access to the I-5/Manthey Road interchange and residences and businesses along Manthey Road.

The Manthey Road Bridge (Bridge Number 29C0127) was built in 1926 as a movable bridge; however, that feature is no longer functional. The bridge structure is a Pratt Camelback through steel truss with a Bascule lift approach on the north end and is 33.5 feet wide. The bridge has a pedestrian walkway on the southeast side outside of the main truss; however, this walkway is currently closed due to its poor and unsafe condition. A separate, independent pedestrian bridge is located immediately northwest (downstream) of the bridge. The proposed project is included in the San Joaquin Council of Government’s 2019 Federal Transportation Improvement Program (SJ07-3014).

1.3 Purpose and Need

In September 2012, Caltrans determined that the bridge is structurally deficient, with a sufficiency rating of 7.1 out of 100 and functionally obsolete (it is not wide enough to accommodate bicycle and pedestrian traffic or safe shoulders).

1.3.1 Purpose

The project has three primary objectives.

- To improve safety related to the bridge and more generally within the project area.
- To provide circulation to current and future residential areas and surrounding development consistent with adopted plans.
- To improve multimodal transportation in the City of Lathrop across the San Joaquin River.

1.3.2 Need

The project is needed to respond to the following concerns:

- **Safety:** The bridge received a 7.1 out of 100 sufficiency rating by Caltrans and was determined to be “Structurally Deficient” and “Functionally Obsolete” based on the September 2012 Caltrans Bridge Inspection Report. The current bridge does not meet standard lane and shoulder widths, and the existing superstructure does not allow widening.
- **Consistency with circulation patterns in adopted plans:** The current bridge on Manthey Road is a major crossing of the San Joaquin River serving the City of Lathrop. Prior to approval of the 2002 West Lathrop Specific Plan and the beginning of construction in Mossdale Village in 2004, the West Lathrop Specific Plan area was almost entirely agricultural. The West Lathrop Specific Plan allows for development of three mixed-use projects (Mossdale Village, River Islands, and Southeast Stewart Tract). Since approving the West Lathrop Specific Plan, the circulation patterns have changed and communities have expanded southward and westward, requiring a better connection across the San Joaquin River. When considering a replacement structure, the City must take into account current and future circulation patterns based on adopted plans.
- **Multimodal enhancements:** The existing bridge width is not adequate to accommodate bike lanes or shoulders. Currently, bicycle traffic must use the adjacent pedestrian bridge. The City’s General Plan and the West Lathrop Specific Plan identify multimodal enhancements and include Class II bike lanes. The new bridge will accommodate Class II bike lanes, encouraging non-motorized traffic over a safe river crossing.

Logical Termini and Independent Utility

The proposed project would function and address the purpose and need identified above without additional improvements. The project would connect two roadway sections and provide a river crossing. No other project would be required for the project to function adequately and meet the project purpose and need. Therefore, the project has independent utility. The project would also connect logical termini, in

that the area studied encompasses a broad enough area to fully address environmental issues.

1.4 Project Description

This section describes the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are the Build Alternative (proposed project, formerly Alternative 3) and the No-Build Alternative. The project extends from west of the San Joaquin River at Lakeside Drive/Stewart Road to Brookhurst Boulevard, a distance of approximately one mile. The project area includes the existing Manthey Road Bridge over the San Joaquin River (Figures 1-1 and 1-2).

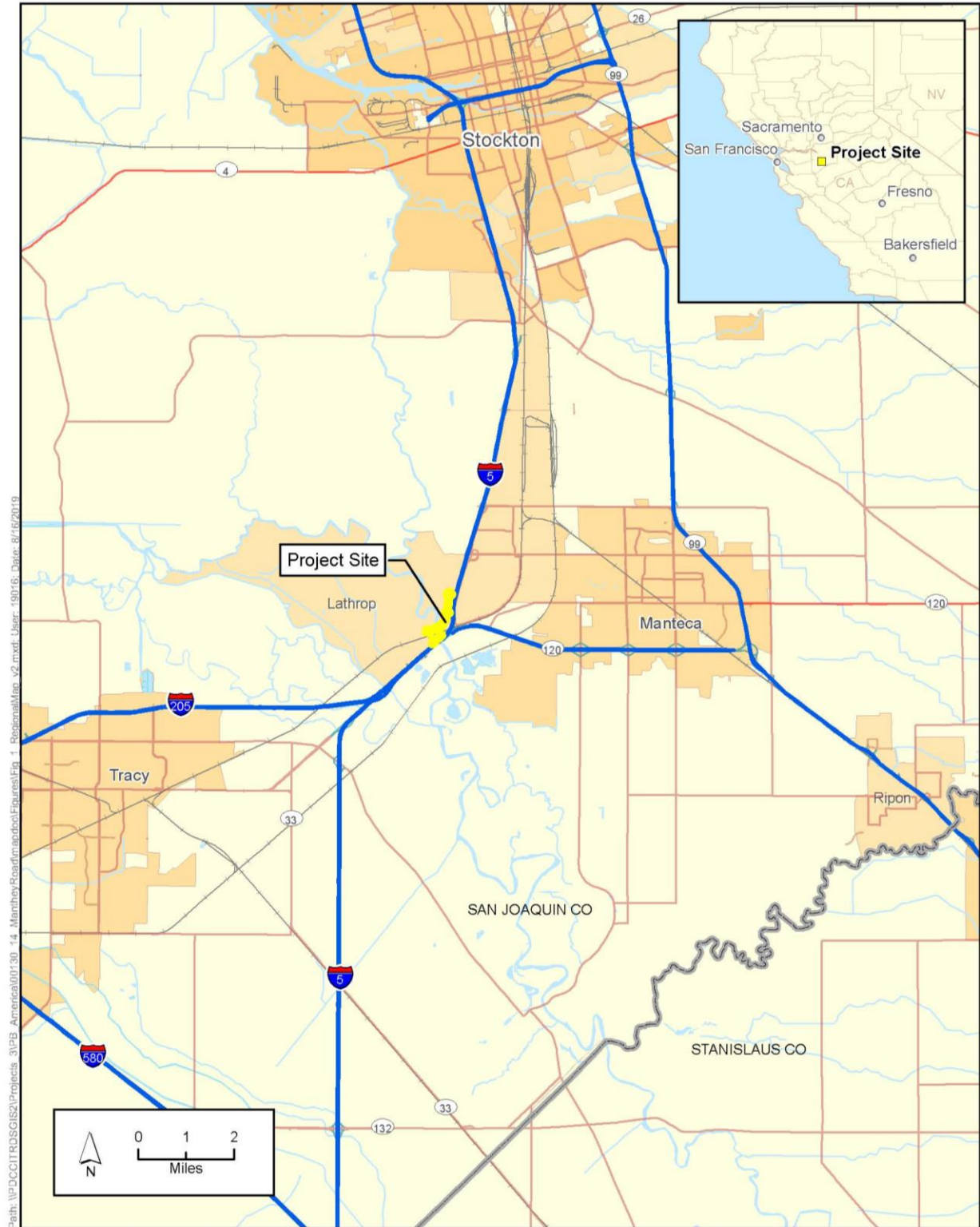


Figure 1-1 Project Vicinity Map

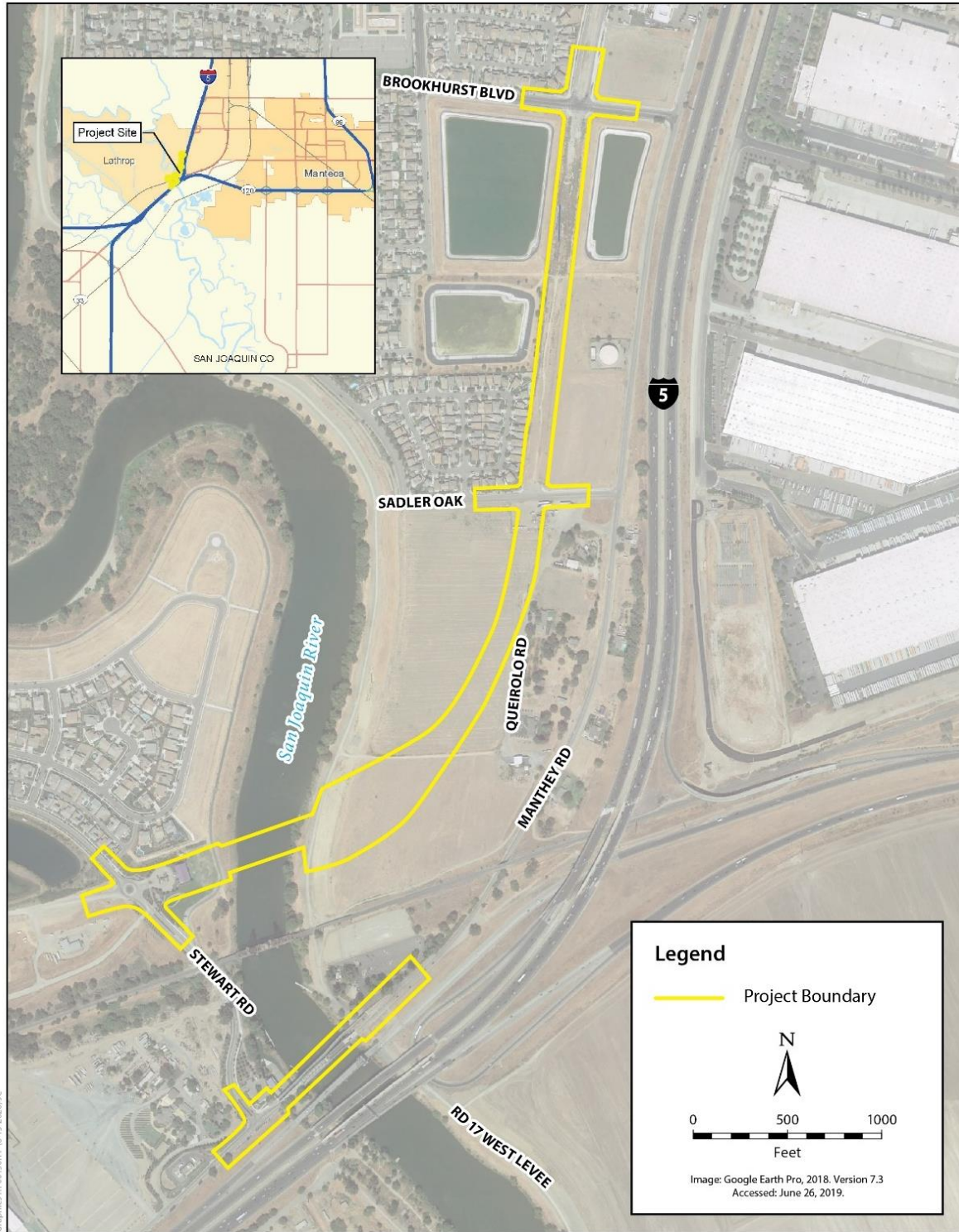


Figure 1-2 Project Location Map

1.5 Project Alternatives

One Build Alternative and the No-Build Alternative are under consideration. Three build alternatives were initially considered for the proposed project but two build alternatives considered were eliminated from further consideration, as described further in Section 1.6, *Alternatives Considered but Eliminated From Consideration*.

1.5.1 Build Alternative

Under the Build Alternative (proposed project), the City would replace the Manthey Road Bridge (No. 29C0127) with a new bridge downstream of the existing railroad bridge and demolish the existing bridge (Figures 1-1 and 1-2). The preliminary alignment for this alternative follows the proposed Golden Valley Parkway alignment across the San Joaquin River, in accordance with the West Lathrop Specific Plan, and conforms at Stewart Road west of the river. Partial right of way acquisition would be required from six privately owned properties (Assessor Parcel Numbers 213-310-05, 213-310-06, 241-020-69, 241-020-68, 241-020-67, and 241-020-63), as well as easements from Reclamation District 17 and Reclamation District 2062 (Figures 1-3, 1-4a, 1-4b and 1-5).

The new bridge would measure approximately 532 feet long by 53 feet wide and would accommodate two 12-foot traffic lanes, two 8-foot shoulders, two 5-foot, 6-inch sidewalks, and concrete barriers and tubular handrails (Figure 1-5). The bridge would be supported by three sets of two piers supported by cast-in-steel-shell piles in the river and abutments on both ends supported by cast-in-drilled-hole piles. The bridge superstructure would be precast, prestressed concrete bulb-tee girders with a cast-in-place concrete deck or a cast-in-place, post-tensioned concrete box girder.

The proposed project would construct a 1-mile-long segment of Golden Valley Parkway along the alignment outlined in the West Lathrop Specific Plan. Though eventually planned as a four-lane arterial, the road constructed under this project would have two 12-foot lanes, with 8-foot shoulders and 5-foot sidewalks located within one-half of the proposed right of way that has been identified for the parkway. The new roadway approach would extend from Brookhurst Boulevard in the north heading southward, turn to the west, cross the San Joaquin River on the new bridge alignment, and connect to Stewart Road in the River Islands development west of the river. Intersection improvements would be made at Brookhurst Boulevard and Saddler Oak. The bridge would conform to existing ground level at Stewart Road.

The United States Army Corps of Engineers would require a minimum of 3 feet of vertical clearance above the levees on each side of the River. Reclamation District 17 prefers 15 feet of vertical clearance above the levee on the Mossdale Landing (east) side for access below the proposed bridge. The City proposes to provide access for Reclamation District 17 on the land side of the levee through a culvert structure. Based on these requests, the profile would reach maximum heights of approximately 20 feet above the existing surrounding ground. A combination of fill slopes and retaining walls could be used to retain the higher approach roadway.

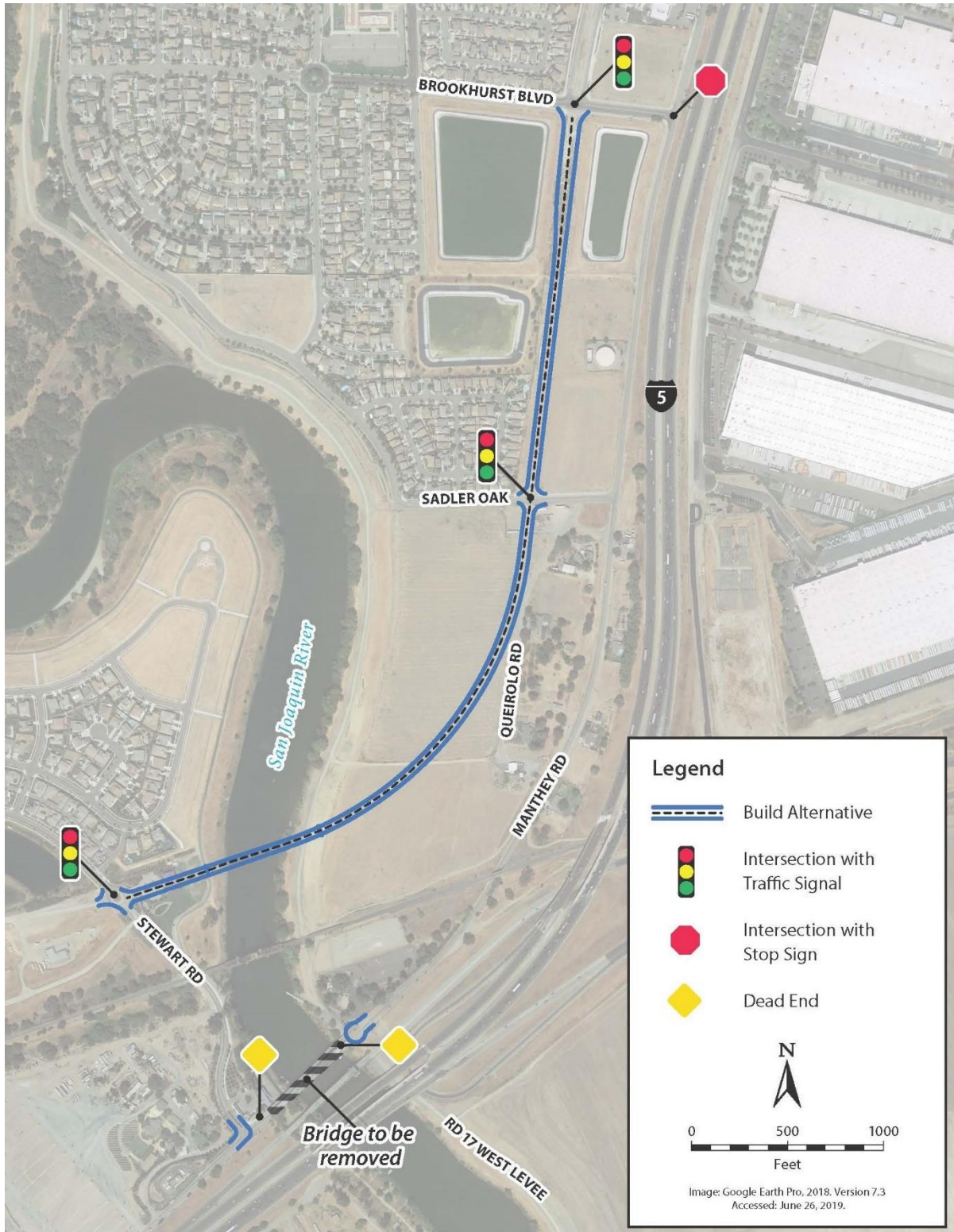


Figure 1-3. Build Alternative Overview

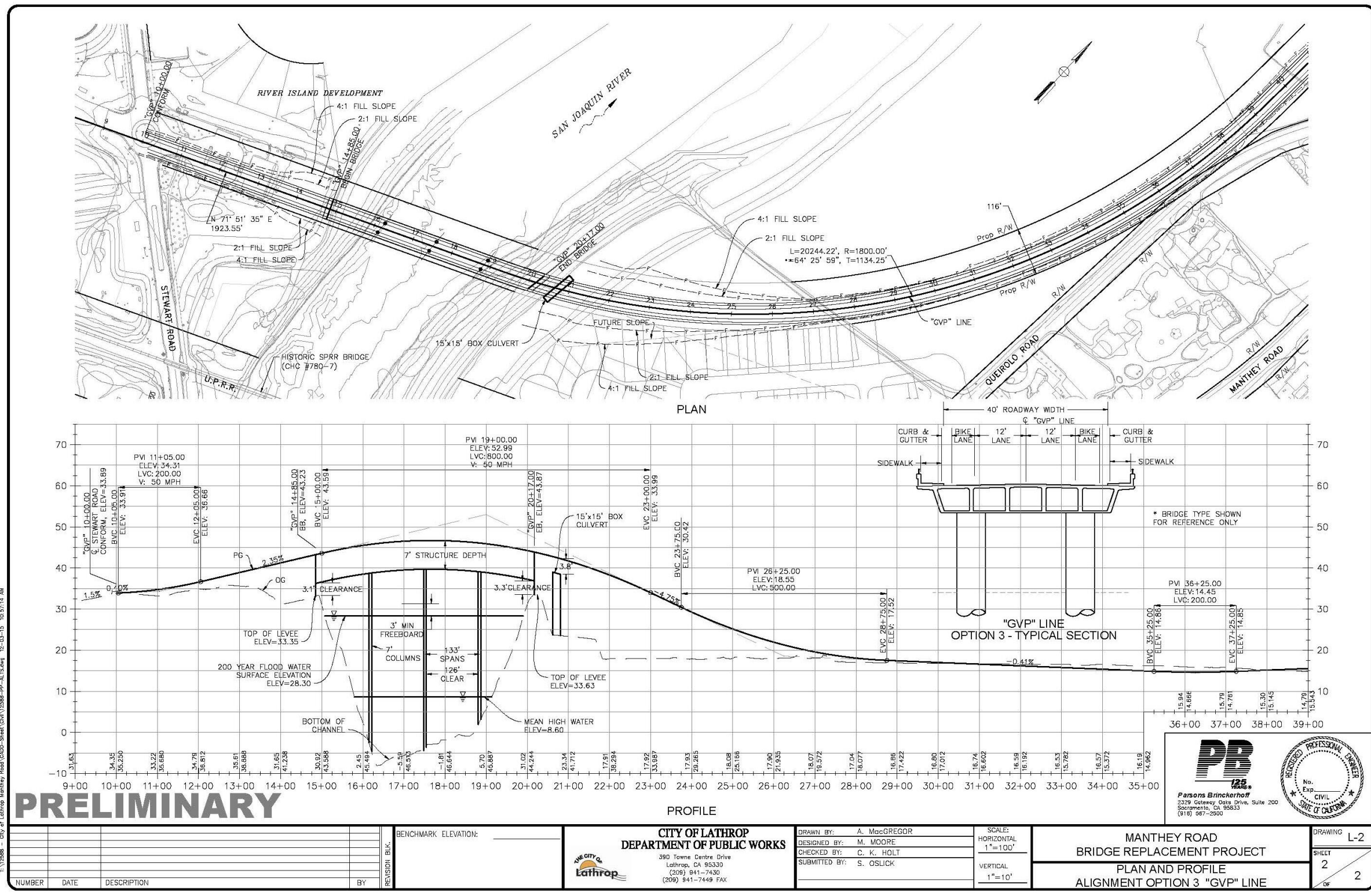
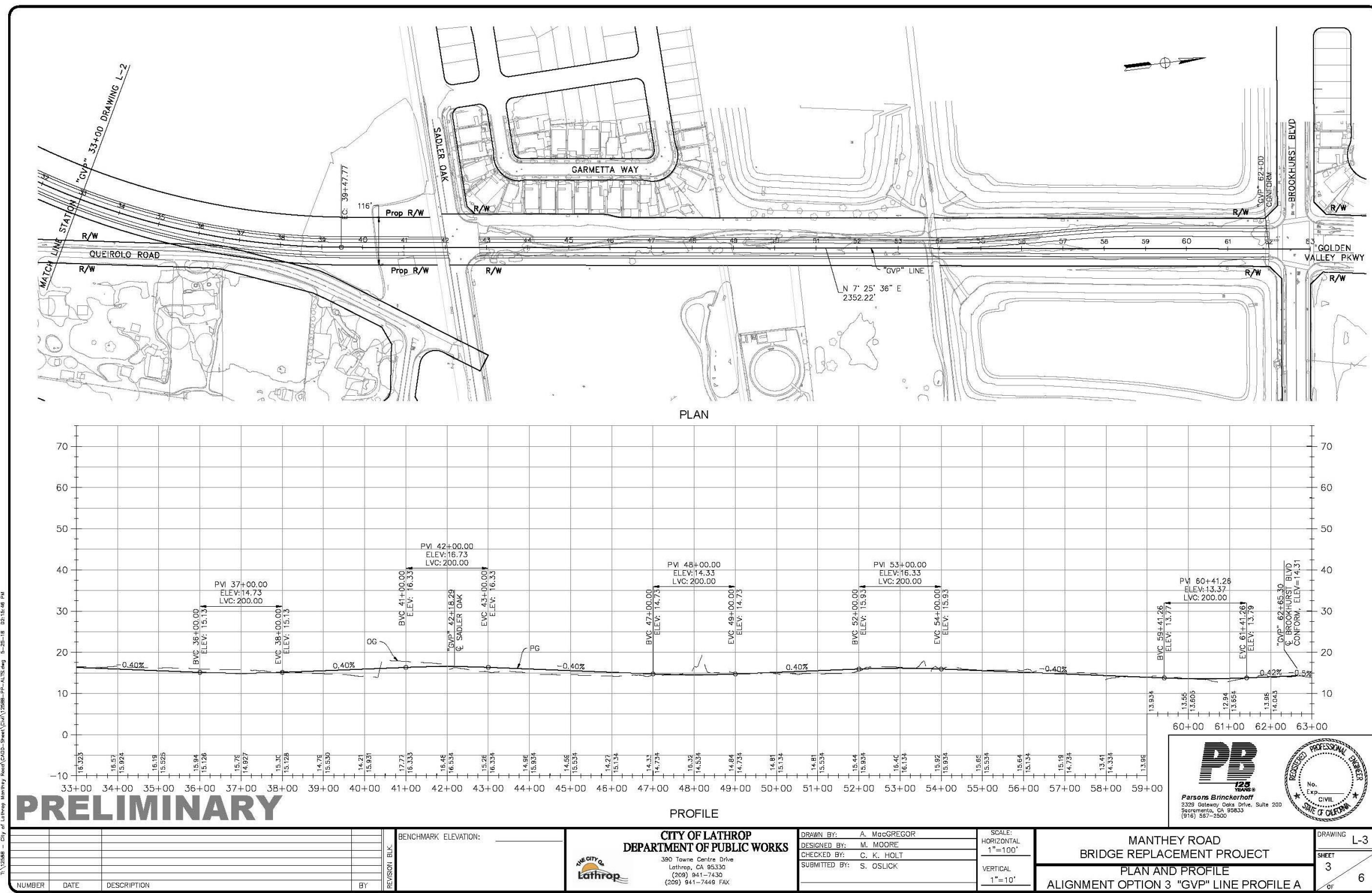


Figure 1-4a Build Alternative Plan and Profile



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Figure 1-4b Build Alternative Plan and Profile

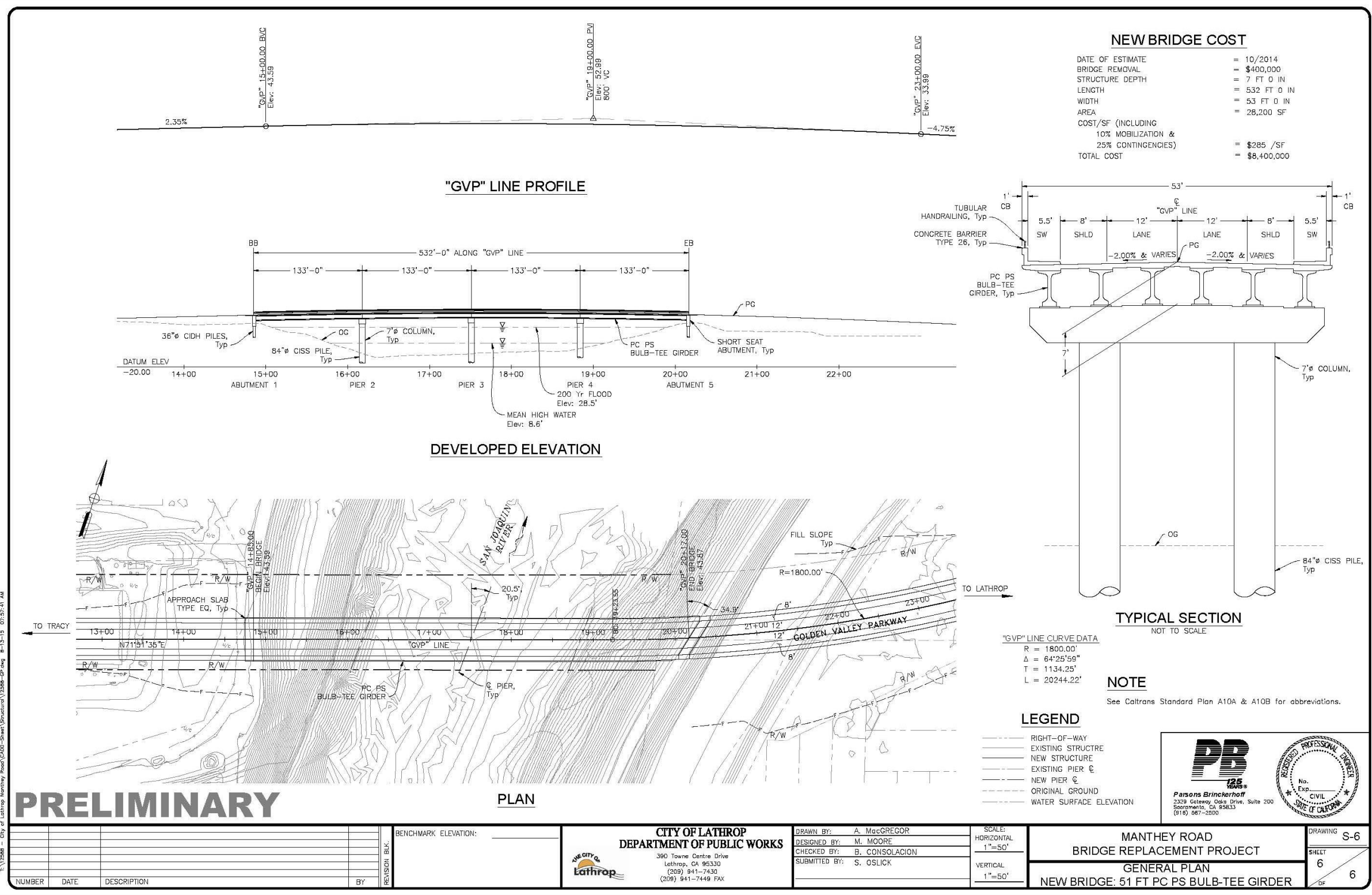


Figure 1-5 Proposed Bridge General Plan

Intersections of Golden Valley Parkway with Brookhurst Boulevard and Sadler Oak Drive would be signalized and would accommodate left and right turns from all directions. No changes would be made to the intersections of Manthey Road at Brookhurst Boulevard and Sadler Oak Drive. The intersection of Golden Valley Parkway and Stewart Road would be signalized; access to Stewart Road south of Golden Valley Parkway would be limited to right turns from Golden Valley Parkway. Northbound traffic on Stewart Road would only be able to turn right (Figure 1-6).

The Manthey Road Bridge would be removed after the new bridge is open to traffic. Access to the Mossdale County Park will be maintained and Manthey Road would culminate in a cul-de-sac at Mossdale County Park to allow for bus turn-arounds. On the west side of the San Joaquin River, Manthey Road would end in a free left turn onto Stewart Road. A free right turn from Stewart Road to Manthey Road would be striped. The existing pedestrian bridge would remain. (This text has been revised since the circulation of the Draft Environmental Document.)

Utility Relocations

The Build Alternative is a new route, and no utilities cross the river at this location. Minor modifications to above ground utility features, such as manholes and utility valves, may be required along the proposed alignment. Relocation of one power pole on the Mossdale Landing side of the San Joaquin River also may be required.

Detours

The existing Manthey Road and Manthey Road Bridge would remain in operation during construction of the new bridge and the approach roadways. No temporary detours would be required for this alternative.

Construction Methods

The general construction methods are described below.

Bridge Construction and Demolition

Construction of the new bridge and removal of the existing bridge would directly affect a total of approximately 500 feet of channel width of the San Joaquin River (i.e., from top of levee to top of levee on either side) and approximately 200 feet of non-contiguous channel length (at the construction and demolition sites).

In-Water Construction Activities

In-water construction activities, described below, consist of those construction activities occurring in water, excluding work confined within cofferdams. These activities would be limited to the period of June 1 to October 31, except as noted. The construction season in-water work window of June 1 to October 31 was determined after consideration of California Department of Fish and Wildlife, National Marine Fisheries Service, and the United States Fish and Wildlife Service in-water work restrictions, timing of presence of multiple special-status fish species, and timing of breeding seasons for other special-status species in the project area.

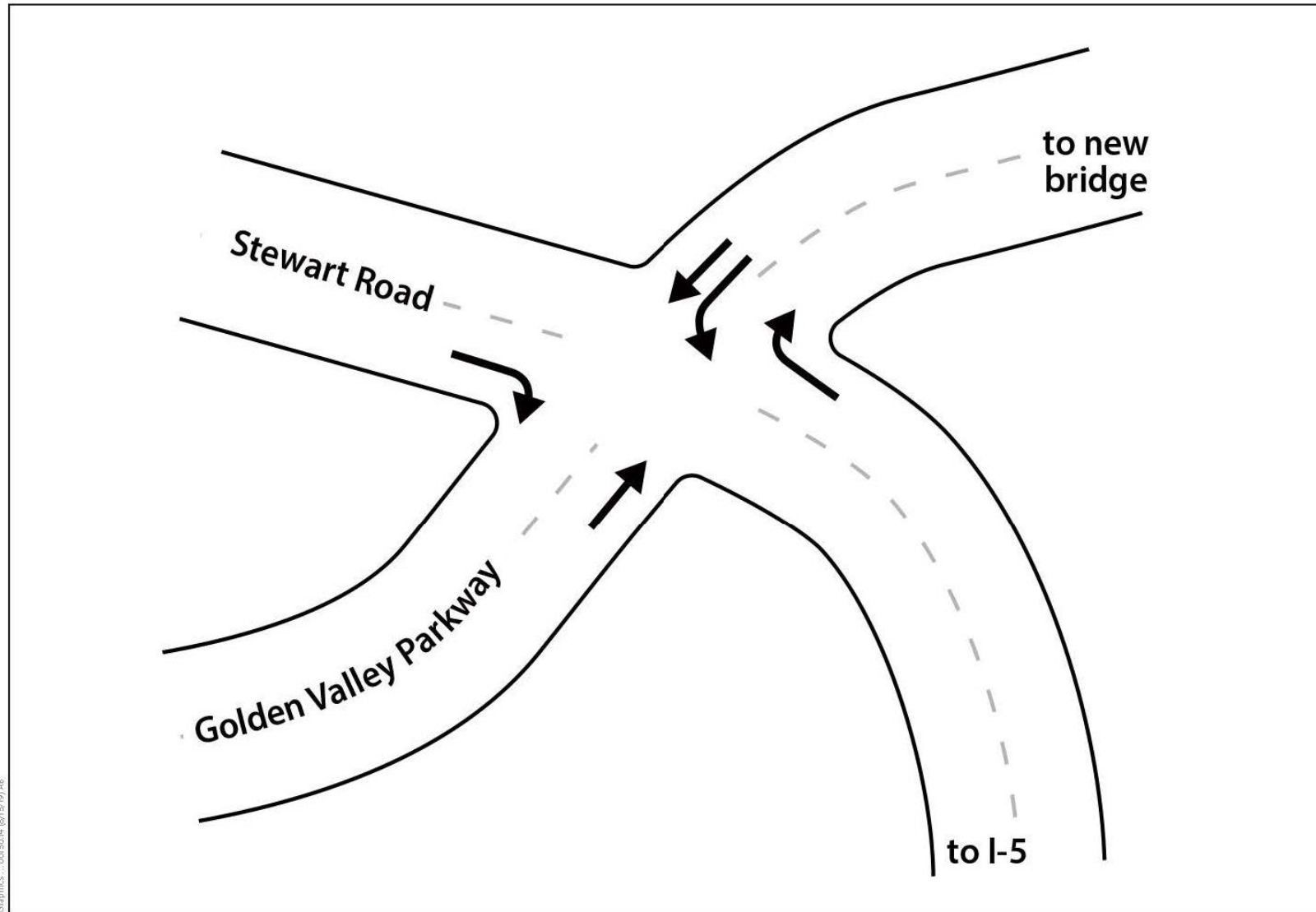


Figure 1-6 Intersection of Stewart Road and Golden Valley Parkway

The annual in-water work windows allow sufficient time to install a temporary trestle as well as casings or cofferdams, which will isolate activities from the active river, thus extending time available for foundation and pier demolition and construction. Activities occurring within cofferdams or steel casings would not be limited by the June 1 to October 31 in-water work window because they would not occur in water. When they are no longer needed to isolate work, temporary trestle and cofferdams would be removed during subsequent in-water work windows. Other construction activities above the water, such as installation of the columns, pier caps, and the superstructure, can take place outside the in-water work window.

Bridge construction would start during the first in-water work window, and bridge removal would commence in the third in-water work window, after the proposed bridge is completed. Additional information on the proposed construction schedule is presented below (see “Proposed Construction Schedule”). Additional information on the sequencing of construction activities is provided below (see “Sequencing of Construction Activities”).

Installation of casings or cofferdams, as well as other construction activities, will be performed from an installed temporary trestle, which would allow for the passage of small recreational boat traffic. A temporary trestle would span the entire width of the river above the 200-year flood-event water surface elevation of 28.5 feet. The contractor would have the option of constructing the temporary trestle below the 200-year flood-event water surface elevation of 28.5 feet, as long as all timber decking is removed in advance of any anticipated flood event above the trestle deck. The temporary trestle would be 40 to 60 feet wide and would consist of approximately 30-foot spans, with five to eight piles per trestle pier. To provide an adequate work platform for new pier construction, the temporary trestle would have extensions perpendicular to the main trestle at proposed bridge pier locations. These extensions would have additional piles, which would be steel pipe or steel H-pile (steel beams that are driven into the earth by pile driving) equipment driven into the channel bottom, using a combination of vibratory and impact pile drivers. The piles would be embedded approximately 50 to 100 feet beneath the existing mudline. It is anticipated that up to eight piles would be driven per day and that pile driving would last up to a total of 40 days during the in-water work window.

Separate temporary trestles would be used for bridge removal and bridge construction. The bridge construction trestle would be as described above. The bridge demolition temporary trestles would extend out from each bank; only one of the temporary trestles would be required to extend to the center pier. Each bridge demolition temporary trestle would be approximately 40 feet long, with 30-foot spans. Extensions at existing pier locations would have additional piles. The bridge demolition temporary trestle would use piles and installation methods similar to those for the bridge construction temporary trestle described above.

The contractor would have the option of using barges instead of a temporary trestle for bridge removal and for bridge construction for the precast girder bridge type. It is anticipated that up to three barges would be in use at the project site at any given

time. Up to two barges with cranes would be moved from pier to pier during bridge demolition and construction of new bridge piers and would be moved from span to span during precast girder erection. Each crane barge would be secured in place using four steel pipe or steel H-piles (spud piles) driven into the channel bottom after each move, similar to how the temporary trestle piles would be installed, as described above. An additional barge would be used to off-haul material from bridge demolition and transport the precast girders to the construction site. This barge would be secured in place using two spud piles, if needed, during loading and unloading. Barges would be approximately 40 feet wide and 150 feet long and remain onsite throughout construction. It is anticipated that construction and demolition activities from barges would require barge movement and spud pile placement outside the in-water work window previously defined. The barges would be repositioned in the channel throughout construction only as needed to complete the work and barges would be removed after bridge construction and demolition are completed.

Cofferdams would be constructed around the three existing in-water foundations, prior to removing the existing foundations, to allow demolition activities to proceed without being limited by the in-water work window. Cofferdams would remain in the river between construction years, as needed, and would be removed during a subsequent in-water work window. The cofferdams used for removal of the existing bridge would be approximately 20 to 30 feet wide and 40 to 60 feet long. The center cofferdam would be located in the main channel, while the other two cofferdams would be located near the west and east shorelines. When all three cofferdams are installed, the cumulative width of the cofferdams would total approximately 65 to 95 feet. Based on a summer river flow width of approximately 330 feet, the cumulative cofferdam width would represent a maximum of approximately 29 percent of the total channel cross section of the San Joaquin River.

Cofferdams would be constructed of steel sheet piles that would be driven into the channel bottom using a vibratory hammer. Once the cofferdams are installed, seams would be sealed to separate the work area from the river, and the cofferdams would be dewatered. Any water displaced would be captured for treatment and released onsite, thereby preventing the discharge of contaminated water to the river. The cofferdams would extend above the 200-year flood event water surface elevation of 28.5 feet. The contractor would have the option of constructing the cofferdams below the 200-year flood event water surface elevation of 28.5 feet, as long as they either install a suitable cap to the top of the cofferdam or remove one or more sheet piles in advance of any anticipated flood event above the cofferdams. The cap would be required to prevent flood waters and fish from entering into the dewatered area inside the cofferdam. If a segment of cofferdam is removed, it would be reinstalled during the subsequent in-water construction window using the same procedures as during the initial cofferdam installation. Cofferdams would be removed during the in-water work window after bridge demolition or construction are completed.

Steel casings would be sized to match the proposed pile diameter and are anticipated to be 84 inches in diameter. The casings would be driven into the

channel bottom, which consists primarily of mud and silt, using a combination of vibratory and impact pile drivers and cranes from the temporary trestle or barge. The casings would be installed within bubble curtains to attenuate underwater noise. A crane would lift the large steel casing vertically into place at the desired location and lower it into the channel bottom. The weight of the casing itself would sink it several feet into the soft upper layers of river bottom. A vibratory hammer would then be used to advance the casing farther into the soil to the extent practical, and then the casing would be driven to the required elevation with an impact hammer. The casings would be embedded approximately 90 to 125 feet beneath the existing mudline. It is anticipated that one steel casing would be driven over the course of 2 to 4 days and that driving would last up to a total of 24 days. Once the casings are installed, any seams would be sealed to separate the work area from the river, and the casings would be dewatered. Any water displaced would be captured for treatment and released onsite, thereby preventing the discharge of contaminated water to the river. The casings would extend above the 200-year flood-event water surface elevation of 28.5 feet. The contractor would have the option of constructing the casings below the 200-year flood- event water surface elevation of 28.5 feet, as long as they install a suitable cap to the top of the casing in advance of any anticipated flood event above the casing. The cap would be required to prevent flood waters and fish from entering the dewatered area within the casing. The casings may be removed up to approximately 20 feet below the mudline and cut at the mudline after pile installation, or they may be left in place to act as the outer shell of the pile. Casing removal would occur during the in-water work window, after pile and column construction are completed.

Out-of-Water Construction Activities

Out-of-water construction activities include those activities that would occur within the sealed areas encompassed either by cofferdams or casings and construction activities above water or on land. Activities that would occur within cofferdams or casings include demolition of the existing bridge foundations and construction of the proposed bridge foundations and columns. Activities that would occur above water include placement of caps and decking. On land activities include all approach work.

Permanent bridge piers would be founded on 84-inch diameter concrete cast-in-steel-shell piles or concrete cast-in-drilled-hole piles with temporary steel casings. The soil inside the casing would be drilled out. A rebar cage would be placed in the casing, and then concrete would be poured into the casing. The piles would extend approximately 90 to 125 feet below the mudline. All of this work would occur inside the sealed steel casing installed during the in-water work window; therefore, it is not considered in-water work.

Abutments would be founded on 4-foot-diameter cast-in-drilled-hole-piles. These piles would be drilled with temporary casings and/or the use of a drilling slurry to prevent cave-in of the hole walls. Once the holes are drilled, the concrete would be poured at the same time as the temporary casing removal and/or displacement of the drilling slurry. The cast-in-drilled-hole-piles would be approximately 60 to 90 feet long. At each bridge abutment, approximately 300 cubic yards of rock slope

protection would be installed above the ordinary high water mark to prevent scour and erosion at the abutments. The rock slope protection would consist of half-ton rock with a median diameter of approximately 27 inches and cover approximately 2,700 square feet of the levee slope, for a distance of approximately 90 linear feet. On both levees, the rock slope protection would be placed from the bridge abutment to the toe of the levee, which is above the ordinary high water mark.

After construction of bridge foundations, temporary formwork for column concrete would be placed on top of the pile, column rebar placed, and concrete poured in the form. For the cast-in-place box girder bridge type, bridge falsework would be constructed, and pier caps would be cast as an integral part of the superstructure. For the precast girder bridge type, a cast-in-place concrete pier cap would be constructed atop the columns to serve as the support for the bridge girders. The precast girders would be fabricated offsite and transported to the field to be erected atop the pier caps, using one or more cranes from the temporary trestle or barges. Girder transportation may be by barge or truck. After girder erection, a cast-in-place deck would be constructed on the girders.

Bridge Removal

Existing foundations would be removed to 3 feet below the mudline, per Caltrans standards. The existing timber piles are below the channel bottom and would be left in place. Site-specific details related to foundation and pile removal will be determined in final design, in coordination with the U.S. Coast Guard and the California State Lands Commission. Based on available historic channel elevations, the channel bottom elevation has been stable, and no future degradation of channel bottom is anticipated. (This text has been revised since the circulation of the Draft Environmental Document.)

Roadway Construction

Excavation to a depth of up to 10 feet is expected in order to construct the new roadway, drainage facilities, and any underground utilities.

Proposed Right-of-Way Acquisition and Temporary Construction Easements

The project would require partial right-of-way acquisition from 11 privately owned properties (Table 1-1). Temporary acquisitions would be required from 10 parcels totaling 7.49 acres. Permanent acquisition would be required from 7 parcels totaling 7.57 acres. Permanent easements from Reclamation District 17 and Reclamation District 2062 would consist of 0.12 acre from Assessor's Parcel Number 241-020-67 (Reclamation District 17) and 0.33 acre from Assessor's Parcel Number 213-310-06 (Reclamation District 2062), totaling 0.45 acre.

Table 1-1. Right-of-Way Acquisition and Easements

Assessor's Parcel Number	Build Alternative Temporary Construction Easement (acres)	Build Alternative Permanent Acquisition (acres)	Build Alternative Permanent Easement (acres)
191-190-15	0.00	0.04	0.00
241-020-61	0.27	0.00	0.00
241-020-08	0.09	0.03	0.00
241-020-63	0.53	3.84	0.00
241-020-68	1.90	1.68	0.00
241-020-67	0.22	0.00	0.12
241-020-69	0.85	0.48	0.00
213-310-06	0.11	0.00	0.33
213-310-15	3.23	1.17	0.00
213-300-05	0.20	0.00	0.00
213-300-06	0.09	0.33	0.00
TOTAL	7.49	7.57	0.45

* Permanent Easements

Staging Areas

The construction staging area for the new bridge and associated approaches would be located within the proposed approach roadway between Stewart Road and Brookhurst Boulevard, including areas covered by proposed fill slopes on the east bank. Construction staging for the removal of the existing bridge would be within the existing roadway between Stewart Road and the Mossdale County Park driveway access, as this segment of the roadway would become permanently closed with the removal of the existing bridge.

Borrow and Disposal Sites

The proposed action would result in the need for imported borrow. Imported borrow will be of a quality suitable for the purposes intended, free of organic matter or other unsatisfactory material. Fill would be obtained from commercial sources.

Existing soils adjacent to the I-5 corridor will be tested for aerially deposited lead prior to disposal or reuse. Existing soils within the agricultural fields will be tested for residual pesticides and herbicides prior to disposal or reuse.

Site Restoration

During construction activities, the contractor would exercise due care to avoid injury or damage to existing roadside trees, shrubs, and other plants that are not to be removed, and all other improvements or facilities within or adjacent to the roadway. Suitable safeguards would be installed to protect existing features from injury or damage. If an object or facility is injured or damaged during construction activities, it

would be replaced or restored to a condition as good as when the contractor entered upon the work, or as good as required by the specifications accompanying the contract.

Sequencing of Construction Activities

The existing bridge would be demolished upon completion of the new bridge.

The following construction sequence would take place: Clearing and grubbing the construction area would be followed by access roadway construction, as needed, and then excavation for abutments, drainage facilities, retaining walls, and other facilities, as needed. In-water construction would begin on June 1 with the installation of the temporary trestle, or spud piles for barge(s), and cofferdams or steel casings for construction of bridge piers or bridge demolition, finishing all in-water work by October 31. After October 31, work would be confined to within the temporary cofferdams or steel casings or be above the water. The temporary trestle, or barge(s), and cofferdams would remain in the waterway to assist in the construction of foundations, columns, and bent caps, as well as the erection of falsework for the cast-in-place option or precast girder erection. Separate trestles or barges and cofferdams would be required adjacent to the existing Manthey Road Bridge for demolition of the existing bridge. Once the superstructure is completed, the temporary trestle(s) and cofferdams, if used, would be removed during the following in-water work window. Drainage facilities and retaining walls would be constructed separately, followed by approach-roadway.

Proposed Construction Schedule

Construction is to be broken into two phases. Phase one would be bridge construction along the alignment, and phase two would be removal of the existing bridge. Phase one construction is anticipated to take 18 months, would begin in summer 2022, and occur over two construction seasons. It is anticipated that the new bridge would be open to traffic by fall 2023. Phase two is anticipated to take 8 months and would begin in spring, following the opening of the new bridge to traffic, and occur over a single in-water work season.

Table 1-2 identifies the type of equipment that would be used to construct the project.

Table 1-2. Construction Equipment and Phasing

Phase	Equipment	Number per Day
Bridge Demolition	Cranes	2
	Vibratory Pile Driver	1
	Off-highway trucks	2
Grubbing/Land Clearing	Crawler Tractors	6
Foundation Construction	Bore/drill rigs	2
	Excavators	2

Phase	Equipment	Number per Day
	Cranes	2
	Crushing/Processing Equip.	2
	Vibratory Pile Driver	1
	Impact Pile Driver	1
Bridge Construction	Cranes	2
Grading/Excavation/Retention Wall	Crawler Tractors	5
	Graders	5
	Rollers	4
	Rubber Tired Loaders	8
	Scrapers	5
	Tractors/Loaders/Backhoes	6
	Concrete Truck/Pump	2
Drainage/Utilities	Cranes	1
	Rough Terrain Forklifts	6
	Trenchers	3
	Tractors/Loaders/Backhoes	4
Paving	Off-highway Trucks	1
	Pavers	7
	Paving Equipment	8
	Rollers	6
	Tractors/Loaders/Backhoes	6

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2, *Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures*.

Transportation System Management and Transportation Demand Management Alternatives

Transportation System Management strategies focus on improving the efficiency of existing facilities without increasing the number of through lanes. Options such as ramp metering, auxiliary lanes, and reversible lanes are generally implemented under Transportation System Management and help reduce congestion.

Transportation System Management measures could not satisfy the purpose and need of the project because the purpose and need of the project is safety and circulation, not increasing capacity.

Transportation Demand Management strategies focus on regional means of reducing the number of vehicle trips and vehicle miles traveled, as well as increasing

vehicle occupancy. In addition to High Occupancy Vehicle lanes, projects may encourage these reductions by providing other options, such as ride sharing and facilities for public transportation or bicycle and pedestrian facilities. As a stand-alone alternative, Transportation Demand Management strategies would not meet the project purpose; however, the project does include Transportation Demand Management options such as bicycle and pedestrian access on the new bridge.

Reversible Lanes

Reversible lanes were not considered because they would not meet the purpose and need of the project for this bridge replacement.

Access to Navigable Waters

The proposed project would not affect access of the public to the San Joaquin River, a navigable water. Public access to the river from public dock at the Mossdale County Park would remain unchanged.

1.5.2 No-Build (No-Action) Alternative

Under the No-Build Alternative, the existing Manthey Road Bridge would remain in its current location, and no facilities would be constructed to meet the purpose and need identified above.

1.6 Alternatives Considered but Eliminated from Further Discussion

Three build alternatives were originally developed for the project, Alternatives 1, 2, and 3. These alternatives were presented in a public scoping meeting in November 2014. Alternative 2 was withdrawn from consideration early in environmental technical studies when it became apparent that the other two alternatives were feasible and would result in fewer environmental impacts. Alternative 1 was withdrawn after all technical studies were complete because it did not support the City's long-term circulation plan.

Alternative 1

Under Alternative 1, the City would demolish the existing bridge and replace it with a new bridge in the same location. The new bridge would measure approximately 538 feet long by 34 feet, 10 inches wide, and would accommodate two 12-foot-wide traffic lanes, two 4-foot-wide shoulders, and concrete traffic barriers with tubular railings. The bridge would be supported by four piers supported by cast-in-steel shell piles in the river and an abutment on either side supported by cast-in-drilled-hole piles. To meet United States Army Corps of Engineers' requirements to provide a 3-foot vertical clearance above the levee, the new bridge would be slightly higher (approximately 8 feet); therefore, the span would need to be slightly longer than the existing bridge. A combination of fill slopes and retaining walls would be used to retain the higher approach roadway.

Within the project limits, the approach roadway on either side of the bridge would be widened to conform to the bridge. The Manthey Road/Stewart Road T-intersection west of the bridge would be modified to accommodate the new bridge and roadway. Driveway access to Mosssdale County Park would not be altered.

Alternative 1 was subsequently removed from consideration by the City's project development team because it did not meet the project purpose and need as well, and it did not support the City's circulation plan in the long term. The Alternative 1 footprint did not allow for future expansion anticipated to be needed in the long term.

Alternative 2

Under Alternative 2, the Manthey Road Bridge would be demolished and replaced on another alignment approximately 300 feet north or downstream of the existing bridge, south of the Union Pacific Railroad Bridge. This option would require realignment of a portion of Manthey Road from its existing alignment. The realignment limits would be from the north side of the railroad underpass to the intersection of Stewart Road. This option would require reconstruction of the railroad underpass and realignment of the road through Mosssdale County Park. Construction of this alternative would require temporary realignment of the Union Pacific Railroad tracks while the undercrossing was widened.

This alternative was withdrawn from consideration because other alternatives were feasible and functioned at least as well and did not result in conflicts with the Union Pacific Railroad or the placement of the realigned road within a park (a public recreation facility that would be considered a Section 4(f) resource). Therefore, this alternative was not carried forward for both logistical and environmental reasons.

1.7 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for project construction:

Table 1-3. Anticipated Permits and Approvals

Agency	Permit/Approval	Status
Regional Water Quality Control Boards	Clean Water Act, Section 401 Water Quality Certification	Application to be submitted during Design Phase
United States Army Corps of Engineers	Clean Water Act, Section 404 Nationwide Permit	Application to be submitted during Design Phase
United States Army Corps of Engineers	Title 33, US Code Section 408 Permit	Application to be submitted during Design Phase
California Department of Fish and Wildlife	CDFG code, Section 1602, Lake and Streambed Alteration Agreement	Application to be submitted during Design Phase
Central Valley Flood Protection Board	Encroachment Permit	Application to be submitted during Design Phase
United States Fish and Wildlife Service/ National Marine Fisheries Service	Endangered Species Act, Section 7: Biological Opinion	Biological Opinions received October 2021/September 2020 (updated since Draft IS/MND/EA)
California State Historic Preservation Officer	Section 106 Concurrence	In process
State Lands Commission	Use Permit	Application to be submitted during Design Phase
United States Coast Guard	Bridge Permit	Application to be submitted during Design Phase
Reclamation Districts 17 and 2062	Approval	Approval request to be submitted during Design Phase

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

2.3 Biological Environment

2.3.1 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is Federal Endangered Species Act: 16 United States Code 9 United States Code Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (and Caltrans, as assigned), are required to consult with the United States Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of the consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 7 of Federal Endangered Species Act defines take as "harass, harm, pursue, hunt, shoot, would, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, (California Endangered Species Act), California Fish and Game Code Section 2050, et seq. California Endangered Species Act emphasized early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. California Department of Fish and Wildlife is the agency responsible for implementing California Endangered Species Act. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or otherwise attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by California Department of Fish and Wildlife. For species listed under both Federal Endangered Species Act and California Endangered Species Act requiring a Biological Opinion under Section 7 of

Federal Endangered Species Act, the California Department of Fish and Wildlife may also authorize impacts to California Endangered Species Act species by issuing Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fisher resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fisher resources, and fishery resources in special areas.

Affected Environment

This section was informed by the Natural Environment Study completed for this project in December 2018 and updated in March 2020. Threatened and endangered species with suitable habitat in the biological study area are discussed here.

Six federally and/or state listed wildlife and fish species (riparian brush rabbit [*Sylvilagus bachmani riparius*], Swainson's hawk [*Buteo swainsoni*], southern distinct population segment of North American green sturgeon [*Acipenser medirostris*], Central Valley spring-run Chinook salmon [*Oncorhynchus tshawytscha*], Delta smelt [*Hypomesus transpacificus*], and longfin smelt [*Spirinchus thaleichthys*]) could occupy the biological study area based on the presence of suitable habitat. Each of these species is discussed in the Draft Initial Study/Environmental Assessment. Riparian brush rabbit and Swainson's hawk, for which additional or revise mitigation to ensure that impacts would be reduced to a less than significant level have been identified are discussed below.

Wildlife Species

Riparian Brush Rabbit

Riparian brush rabbit is designated as a state and federal endangered species. Riparian brush rabbit occupies riparian communities that contain large patches of dense, brush understory that are next to open areas dominated by grasses and herbs (U.S. Fish and Wildlife Service 2020). In general, an open tree canopy appears to be more desirable habitat for riparian brush rabbit than a dense riparian canopy (U.S. Fish and Wildlife Service 2020). Riparian brush rabbit is known to occur only in Caswell Memorial State Park on the Stanislaus River and the South Delta in patches of habitat along the San Joaquin River, Paradise Cut, Tom Paine Slough, and railroad rights-of-way in San Joaquin County (U.S. Fish and Wildlife Service 2020). Habitat patches in the South Delta are extremely narrow strips—most only a few meters wide—between active farmland and open water (U.S. Fish and Wildlife Service 2020).

Protocol-level surveys for riparian brush rabbit have not been conducted. There are numerous records for riparian brush rabbit within 2 miles of the biological study area; the nearest is approximately 750 feet west of the biological study area in an area that is a mix of riparian woodland and riparian scrub along the railroad tracks. The riparian woodland along the east side of the San Joaquin River and north of the railroad in the biological study area represents suitable habitat for riparian brush rabbit. This area may also serve as a dispersal corridor for riparian brush rabbit, linking the population at the Oxbow Preserve adjacent to the San Joaquin River, which is approximately 1 mile north of the study area, to the remainder of the South Delta population, such as rabbits at Union Pacific Railroad right-of-way and Paradise Cut. This area has patches of dense understory with Himalayan blackberry and shrubby willows and adjacent herbaceous habitat. The remainder of the riparian habitat is generally not suitable for riparian brush rabbit. The riparian habitat on the east bank adjacent to the existing Manthey Road Bridge is entirely riprapped and is vegetated only with tree tobacco and weedy forbs. The west bank adjacent to the bridge has a riparian overstory dominated by a large cottonwood and several tree of heaven; the understory consists mostly of annual grasses and herbaceous vegetation, with a narrow strip of scrubby willows along the riprapped shoreline. The remainder of the west bank is heavily riprapped and is dominated by weedy herbaceous species and scattered cottonwood, oak, and willow trees, including saplings. Brush rabbits rarely cross small clearings, preferring to remain within approximately 15 feet of cover, and limit short- and long-distance movements to routes with patches of dense, brushy vegetation but will travel through areas of tall grasses and herbs (U.S. Fish and Wildlife Service 2020). Previously, it was suspected that waterways and open areas were barriers to brush rabbit movement, but brush rabbits have dispersed across the Stanislaus and San Joaquin Rivers (U.S. Fish and Wildlife Service 2020).

Swainson's Hawk

Swainson's hawk is state listed as threatened. Swainson's hawks forage in grasslands, grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Vineyards, orchards, rice, and cotton crops are generally unsuitable for foraging because of the density of the vegetation. The majority of Swainson's hawks winter in South America, although some winter in the United States. Swainson's hawk arrives in California in early March to establish nesting territories and breed. They usually nest in large, mature trees. Most nest sites (87 percent) in the Central Valley are found in riparian habitats, primarily because trees are more available there. Swainson's hawks also nest in mature roadside trees and in isolated trees in agricultural fields or pastures. The breeding season is from March through August.

Focused surveys for Swainson's hawk were not conducted. Swainson's hawks were observed in flight over the biological study area—on June 3, 2014, one was flushed from a tree located between the proposed location of Golden Valley Parkway and the parking lot for Mossdale County Park. Another was observed in flight just north of the biological study area on June 3, 2014; two others were observed in flight over the biological study area on May 9, 2016. The California Natural Diversity Data Base

contains several records of Swainson's hawks' nests within 10 miles of the biological study area; the nearest record is on the west side of the San Joaquin River between the limits of project construction disturbance for the new bridge and the removal of the existing Manthey Road bridge. This nest site has been used for several years; the most recent observation of the nest being occupied was in 2009. The nest is located in a large oak tree within an area used for farm equipment storage and residential use. Riparian trees, as well as landscape trees within and adjacent to the biological study area, could be used by Swainson's hawk for nesting. The ruderal and annual grassland areas in the biological study area represent potential foraging habitat.

Environmental Consequences

Build Alternative

Wildlife Species

Riparian Brush Rabbit

It is unknown whether riparian brush rabbit occupies habitat within the biological study area, although due to the poor quality of the riparian habitat, it is unlikely. It is more likely that the riparian habitat would be used for dispersal. It is possible the riparian habitat and adjacent grasslands in the study area serve as a link between the Oxbow Preserve population 1 mile north of the study area and the rest of the South Delta population, such as the rabbits within the Union Pacific Railroad right-of-way, which is just west of the study area. However, though the Oxbow Preserve population is genetically similar to the South Delta population, it is considered by the United States Fish and Wildlife Service to be genetically isolated from the rest of the South Delta population due to surrounding development (U.S. Fish and Wildlife Service 2020). It is unknown what number of individuals could be potentially affected either directly or indirectly by the proposed action. Both adults and young brush rabbit of both sexes have a potential to be exposed to project activities.

Disturbance to riparian brush rabbits during construction, if they occur nearby, would take place over approximately 2 years. This disturbance would include visual disturbance from construction personnel and equipment and noise from construction equipment and pile driving. This activity could disrupt normal behavior, including foraging, dispersal, and breeding.

Construction would permanently reduce the amount of suitable riparian woodland habitat by 0.07 acre, temporarily disturb 0.08 acre, remove another 0.10 acre of landscaped/developed land adjacent to the riparian woodland habitat that could be used by riparian brush rabbit, and create a potential barrier to brush rabbit dispersal along the San Joaquin River due to the presence of the new bridge and increased noise and activity along the river. After construction of the project bridge, the area beneath the bridge, from the top of the levee down to the water's edge, would still remain open but would lack the existing riparian vegetation that currently provides potential habitat and dispersal cover for riparian brush rabbit, which would create an approximate 150-foot gap between riparian vegetation to the north and south of the

permanent and temporary impact areas (Figure 2.3.1-1). The current bridge designs show the bridge abutment at approximately 100 feet from the mean highwater line on the San Joaquin River, with the bottom of the bridge being approximately 30 feet above the ground at its highest to approximately 3 feet above ground at the abutment (Figure 1-4a). Though the project would result in an impact on connectivity between the Oxbow population and the remainder of the South Delta population, the construction of the new bridge would not create a complete barrier between these populations. Also, as mentioned above, there is evidence showing that rabbits have crossed the Stanislaus and San Joaquin Rivers (U.S. Fish and Wildlife Service 2020).



Figure 2.3.1-1 Biological Study Area—Sheet 1 of 4



Figure 2.3.1-1 Biological Study Area—Sheet 2 of 4

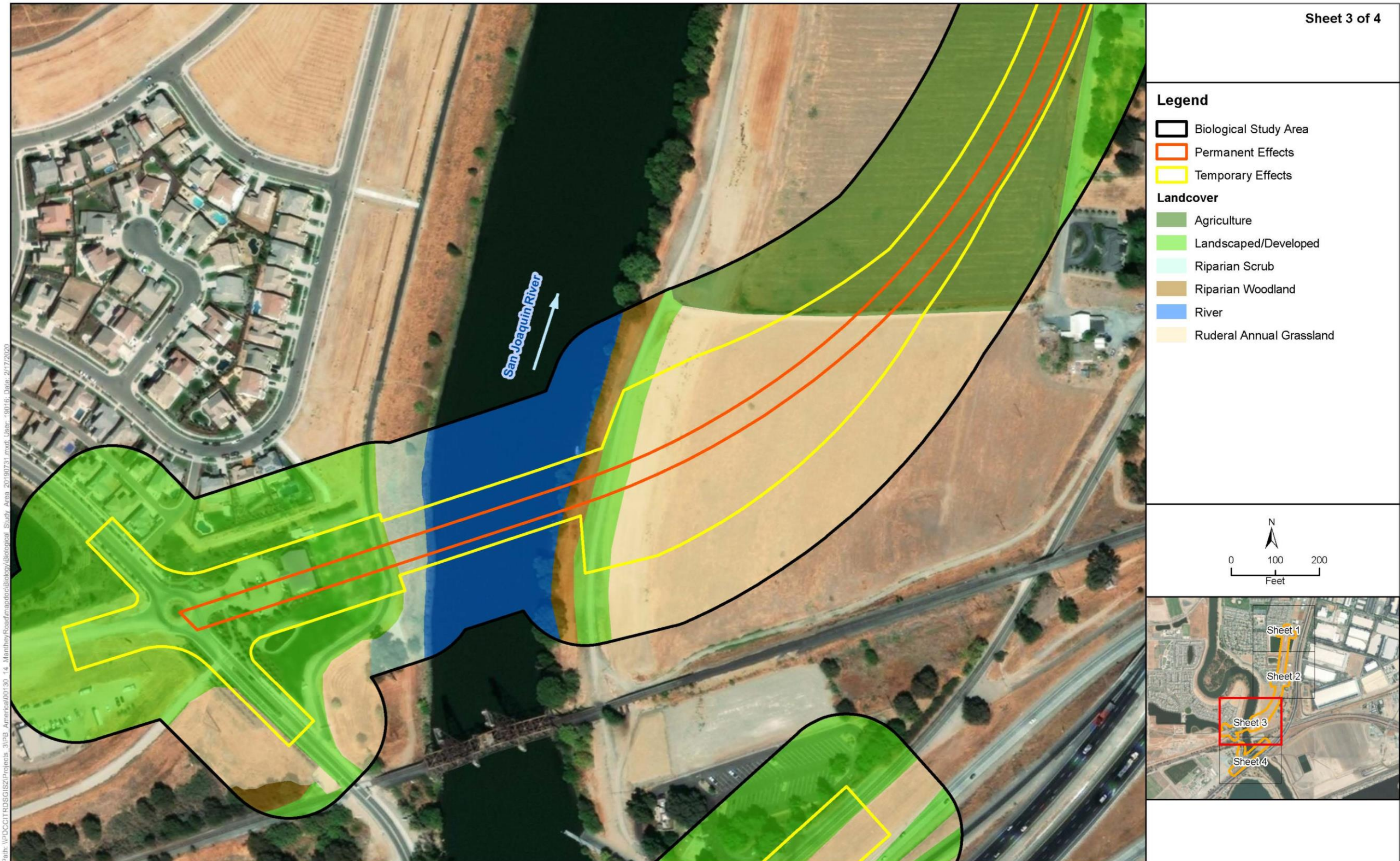


Figure 2.3.1-1 Biological Study Area—Sheet 3 of 4

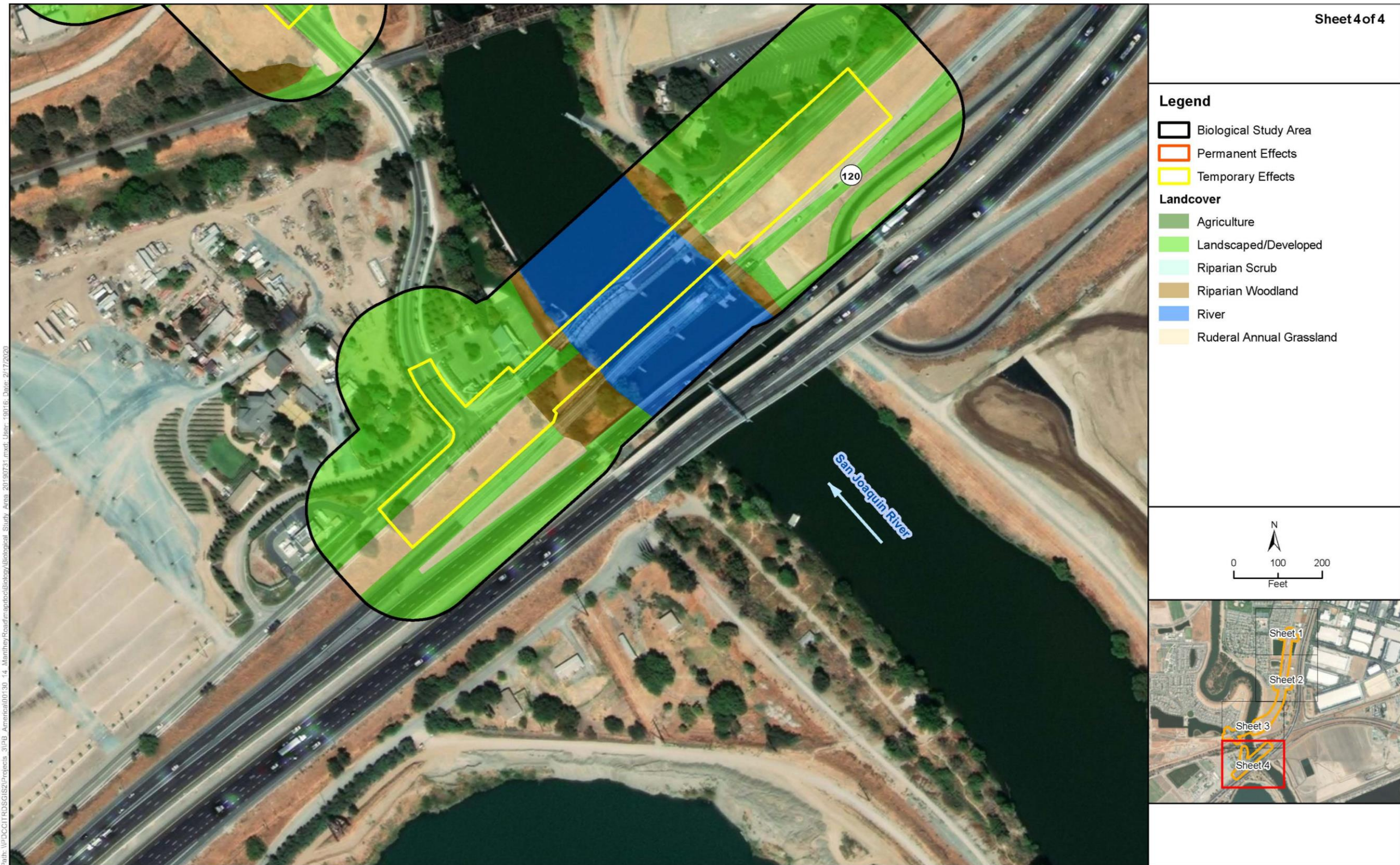


Figure 2.3.1-1 Biological Study Area—Sheet 4 of 4

Swainson's Hawk

Construction activities could result in the disturbance or loss of a Swainson's hawk nest, if a nest is present in or near the construction area. These activities could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. The presence of construction crews and equipment and noise from pile driving could disrupt normal behaviors, including nesting.

The Build Alternative would result in the permanent loss of 4.92 acres of suitable foraging habitat for Swainson's hawk (3.38 acres of ruderal grassland and 1.54 acres of dry farmed wheat), and the temporary loss of 9.17 acres of foraging habitat (6.74 acres of ruderal grassland and 2.43 acres of dry farmed wheat). The Build Alternative also would result in the permanent loss of 0.07 acre and the temporary loss of 0.08 acre of riparian woodland habitat that provides suitable nesting habitat for Swainson's hawk.

No-Build Alternative

Under the No-Build Alternative, no construction of the proposed project would take place, and no effects on threatened or endangered species discussed would occur.

Avoidance, Minimization, and/or Mitigation Measures

Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

The City and/or its contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern, special-status wildlife habitats, and protected trees to be avoided.

Orange construction fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans prior to construction bid. Before construction begins, the construction contractor will work with the engineer and a resource specialist to verify the locations for the orange construction fencing and will place stakes around the sensitive resource sites to indicate these locations. The fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

To prevent snakes and other ground-dwelling animals from being caught in the orange construction fencing, it will be placed with at least a 1-foot gap between the ground and the bottom of the fencing. Fencing will be inspected weekly and repairs made promptly, if needed.

Conduct Environmental Awareness Training for Construction Employees

The City will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel to brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the biological study area (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the biological study area in which the species may occur, as well as their legal status and protection. The program also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation, as well as the ramifications for non-compliance, which will include the steps to be taken if a sensitive species is found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each person. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period.

Conduct Biological Monitoring

An appointed monitor, trained by a Caltrans-approved qualified biologist, will ensure that activities are being conducted in accordance with the agreed upon project schedule, agency conditions of approval as documented in the Biological Opinions for the project, and species-specific avoidance and minimization measures in the Initial Study/Environmental Assessment. The appointed monitor will be present throughout project construction and will not preclude the presence of a biological monitor as specified in other species-specific measures. The appointed monitor will ensure that fencing around environmentally sensitive areas remains in place during construction and that construction personnel, equipment, or runoff or sedimentation from construction does not enter environmentally sensitive areas. If any violations are noted or if any sensitive species are encountered, the appointed monitor will contact the project biologist for guidance on implementation of corrective measures as described in the species-specific avoidance, minimization, and mitigation measures in the Initial Study/Environmental Assessment. A qualified biologist will be available to conduct site visits as required.

(This avoidance/minimization measure has been revised since the circulation of the Draft Environmental Document.)

*Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction, and
Conduct Tree Removal during the Non-Breeding Season*

The City will conduct surveys for nesting Swainson's hawks in the spring 1 year before construction to provide information in preparation for construction (i.e., locations of nests, hawks responses to disturbance, sizes of buffer areas, and anticipated impacts on project schedule). Surveys also will be conducted in the spring of the year of construction to determine whether there are active nests in the current year. Information collected during the first round of surveys will help to focus the second round of surveys. Focused surveys for Swainson's hawk will be conducted within the limits of disturbance and in a buffer area up to 0.5 miles around the limits of disturbance. The size of the buffer area surveyed will be based on the type of habitat present and the line of sight from the construction area to surrounding suitable breeding habitat. Buffer areas containing unsuitable nesting habitat or with an obstructed line of sight to the construction area will not be surveyed. Surveys will follow the methods of the Swainson's Hawk Technical Advisory Committee (2000). A minimum of six surveys will be conducted during the appropriate timeframes discussed in the methods. If needed, biologists will coordinate with the California Department of Fish and Wildlife regarding the extent and number of surveys. Surveys generally will be conducted from February to July. Survey methods and results will be reported to California Department of Fish and Wildlife.

The City and/or its construction contractor will remove or trim trees during the non-breeding season (generally between September 15 and January 1) to the extent feasible.

*Mitigation Measure BIO-3. Purchase Compensatory Mitigation for Permanent Loss
of Swainson's Hawk Foraging Habitat*

The permanent loss of Swainson's hawk foraging habitat will be mitigated according to California Department of Fish and Wildlife's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (1994) (Staff Report) by purchasing credits at a California Department of Fish and Wildlife-approved conservation bank. Following the guidance in the Staff Report, the final mitigation ratio will be determined based on the proximity of the affected foraging habitat to the nearest active Swainson's hawk nest, which as defined in the Staff Report is a nest active within the last 5 years. The nearest active nest will be determined based on either the results of the focused surveys conducted 1 year before construction or based on nest data in the California Natural Diversity Database if no nests are detected within a 0.5-mile radius during surveys.

(Mitigation Measure BIO-3 has been added since the circulation of the Draft Environmental Document.)

Avoid and Minimize Impacts on Riparian Brush Rabbit

- A preconstruction survey of the riparian habitat to be disturbed will be conducted immediately prior to the removal of riparian habitat by an individual approved by

United States Fish and Wildlife Service and California Department of Fish and Wildlife.

- Immediately following preconstruction surveys, riparian vegetation will be removed using hand tools. All vegetation will be cut to ground level. The vegetation removal will be monitored by the approved biologist to ensure that these activities do not result in injury or mortality of riparian brush rabbit. Any riparian brush rabbits observed during vegetation removal will be allowed to passively disperse outside of the work area or, if necessary, will be captured by the approved biologist. United States Fish and Wildlife Service and California Department of Fish and Wildlife will be contacted immediately if any brush rabbits are observed or captured, and a plan will be developed in consultation with the agencies to relocate any captured animals.
- Immediately following vegetation removal, work areas adjacent to riparian habitats will have tightly woven exclusion fencing (i.e., silt fencing) installed at least 3 feet high above the ground surface between the work area and the riparian habitat. The fencing will extend from the water line up the riverbanks (paralleling the work area) to the top of the adjoining levee (the side nearest the river such that the levee road is not fenced off). The fencing will continue another 25 feet away from the work area, along the top of the levee, and then curl back toward the river for approximately 10 feet to redirect wildlife back toward the riparian habitat and away from the work area. Because of the sensitivity of the riparian habitat and potential for harming wildlife, the fencing material will not be buried through trenching, but will be weighted down and covered on the inside (toward the work area) with gravel or sand bags such that animals cannot pass underneath the fence and are less able to dig beneath it. In areas where existing development (e.g., pavement or structures) is closer than the top of the levee, the exclusion fence will extend to that limit, and then continue for another 25 feet away from the work area and curl back toward the suitable habitat.
- The limits of the temporary disturbance area adjacent to riparian habitat will be fenced off with orange construction fencing that reaches a height of at least 4 feet. The fencing will be in place prior to and during all construction phases. To prevent rabbits and other ground-dwelling animals from being caught in the orange construction fencing, it will be placed with at least a 1-foot gap between the ground and the bottom of the orange construction fencing.
- Exclusion fencing will be checked weekly by a biological monitor to ensure that it is intact and functioning.
- If a riparian brush rabbit is encountered in a work area, all work will cease immediately. The animal will be allowed to passively move out of the work area and will not be captured unless by an individual authorized by a United States Fish and Wildlife Service biological opinion and a California Department of Fish and Wildlife incidental take permit. United States Fish and Wildlife Service and California Department of Fish and Wildlife will be notified within 24 hours of any observation of riparian brush rabbit.

Mitigation Measure BIO-4. Mitigate for Impacts on Habitat for Riparian Brush Rabbit

To reduce and offset the loss of habitat resulting from the construction of the new bridge, the City of Lathrop will implement offsite and onsite measures.

Offsite Habitat Restoration:

The City of Lathrop will fund offsite restoration of riparian brush rabbit habitat along the San Joaquin River at a location approved by United States Fish and Wildlife Service and California Department of Fish and Wildlife through River Partners. The permanent and temporary impacts on riparian woodland and the permanent impacts on landscaped/developed areas, which is a total of 0.25 acre, will be mitigated at a minimum of 1:1. The location selected will serve to improve connectivity between current riparian brush rabbit populations. The City of Lathrop and River Partners will prepare a restoration plan for review and approval by United States Fish and Wildlife Service and California Department of Fish and Wildlife. The restoration plan will include designs for restoring the location, which would include a planting design that provides cover, foraging habitat, and upland refugia for riparian brush rabbit; information on current and future site topography; and an irrigation plan. The restoration plan would also include information on site monitoring and maintenance and details on how these activities will be funded in perpetuity.

Onsite Connectivity and Habitat Improvements:

Onsite improvements will include a vegetated culvert that will provide cover and space for movement beneath Golden Valley Parkway and/or flood refugia habitat on the berms of Golden Valley Parkway. Onsite improvements will be finalized in coordination with and by approval of the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

- **Vegetated Culvert:** The 15-foot by 15-foot culvert on the land side of the levee that would be constructed for a gravel access road to allow the reclamation district unimpeded access for levee repair and maintenance would be widened by 2 to 3 feet and planted with vegetation to provide cover for rabbits to cross. The vegetation would be planted in soil, and irrigation and grow lights would be installed to compensate for lack of light and rainfall in the culvert. Vegetation would be planted leading to the area on either side of the culvert. The vegetated strip would be protected from vehicles by placing permanent traffic pylons, or the equivalent, to prevent vehicles from driving over the vegetation. The access road would be used infrequently for levee inspections and maintenance, likely once a month.
- **Flood Refugia Habitat:** The City of Lathrop will plant vegetation suitable for riparian brush rabbit on the berms of Golden Valley Parkway as it approaches the bridge from the east. These areas would be protected from flooding by the levee. Vegetation would include brushy plant species such as coyote brush, wild rose, golden currant, box elder, and grasses and herbs such as wild rye, Santa Barbara sedge, and mugwort. Final planting designs will be developed for approval by the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

Onsite Monitoring Plan

The City of Lathrop will develop and implement a monitoring plan to establish a baseline for riparian brush rabbit activity within dispersal habitat in the Manthey Road Bridge project area prior to the construction of the proposed project. The monitoring plan will be implemented in the time leading up to the removal of riparian habitat within the project work area. At a minimum, the plan will include the following actions and requirements.

- Collect baseline data on riparian brush rabbit use of and predator presence in the riparian habitat corridor on the right bank (east shore) of the San Joaquin River within the project work area. Baseline data collection will rely on the use of motion activated cameras (camera traps) to record the presence of animals moving through the future project area. To the extent practicable, considering project schedule, camera traps will be put in place and active over two 6-month periods, preferably beginning at the start of the breeding season in February and terminating in August. Photos will be reviewed by a biologist experienced with the identification of riparian brush rabbit and other wildlife species.
- Replacement dispersal habitat will be installed, and a post-construction monitoring and management plan for on-site habitat will be prepared and implemented. At a minimum, the plan would include the following.
 - Monitor the use of the replacement dispersal habitat as well as the adjacent area under the bridge by riparian brush rabbit and potential predators over a minimum of 5 years, with monitoring occurring in years 1, 3, and 5.
 - Monitoring will include the placement and activation of camera traps over a 6-month period, from, February to August. In addition, field staff will assess the condition of the replacement habitat and identify remedies to fix obstructions and/or adjust the cover (e.g., replanting vegetation, improving irrigation). Information collected will include the following:
 - Number of observed riparian brush rabbits.
 - Documentation of use of the replacement habitat and/or adjacent areas.
 - Documentation of other wildlife, including potential predators.
 - Condition of the replacement dispersal habitat.
 - Monitoring and management will be conducted by a wildlife biologist with knowledge of the life history, behavior, and habitat requirements of riparian brush rabbit.
 - If monitoring indicates that rabbits are not using the replacement dispersal habitat or area under the bridge relative to baseline data, the City will fund additional offsite habitat protection that addresses population connectivity needs. The specific detail for additional offsite habitat protection would include the location (one that demonstrates its restoration, protection, or enhancement would provide linkage opportunities between riparian brush rabbit populations); the third party responsible for managing the habitat; and

plans for maintaining and managing the habitat in perpetuity. These details will be developed in coordination with the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

The City of Lathrop's Director of Public Works, or his or her designee, will be responsible on a continuing basis for the implementation of the mitigation measures relating to riparian brush rabbit replacement habitat and the replacement habitat management plan. The Director will determine the manner in which mitigation shall proceed and the resources, including staff commitment and consultants, that will be utilized in the effort.

2.4 Cumulative Impacts

2.4.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines.

2.4.2 Approach to Cumulative Impacts

CEQA Guidelines provide that cumulative impacts can be analyzed by the list or projections approach. The list approach lists reasonably foreseeable projects that contribute to the same cumulative impacts as the project. The projection approach relies on adopted plans to represent the reasonably foreseeable projects. The cumulative analysis for the project takes into consideration other ongoing projects in the same geographic area as the proposed project, as well as planned land use and

transportation and circulation projects identified in the City of Lathrop and San Joaquin County general plan and policy documents. Developments and plans in the project region include the following:

- **River Islands Specific Plan:** A mixed-use development including approximately 11,000 residential units on 4,995 acres west of the San Joaquin River and Interstate 5;
- **Mosssdale Village Specific Plan:** A mixed use development located west of I-5 and east of the San Joaquin River on 1,161 acres;
- **Central Lathrop Specific Plan – Stanford Crossing:** A mixed-use development on 1,521 acres located north of Mosssdale Village;
- **Watt Commercial Properties – Lathrop Market Place:** A commercial development anchored by the Target Shopping Center and located on 27 acres at the corner of Louise Avenue and River Islands Parkway; and
- **South Lathrop Specific Plan – Tripoint Logistics Center:** A light industrial/commercial development on 315 acres south of State Route 120 at Yosemite Avenue.

Additional cumulative projects include flood management projects affecting the San Joaquin River and restoration and other water-related projects in and near the San Joaquin River.

2.4.3 Assessment of Cumulative Impacts

Biological Resources

Listed Special-Status Wildlife

Riparian Brush Rabbit

The study area for evaluating cumulative effects on riparian brush rabbit is limited to the current range of the species, which is in the portion of San Joaquin County that includes Caswell Memorial State Park, the San Joaquin River National Wildlife Refuge, and the South Delta. The decline of riparian brush rabbit has been attributed to the loss and fragmentation of San Joaquin Valley riparian forests and the conversion of land within the floodplains from shrub dotted pastureland to agricultural lands, and therefore the health of the resource is poor. As described in Section 2.3.4, Threatened and Endangered Species, the proposed project would result in the permanent reduction of potential riparian brush rabbit habitat along the San Joaquin River by 0.17 acre (0.07 acre of riparian woodland and 0.10 acre of landscaped/developed land adjacent to the riparian woodland habitat). However, the habitat is poor quality, and it is unknown whether riparian brush rabbit is present. It is likely that at most this habitat would be used for dispersal.

Past, present, and reasonably foreseeable (future) projects within the resource study area evaluated in combination with the proposed project include flood risk reduction affecting the San Joaquin River, the Long Term Operations of the Central Valley

Project and California State Water Project, habitat restoration (e.g., Upper San Joaquin River Restoration Program), and local development projects (e.g., River Islands Specific Plan, Mossdale Village Specific Plan, Central Lathrop Specific Plan – Stanford Crossing, Mossdale Village Specific Plan, South Lathrop Specific Plan). Development projects have or would entail similar project features (e.g., construction of the River Islands Parkway bridge over the San Joaquin River) and construction activities (e.g., vegetation clearing, grading) that would result in the loss of occupied and potential riparian brush rabbit habitat. The actions could also result in the disruption of normal behaviors due to noise and visual disturbances during construction, thereby potentially adversely affecting growth, survival, or reproductive success in the resource study area. Therefore, a cumulative impact on riparian brush rabbit in study area exists. The proposed project could contribute to that impact. However, avoidance and minimization measures described in Section 2.3.4, including compensatory mitigation and methods for removing vegetation and use of exclusion fencing, in combination with the marginal nature of the habitat, would ensure that that project's contribution would not be considerable.

Swainson's Hawk

The study area for evaluating cumulative effects on Swainson's hawk is the northern San Joaquin Valley. The primary threat to Swainson's hawk is the loss of foraging and nesting habitat, which has been declining, and therefore the health of the resource is poor. The proposed project would result in the permanent loss of 4.92 acres and the temporary disturbance of 9.17 acres of suitable foraging habitat. The proposed project would also result in the permanent loss of 0.07 acre and the temporary loss of 0.08 acre of riparian woodland that provides suitable nesting habitat for Swainson's hawk. The presence of construction crews and equipment and the noise from pile driving could disrupt normal behaviors, including nesting.

Past, present, and reasonably foreseeable (future) projects within the resource study area evaluated in combination with the proposed project include flood risk reduction affecting the San Joaquin River, the Long Term Operations of the Central Valley Project and California State Water Project, habitat restoration (e.g., Upper San Joaquin River Restoration Program), and local development projects (e.g., River Islands Specific Plan, Mossdale Village Specific Plan, Central Lathrop Specific Plan – Stanford Crossing, Mossdale Village Specific Plan, South Lathrop Specific Plan). Development projects have or would entail similar project features (e.g., construction of the River Islands Parkway bridge over the San Joaquin River) and construction activities (e.g., vegetation clearing, grading) that would result in the loss of Swainson's nesting and foraging habitat. The actions could also result in the disruption of normal behaviors, including nesting and foraging, due to noise and visual disturbances during construction, thereby potentially adversely affecting growth, survival, or reproductive success in the resource study area. Therefore, a cumulative impact on Swainson's hawk exists and the proposed project could contribute to that impact. Implementation of avoidance and minimization measures to locate and avoid active nests and remove or trim trees during the non-breeding

season would ensure that the project's contribution to effects on breeding habitat would not be considerable.

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, in which Swainson's hawk conservation is a major emphasis, includes the preservation and management of up to 62,000 acres Swainson's hawk foraging habitat (San Joaquin Council of Governments 2000). Also, the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan's 2018 Annual Report states the following in regard to Swainson's hawk in the County: "Overall, the Swainson's hawk population in San Joaquin County appears to be doing well, with a relatively high density of nesting pairs and a high rate of nest success" (San Joaquin County Council of Governments 2018). Considering the ongoing efforts to protect habitat for Swainson's hawk and the status of the species in the County, the permanent loss of 4.92 acres of foraging habitat would not be cumulatively considerable.

Chapter 3 CEQA Evaluation

3.1 Determining Significance under CEQA

CEQA requires the City to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report must be prepared. Each and every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the CEQA Guidelines list a number of “mandatory findings of significance,” which also require the preparation of an Environmental Impact Report. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project and standardized measures that are applied to all or most transportation projects, such as Best Management Practices and measures included in the Caltrans Standard Plans and Specifications or as Standard Special Provisions, are an integral part of the project and have been considered prior to any significance determinations documented below; see Chapter 1, *Proposed Project*, and Chapter 2, *Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures*, for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 that provide the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.4 Biological Resources

CEQA Significance Determinations for Biological Resources

Would the project:

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 Wildlife or United States Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated

Wildlife

The proposed project would result in temporary and permanent impacts on several natural communities that provide habitat for special status wildlife species.

Riparian Brush Rabbit

Riparian habitat that could support riparian brush rabbit is present in the project area. The habitat is poor quality and it is unknown whether riparian brush rabbit is present; however, it could be used by brush rabbits and may serve as a dispersal corridor between the Oxbow Preserve population to the north and other populations to the southwest. Disturbance to riparian brush rabbits during construction, if they occur nearby, would take place over approximately 2 years. This disturbance would include visual disturbance from construction personnel and equipment and noise from construction equipment and pile driving. This activity could disrupt normal behavior, including foraging, dispersal, and breeding. Construction would permanently reduce the amount of suitable habitat by 0.07 acre, temporarily disturb 0.08 acre, remove another 0.10 acre of landscaped/developed land adjacent to the riparian woodland habitat that could be used by riparian brush rabbit, and create a potential barrier to brush rabbit dispersal along the San Joaquin River due to the presence of the new bridge and increased noise and activity along the river. After construction of the project bridge, the area beneath the bridge, from the top of the levee down to the water's edge, would still remain open but would lack the existing riparian vegetation that currently provides potential habitat and dispersal cover for riparian brush rabbit, which would create an approximate 150-foot gap between riparian vegetation to the north and south of the permanent and temporary impact areas (Figure 2.3.1-1). The current bridge designs show the bridge abutment at approximately 100 feet from the mean highwater line on the San Joaquin River, with the bottom of the bridge being approximately 30 feet above the ground at its highest to approximately 3 feet above ground at the abutment (Figure 1-4a). Though the project would result in an impact on connectivity between the Oxbow population and the remainder of the South Delta population, the construction of the new bridge would not create a complete barrier between these populations. Also, as mentioned above, there is evidence showing that rabbits have crossed the Stanislaus and San Joaquin Rivers (U.S. Fish and Wildlife Service 2020). With implementation of the measures below discussed in Section 2.3.4, this impact would be less than significant.

- Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources
- Conduct Environmental Awareness Training for Construction Employees

- Conduct Biological Monitoring
- Avoid and Minimize Impacts on Riparian Brush Rabbit
- Mitigation Measure BIO-4. Mitigate for Impacts on Habitat for Riparian Brush Rabbit

Swainson's Hawk

Construction activities could result in the disturbance or loss of a Swainson's hawk nest, if a nest is present in or near the construction area. These activities could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. The presence of construction crews and equipment and the noise from pile driving could disrupt normal behaviors, including nesting. The Build Alternative would result in the permanent loss of 4.92 acres and the temporary disturbance of 9.17 acres of suitable foraging habitat. The Build Alternative would also result in the permanent loss of 0.07 acre and the temporary loss of 0.08 acre of riparian woodland that provides suitable nesting habitat for Swainson's hawk. With the implementation of the following measures discussed in Sections 2.3.4, impacts on white-tailed kite would be less than significant.

- Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources
- Conduct Environmental Awareness Training for Construction Employees
- Conduct Biological Monitoring
- Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction and Conduct Tree Removal during the Non-Breeding Season
- Mitigation Measure BIO-3. Purchase Compensatory Mitigation for Permanent Loss of Swainson's Hawk Foraging Habitat

3.2.5 Mandatory Findings of Significance

CEQA Significance Determinations for Mandatory Findings of Significance

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?

Less Than Significant With Mitigation Incorporated—As discussed in Section 2.3, *Biological Environment*, the proposed project would result in impacts on a number of biological resources, such as riparian habitat, shaded riparian aquatic habitat, and both terrestrial and aquatic species. However, with the implementation of avoidance and minimization measures and compensatory mitigation these

impacts would be less than significant and would not substantially reduce habitat, cause a reduction in population levels, or restrict the range of any species.

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.)

Less Than Significant Impact—As discussed in Section 2.4, *Cumulative Impacts*, although past, present, and future projects in the area may result in cumulative impacts on some resource areas, the contributions of the proposed project would not be considerable. Cumulative impacts on biological resources (threatened and endangered species) are anticipated. With the implementation of avoidance, minimization, and mitigation measures identified in Chapters 2 and 3, the project’s contribution to those cumulative impacts would not be considerable.

Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team meetings, interagency coordination meetings, and letters and correspondence. This chapter summarizes the results of efforts to identify, address, and resolve project-related biological issues related to Swainson's hawk and riparian brush rabbit through early and continuing coordination.

4.1 Coordination during Preparation of Technical Studies and the Initial Study

The following coordination with agencies and other stakeholders related to biological resources took place during preparation of the technical studies, the Draft Initial Study/Environmental Assessment, and this Recirculated Focused Initial Study.

- **United States Fish and Wildlife Service:** An official species list was obtained from the United States Fish and Wildlife Service, Sacramento Fish and Wildlife Office, on November 5, 2019. A Biological Assessment was submitted to United States Fish and Wildlife Service in April 2020 and a Biological Opinion was received in October 2021.
- **National Marine Fisheries Service:** An official species list was obtained from the National Marine Fisheries Service on October 31, 2019. A Biological Assessment was submitted to National Marine Fisheries Service in April 2020 and a Biological Opinion was received in September 2020.
- **California Department of Fish and Wildlife:** The City and their consultants participated in telephone calls on December 7 and December 9, 2020 to discuss their comments on the September 2020 Initial Study/Environmental Assessment. Most comments were revised easily, but impacts on riparian brush rabbit were more difficult to address, as mitigation banks did not exist and onsite mitigation had not been previously attempted for this species under these conditions. The City and their consultants, participated in a call with California Department of Fish and Wildlife and the jurisdictional reclamation district on April 27, 2021. The City, their consultants, California Department of Fish and Wildlife, United States Fish and Wildlife Service, and Caltrans participated in a call addressing riparian brush rabbit impacts and mitigation on June 16, 2021. Since that time Caltrans has been in contact with United States Fish and Wildlife Service and California Department of Fish and Wildlife. (This text has been added since the circulation of the Draft Environmental Document.)

4.2 Public Comments on the Initial Study/Environmental Assessment and Responses

Public comments and responses received during circulation of the Draft Initial Study/Environmental Assessment and on the Recirculated Focused Initial Study will be included in the Final Initial Study/Environmental Assessment.

Chapter 5 List of Preparers

5.1 ICF

Shahira Ashkar, ICF Project Manager/Managing Director. M.A., Anthropology, University of Arizona; 25 years of archaeology and environmental planning experience. Contribution: Environmental Document Preparation, Traffic, Cultural Resources.

John Howe, ICF Senior Wildlife Biologist. M.S., Environmental Biology, University of California, Los Angeles; 23 years of biological resources experience. Contribution: Wildlife Biology.

Lisa Webber, ICF Senior Botanist/Wetland Ecologist. M.S., Botany, University of Massachusetts, Amherst; 29 years botany and wetland ecology experience. Contribution: Plant Species, Wetlands, and Invasive Species Senior Review.

Chapter 6 Distribution List

California State Clearinghouse
Office of Planning and Research
1400 10th Street
Sacramento, CA 95814 -5502

San Joaquin Valley Air Pollution
Control District
Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718

California Department of Fish and
Wildlife
Bay Delta Region (Region 3)
2825 Cordelia Road, Suite 100
Fairfield, CA 94534

Central Valley Flood Protection Board
3310 El Camino Avenue, Suite 170
Sacramento, CA 95821

California Air Resources Board
1001 I Street
Sacramento, CA 95814

California State Lands Commission
100 Howe Avenue, #100@
Sacramento, CA 95825

Regional Water Quality Control Board
Central Valley, Region 5
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691

Kathy Perez
Nototomne Cultural Preservation
Northern Valley Yokuts
P. O. Box 717
Linden, CA 95236

Ione Band of Miwok Indians
9252 Bush Street, Suite 2
Plymouth, CA 95669-0699

Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

U.S. Army Corps of Engineers
Sacramento District
Regulatory Division
1325 J Street, Room 1480
Sacramento, CA 95814

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390 Towne Centre Drive
Lathrop, CA 95330

Vice Mayor
Jennifer Torres-O'Callaghan
390 Towne Centre Drive
Lathrop, CA 95330

Councilmember Diane Lazard
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Councilmember Paul Akinjo
390 Towne Centre Drive
Lathrop, CA 95330

Councilmember Minnie Diallo
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Lathrop, CA 95330

California State Senator Susan
Talamantes Eggman
State Capitol, Room 4052
Sacramento, CA 95814

California State Assemblymember
Heath Flora
Sacramento Capitol, Suite 3098
Sacramento, CA 94249

United States Senator Alex Padilla
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Sacramento, CA 95814

United States Senator Diane Feinstein
2500 Tulare Street, Suite 4290
Fresno, CA 93721

United States Congressman Jerry
McNerney
2222 Grand Canal Boulevard, #7
Stockton, CA 95207

Appendix A Avoidance, Minimization, and Mitigation Measures

The following summary of avoidance, minimization and/or mitigation measures are sorted by resource area and subheadings “Mitigation Measures to Mitigate Significant Impacts under CEQA” and “Avoidance or Minimization Measures to Avoid or Minimize Less than Significant Impacts.”

Mitigation Measures to Mitigate Significant Impacts under CEQA

Mitigation Measure BIO-1. Compensate for Temporary Effects on and Permanent Loss of Riparian Woodland and Riparian Scrub (Including Shaded Riverine Aquatic Cover)

The City will comply with regulatory requirements determined as part of the Streambed Alteration Agreement for the work that would occur within the San Joaquin River, including riparian habitat mitigation. The City will compensate for construction-related effects and permanent loss of up to 0.07 acre of riparian woodland and up to 0.07 acre of riparian scrub at a minimum ratio of 1:1 (1 acre restored for every 1 acre permanently affected). The actual compensation ratios will be determined through coordination with the California Department of Fish and Wildlife as part of the permitting process. In addition, temporary loss of up to 0.08 acre riparian woodland and up to 0.09 acre of riparian scrub that cannot be restored onsite will be mitigated. The City will purchase mitigation bank credits to compensate for temporary and permanent losses of riparian woodland and riparian scrub on the waterside slope of the existing levees, including riparian woodland supporting Shaded Riverine Aquatic cover habitat.

Because compliance with the United States Army Corps of Engineers levee vegetation policy, the Unified Land Development Code, and other engineering constraints limit the ability to achieve full onsite restoration of temporary impacts and compensation for permanent impacts, the purchase of mitigation bank credits will be needed to achieve no net loss of existing in-kind riparian and Shaded Riverine Aquatic cover habitat values.

The riparian mitigation may also benefit Swainson’s hawk, white-tailed kite, yellow-breasted chat, yellow warbler, and western red bat. Depending on the exact location, this mitigation could also benefit riparian brush rabbit.

The City will purchase riparian habitat credits from an approved mitigation bank near the project, such as the Cosumnes Floodplain Mitigation Bank, Fremont Landing Conservation Bank, or Liberty Island Conservation Bank. If no suitable mitigation bank options are available at the time of construction, the City will pay into the National Fish and Wildlife Foundation Sacramento District in-lieu fee program. The final compensation ratio of restored or created riparian habitat for each acre of

riparian habitat removed will be approved by California Department of Fish and Wildlife in order to result in no net loss of riparian habitat.

In addition to mitigating for the loss of riparian forest habitat, specific measures will be included to compensate for the loss of Shaded Riverine Aquatic cover (area and linear feet). However, the acreage will not be duplicated, such that the acreage of riparian forest habitat restored for Shaded Riverine Aquatic cover mitigation will apply toward riparian forest habitat mitigation requirements. National Marine Fisheries Service recommends revegetating onsite at a 3:1 ratio (3 units replaced for every 1 unit of affected habitat) with native riparian species to replace Shaded Riparian Aquatic cover habitat. Shaded Riverine Aquatic cover mitigation will include the following riparian replacement requirements:

- Replace the 0.016 acre of temporary loss of Shaded Riverine Aquatic cover vegetation at a 1:1 replacement ratio (i.e., 0.016 acre) and the 0.014 acre of permanent loss of Shaded Riverine Aquatic cover vegetation at a 3:1 replacement ratio (i.e., 0.042 acre) by purchasing a total of 0.058 acre (0.016 acre + 0.042 acre) of Shaded Riverine Aquatic cover credits.
- Shaded Riverine Aquatic cover credits will need to be purchased from a National Marine Fisheries Service-approved mitigation bank within the approved service area for the project that provides riparian forest floodplain conservation credits as offsite compensation for impacts on federally listed anadromous salmonids, designated critical habitat, and essential fish habitat for Chinook salmon.

Mitigation Measure BIO-2. Purchase Channel Enhancement Credits at National Marine Fisheries Service-Approved Anadromous Fish and Unites States Fish and Wildlife Service-Approved Delta Smelt Conservation Bank for Impacts on Critical Habitat

Permanent impacts on critical habitat, including the permanent shading of up to an additional 55,866 square feet (0.13 acre) of aquatic habitat, will be mitigated through purchase of 1.20 acres of mitigation credits at a National Marine Fisheries Service-approved anadromous fish and a Unites States Fish and Wildlife Service-approved delta smelt conservation bank.

The City proposes to purchase 1.20 acres of mitigation credits because National Marine Fisheries Service has indicated that the existing bridge should not be included in the environmental baseline, and although National Marine Fisheries Service would consider 2:1 mitigation for shade impacts, Unites States Fish and Wildlife Service requires 3:1 mitigation for impacts on delta smelt critical habitat, including shallow water habitat. Because the entire channel area (0.40 acre) at the proposed bridge location meets Unites States Fish and Wildlife Service' definition of shallow water habitat, a minimum of 1.20 acres of mitigation credits are needed to meet Unites States Fish and Wildlife Service' 3:1 mitigation ratio for impacts on delta smelt critical habitat.

Mitigation Measure BIO-3. Purchase Compensatory Mitigation for Permanent Loss of Swainson's Hawk Foraging Habitat

The permanent loss of Swainson's hawk foraging habitat will be mitigated according to the California Department of Fish and Wildlife's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (1994) (Staff Report) by purchasing credits at a California Department of Fish and Wildlife-approved conservation bank. Following the guidance in the Staff Report, the final mitigation ratio will be determined based on the proximity of the affected foraging habitat to the nearest active Swainson's hawk nest, which as defined in the Staff Report is a nest active within the last 5 years. The nearest active nest will be determined based on the results of the focused surveys conducted 1 year before construction or based on nest data in the California Natural Diversity Database if no nests are detected within a 0.5-mile radius during surveys.

Mitigation Measure BIO-4. Mitigate for Impacts on Habitat for Riparian Brush Rabbit

To reduce and offset the loss of habitat resulting from the construction of the new bridge, the City of Lathrop will implement offsite and onsite measures.

Offsite Habitat Restoration:

The City of Lathrop will fund offsite restoration of riparian brush rabbit habitat along the San Joaquin River at a location approved by the United States Fish and Wildlife Service and California Department of Fish and Wildlife through River Partners. The permanent and temporary impacts on riparian woodland and the permanent impacts on landscaped/developed areas, which is a total of 0.25 acre, will be mitigated at a minimum of 1:1. The location selected will serve to improve connectivity between current riparian brush rabbit populations. The City of Lathrop and River Partners will prepare a restoration plan for review and approval by the United States Fish and Wildlife Service and California Department of Fish and Wildlife. The restoration plan will include designs for restoring the location, which would include a planting design that provides cover, foraging habitat, and upland refugia for riparian brush rabbit; information on current and future site topography; and an irrigation plan. The restoration plan would also include information on site monitoring and maintenance and details on how these activities will be funded in perpetuity.

Onsite Connectivity and Habitat Improvements:

Onsite improvements will include a vegetated culvert that will provide cover and space for movement beneath Golden Valley Parkway and/or flood refugia habitat on the berms of Golden Valley Parkway. Onsite improvements will be finalized in coordination with and by approval of the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

- **Vegetated Culvert:** The proposed culvert on the land side of the levee that would be constructed to allow the reclamation district unimpeded access for levee repair and maintenance would be widened by 2 to 3 feet and planted with vegetation to

provide cover for rabbits to cross. The vegetation would be planted in soil, and irrigation and grow lights would be installed to compensate for lack of light and rainfall in the culvert. Vegetation would be planted leading to the area on either side of the culvert. The vegetated strip would be protected from vehicles by placing permanent traffic pylons, or the equivalent, to prevent vehicles from driving over the vegetation. The access road would be used infrequently for levee inspections and maintenance, likely once a month.

- **Flood Refugia Habitat:** The City of Lathrop will plant vegetation suitable for riparian brush rabbit on the berms of Golden Valley Parkway as it approaches the bridge from the east. These areas would be protected from flooding by the levee. Vegetation would include brushy plant species such as coyote brush, wild rose, golden currant, box elder, and grasses and herbs such as wild rye, Santa Barbara sedge, and mugwort. Final planting designs will be developed for approval by the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

Onsite Monitoring Plan

The City of Lathrop will develop and implement a monitoring plan to establish a baseline for riparian brush rabbit activity within dispersal habitat in the Manthey Road Bridge project area prior to the construction of the proposed project. The monitoring plan will be implemented in the time leading up to the removal of riparian habitat within the project work area. At a minimum, the plan will include the following actions and requirements.

- Collect baseline data on riparian brush rabbit use of and predator presence in the riparian habitat corridor on the right bank (east shore) of the San Joaquin River within the project work area. Baseline data collection will rely on the use of motion activated cameras (camera traps) to record the presence of animals moving through the future project area. To the extent practicable, considering project schedule, camera traps will be put in place and active over two 6-month periods, preferably beginning at the start of the breeding season in February and terminating in August. Photos will be reviewed by a biologist experienced with the identification of riparian brush rabbit and other wildlife species.
- Replacement dispersal habitat will be installed and a post-construction monitoring and management plan for on-site habitat will be prepared and implemented. At a minimum, the plan would include the following.
 - Monitor the use of the replacement dispersal habitat as well as the adjacent area under the bridge by riparian brush rabbit and potential predators over a minimum of 5 years, with monitoring occurring in years 1, 3, and 5.
 - Monitoring will include the placement and activation of camera traps over a 6-month period from February to August. In addition, field staff will assess the condition of the replacement habitat and identify remedies to fix obstructions and/or adjust the cover (e.g., replanting vegetation, improving irrigation). Information collected will include the following:

- Number of observed riparian brush rabbits.
- Documentation of use of the replacement habitat and/or adjacent areas.
- Documentation of other wildlife, including potential predators.
- Condition of the replacement dispersal habitat.
- Monitoring and management will be conducted by a wildlife biologist with knowledge of the life history, behavior, and habitat requirements of riparian brush rabbit.
- If monitoring indicates that rabbits are not using the replacement dispersal habitat or area under the bridge relative to baseline data, the City will fund additional offsite habitat protection that addresses population connectivity needs. The specific detail for additional offsite habitat protection would include the location (one that demonstrates its restoration, protection, or enhancement would provide linkage opportunities between riparian brush rabbit populations); the third party responsible for managing the habitat; and plans for maintaining and managing the habitat in perpetuity. These details will be developed in coordination with the United States Fish and Wildlife Service and California Department of Fish and Wildlife.

The Director of the City of Lathrop Department of Public Works, or his or her designee, will be responsible on a continuing basis for the implementation of the mitigation measures relating to riparian brush rabbit replacement habitat and the replacement habitat management plan. The Director will determine the manner in which mitigation shall proceed, and the resources, including staff commitment and consultants, that will be utilized in the effort.

Mitigation Measure CUL-1. Implement Post Review Discovery Plan

Monitoring guided by the Post Review Discovery and Monitoring Plan prepared for the project will be required in areas that have been identified as sensitive for buried archaeological resources. This plan provides background information, research themes, and thresholds for assessing potential eligibility of inadvertent finds. It also provides a framework for process and communications chains and requirements for documentation. The plan was prepared in accordance with 36 Code of Federal Regulations 800.13(b) and Stipulation XV.B of the *2014 First Amended Programmatic Agreement among the Federal Highway Administration, Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation regarding Compliance with Section 106 of the National Historic Preservation Act (Section 106 PA), as It Pertains to the Administration of the Federal-Aid Highway Program in California.*

Avoidance or Minimization Measures to Avoid or Minimize Less than Significant Impacts

Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

The City and/or its contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern, special-status wildlife habitats, and protected trees to be avoided.

Orange construction fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans prior to construction bid. Before construction begins, the construction contractor will work with the engineer and a resource specialist to verify the locations for the orange construction fencing and will place stakes around the sensitive resource sites to indicate these locations. The fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

To prevent snakes and other ground-dwelling animals from being caught in the orange construction fencing, it will be placed with at least a 1-foot gap between the ground and the bottom of the fencing. Fencing will be inspected weekly and repairs made promptly, if needed.

Conduct Environmental Awareness Training for Construction Employees

The City will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel to brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the biological study area (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the biological study area in which the species may occur, as well as their legal status and protection. The program also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation, as well as the ramifications for non-compliance, which will include the steps to be taken if a sensitive species is found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each person. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs

will be conducted for appropriate new personnel as they are brought on the job during the construction period.

Conduct Biological Monitoring

An appointed monitor, trained by a Caltrans-approved qualified biologist, will ensure that activities are being conducted in accordance with the agreed upon project schedule, agency conditions of approval as documented in the Biological Opinions for the project, and species-specific avoidance and minimization measures in the Initial Study/Environmental Assessment. The appointed monitor will be present throughout project construction and will not preclude the presence of a biological monitor as specified in other species-specific measures. The appointed monitor will ensure that fencing around environmentally sensitive areas remains in place during construction and that construction personnel, equipment, or runoff or sedimentation from construction does not enter environmentally sensitive areas. If any violations are noted or if any sensitive species are encountered, the appointed monitor will contact the project biologist for guidance on implementation of corrective measures as described in the species-specific avoidance, minimization, and mitigation measures in the Initial Study/Environmental Assessment. A qualified biologist will be available to conduct site visits as required.

Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction, and Conduct Tree Removal during the Non-Breeding Season

The City will conduct surveys for nesting Swainson's hawks in the spring 1 year before construction to provide information in preparation for construction (i.e., locations of nests, hawks responses to disturbance, sizes of buffer areas, and anticipated impacts on project schedule). Surveys also will be conducted in the spring of the year of construction to determine whether there are active nests in the current year. Information collected during the first round of surveys will help to focus the second round of surveys. Focused surveys for Swainson's hawk will be conducted within the limits of disturbance and in a buffer area up to 0.5 miles around the limits of disturbance. The size of the buffer area surveyed will be based on the type of habitat present and the line of sight from the construction area to surrounding suitable breeding habitat. Buffer areas containing unsuitable nesting habitat or with an obstructed line of sight to the construction area will not be surveyed. Surveys will follow the methods of the Swainson's Hawk Technical Advisory Committee (2000). A minimum of six surveys will be conducted during the appropriate timeframes discussed in the methods. If needed, biologists will coordinate with the California Department of Fish and Wildlife regarding the extent and number of surveys. Surveys generally will be conducted from February to July. Survey methods and results will be reported to California Department of Fish and Wildlife.

The City and/or its construction contractor will remove or trim trees during the non-breeding season (generally between September 15 and January 1) to the extent feasible.

Avoid and Minimize Impacts on Riparian Brush Rabbit

- A preconstruction survey of the riparian habitat to be disturbed will be conducted immediately prior to the removal of riparian habitat by an individual approved by United States Fish and Wildlife Service and California Department of Fish and Wildlife.
- Immediately following preconstruction surveys, riparian vegetation will be removed using hand tools. All vegetation will be cut to ground level. The vegetation removal will be monitored by the approved biologist to ensure that these activities do not result in injury or mortality of riparian brush rabbit. Any riparian brush rabbits observed during vegetation removal will be allowed to passively disperse outside of the work area or, if necessary, will be captured by the approved biologist. United States Fish and Wildlife Service and California Department of Fish and Wildlife will be contacted immediately if any brush rabbits are observed or captured, and a plan will be developed in consultation with the agencies to relocate any captured animals.
- Immediately following vegetation removal, work areas adjacent to riparian habitats will have tightly woven exclusion fencing (i.e., silt fencing) installed at least 3 feet high above the ground surface between the work area and the riparian habitat. The fencing will extend from the water line up the riverbanks (paralleling the work area) to the top of the adjoining levee (the side nearest the river such that the levee road is not fenced off). The fencing will continue another 25 feet away from the work area, along the top of the levee, and then curl back toward the river for approximately 10 feet to redirect wildlife back toward the riparian habitat and away from the work area. Because of the sensitivity of the riparian habitat and potential for harming wildlife, the fencing material will not be buried through trenching, but will be weighted down and covered on the inside (toward the work area) with gravel or sand bags such that animals cannot pass underneath the fence and are less able to dig beneath it. In areas where existing development (e.g., pavement or structures) is closer than the top of the levee, the exclusion fence will extend to that limit, and then continue for another 25 feet away from the work area and curl back toward the suitable habitat.
- The limits of the temporary disturbance area adjacent to riparian habitat will be fenced off with orange construction fencing that reaches a height of at least 4 feet. The fencing will be in place prior to and during all construction phases. To prevent rabbits and other ground-dwelling animals from being caught in the orange construction fencing, it will be placed with at least a 1-foot gap between the ground and the bottom of the orange construction fencing.
- Exclusion fencing will be checked weekly by a biological monitor to ensure that it is intact and functioning.
- If a riparian brush rabbit is encountered in a work area, all work will cease immediately. The animal will be allowed to passively move out of the work area and will not be captured unless by an individual authorized by a United States Fish and Wildlife Service biological opinion and a California Department of Fish and Wildlife incidental take permit. United States Fish and Wildlife Service and

California Department of Fish and Wildlife will be notified within 24 hours of any observation of riparian brush rabbit.