

# Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project Initial Study/Negative Declaration



*Prepared for:*

Stanislaus County Department of Public Works  
1716 Morgan Road  
Modesto, CA 95358



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**DRAFT: April 2023**

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## List of Acronyms

AB	Assembly Bill
APE	Area of potential effects
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	Air Resources Board
BIOS	Biogeographic Information and Observation System
BMP	Best management practices
Bridge	Montpelier Road Bridge over Turlock Irrigation District Canal
BSA	Biological study area
BSC	Building Standards Commission
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
COM	Commercial
Cortese	Hazardous Waste and Substances Sites
County	Stanislaus County
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dBA	A-weighted decibels
DPM	Diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency

ESA	Environmentally sensitive area
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zones
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse gas
GSP	Groundwater Sustainability Plan
HBP	Highway Bridge Program
HCP	Habitat Conservation Plan
HSC	Health and Safety Code
HWCL	Hazardous Waste Control Law
I-5	Interstate 5
IS/NMD	Initial Study/ Mitigated Negative Declaration
LCFS	Low Carbon Fuel Standard
LDR	Low-density residential
Leq	Equivalent continuous sound level
Lmax	Maximum sound level
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
msl	Mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Services
NRHP	National Register of Historic Places
O <sub>3</sub>	Ozone
OHWM	Ordinary high-water mark

OPR	Office of Planning and Research
Pb	Lead
PM <sub>10</sub>	Particulate matter 10 microns or less in diameter
PM <sub>2.5</sub>	Particulate matter 2.5 microns or less in diameter
ppm	Parts per million
ppv	Peak particle velocity
PRC	Public Resources Code
project	Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project
RACT	Reasonably Available Control Technology
ROW	Right-of-way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SER	Standard Environmental Reference
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMARA	Surface Mining and Reclamation Act
SO <sub>2</sub>	Sulfur dioxide
StanCOG	Stanislaus Council of Governments
SWRCB	State Water Resources Control Board
TCE	Temporary construction easement
TCR	Tribal Cultural Resource
TID	Turlock Irrigation District
U.S.	United States
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	Volatile organic compounds
WDR	Waste discharge requirements

## 1.0 Project Description

<b>Project Title</b>	Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project
<b>Lead Agency Name and Address:</b>	Stanislaus County 1716 Morgan Road Modesto, CA 95358
<b>Contact Person and Phone Number</b>	Chuck Covolo, Project Manager Stanislaus County Department of Public Works (209) 353-5938
<b>Project Location</b>	Montpelier Road between Cogswell Road and 6th Street
<b>Project Sponsor's Name and Address</b>	Stanislaus County Department of Public Works 1716 Morgan Road Modesto, CA 95358
<b>General Plan Designation(s)</b>	Agriculture (AG) and Planned Development (PD)
<b>Zoning Designation(s)</b>	General Agriculture 10 Acre (A-2-10) and General Agriculture 40 Acre (A-2-40)

## 1.1 Introduction

The County of Stanislaus (County) proposes to replace the Montpelier Road (Bridge 38C0157) over Turlock Irrigation District (TID) Main Canal, located approximately two miles southeast of the City of Waterford between Cogswell Road and 6th Street (project) (see **Figure 1**, Regional Location and **Figure 2**, Project Location). Permanent right-of-way (ROW) acquisitions and temporary construction easements (TCE) would be necessary to complete the project.

The project is listed in the Stanislaus Council of Governments' (StanCOG) 2019 Federal Transportation Improvement Program (FTIP) as a bridge replacement. The County is planning to use federal funds through the Highway Bridge Program for the project. The California Department of Transportation (Caltrans) is the lead agency pursuant to the National Environmental Policy Act (NEPA) and the County is the lead agency pursuant to the California Environmental Quality Act (CEQA).

## 1.2 Project Purpose and Need

The purpose of the project is to improve safety and reduce the risk of bridge failure by replacing a functionally obsolete bridge that is deemed scour critical with a new bridge that would meet current Caltrans design standards. The project is needed because the Montpelier Road Bridge was given a sufficiency rating of 53.8 and is deemed functionally obsolete; the width of the bridge is insufficient for average daily traffic demand, there are substandard railings at the bridge and approach, and the bridge is deemed scour critical due to full exposure of the footings at Piers 2 and 3.

## 1.3 Project Description

### *Existing Bridge*

The existing bridge structure has four 3-span continuous reinforced concrete T girders on reinforced concrete pier walls and spread footings and is approximately 23 feet wide and 81 feet long. The wingwalls and abutments are monolithic reinforced concrete. Montpelier Road is a 2-lane road with 10-foot lanes in each direction and is classified as a major collector road. The average daily traffic on Montpelier Road is 1,500 vehicles, with approximately 10 percent of the vehicles consisting of truck traffic. The bridge was constructed in 1920; according to Caltrans' Historical Significance listing of Local Agency Bridges (March 2019), the bridge is not eligible for listing on the National Register of Historic Places (NRHP) (Category 5).

The project area is in a rural area directly adjacent to land use designated for AG, PD, and low-density residential use (LDR) (see **Figure 3**, Land Use Map). Land surrounding the channel consists of agricultural crops; there are orchard trees in all four quadrants adjacent to the bridge, with the closest trees located approximately 100 feet from the north end of the bridge. There are dirt access roads on both sides of the channel west and east of the bridge. Dallas Road parallels the TID Main Canal on the southeast side; it is a County-maintained paved road with an existing stop controlled intersection with Montpelier Road. The shoulders of the road and access roads are largely unvegetated with small amounts of ruderal vegetation.

### *Proposed Improvements*

The project would include replacement of the existing functionally obsolete bridge with a 2-span bridge alternative. The project would include demolition of the existing bridge and construction of a new precast/prestressed concrete slab girder along the same alignment. The new bridge structure would be approximately 94 feet long and 33.5 feet wide with two travel lanes, shoulders, and crash-tested concrete bridge barriers. A maximum width of two feet would be added to each side of the bridge for the crash-tested concrete or steel post barriers with end-treatment crash cushions at each corner. The Montpelier Road and Dallas Road intersection and the canal access roads would be slightly realigned to accommodate the crash cushions. The realignment will consist of additional aggregate base (gravel) to create a wide gravel path connecting onto Montpelier Road to provide the entrance/exit for the TID maintenance vehicles. No demolition of the existing access roads would be required since it is currently not paved, and the realigned access roads will not be paved either. The project would also include permanently removing the existing stop signs on Montpelier Road. Improvements to Montpelier Road would not increase the number of through lanes.

Modifications to existing drainage patterns are not anticipated; however, culverts may be temporarily required to channel water away from the canal during construction. Construction activities in the canal would include removal of the existing piers. Excavation to a maximum depth of approximately four feet of excavation is anticipated for the bottom of the abutment. Piles would be driven to a depth of 50 feet.

### *Detour Route*

Construction of the project is anticipated to begin in the fall of 2025 and last between six and nine months. For the duration of the construction, the bridge would be closed, and traffic would be detoured around the project area using existing roads. Vehicles traveling south on Montpelier Road would likely be diverted to travel west on 6th Street, south on Hickman Road, and east on Cogswell Road. Vehicles traveling north on Montpelier Road would travel the same route in reverse (see **Figure 4**, Detour Route). Dallas Road

would also be closed at the intersection with Montpelier Road. No improvements are proposed along the detour routes. Temporary signage would be placed along the route to provide wayfinding for vehicles.

### Right-of-Way

It is anticipated that some permanent ROW acquisition would be needed from Assessor's Parcel Numbers (APN) 019-011-014, 019-011-029, 019-011-003, and 019-011-006 to accommodate the realigned canal access roads. TCEs may also be required from each parcel to accommodate contractor staging areas. Construction staging would be located on the roadway approaches and the canal access road. It is estimated that approximately 0.14 acre of ROW and 0.11 acre TCEs would be necessary to complete the project. The project would not result in any relocations or displacements of residents or businesses. Utility relocations may be required, pending investigation of the location of existing underground and overhead utilities. All utility relocations would be conducted in coordination with the service providers. Tree removal may be required to accommodate the realigned canal access roads.

### Utilities

Underground utilities are attached to the edge of the existing bridge, and several service boxes and manholes are located along the approach roadways. Overhead utilities are located south of the bridge and parallel to the canal. The utilities attached to the side of the bridge would be relocated to the new edge of deck following construction. The overhead utilities may need to be temporarily relocated or de-energized during construction when large cranes and other high vertical clearance equipment are present. No utility poles require relocation for the proposed improvements.

### ***Anticipated Construction Schedule and Methods***

Construction would take place Monday through Friday during daylight hours; no night work is anticipated. Construction methods would include the following:

- Installing construction area signs – Prior to construction, appropriate signage would be installed, identifying construction areas, the closed road, and detour routes. Detailed signage plans would be reviewed and approved by the County. Residents, businesses, and other stakeholders would be informed of the project and impacts on traffic operations during construction. Signs would remain in place throughout construction.
- Staging Areas – The contractor would mobilize equipment and materials in the designated staging areas located along both sides of the road. Staging areas would be returned to pre-project condition following construction.
- Clearing, Grubbing, and Tree Removal – Clearing and grubbing of vegetation and removal of any trees would be completed.
- Demolition – Best management practices (BMPs) would be implemented during construction. Demolition of the existing Montpelier Road Bridge and portions of roadway would be performed in accordance with Stanislaus County standards supplemented by Caltrans Specifications modified to meet environmental permit requirements. All concrete and other debris generated by the demolition would be removed from the project area and properly disposed of by the contractor.
- Stream Diversion – Rainfall occurs typically between November and March, with the highest levels falling in December and January. The canal is expected to be dry during the months between November and February. There may be a small amount of nuisance flow during these months.

The canal has controlled flows, which means control valves are adjusted either mechanically or manually to restrict or release water flows for irrigation. Because the flow is heavily regulated by multiple control points both upstream and downstream of the BSA, the canal is not expected to be substantially influenced by natural storm events. The contractor would work with TID to have the nuisance flow diverted prior to construction and water diversion would be used as needed.

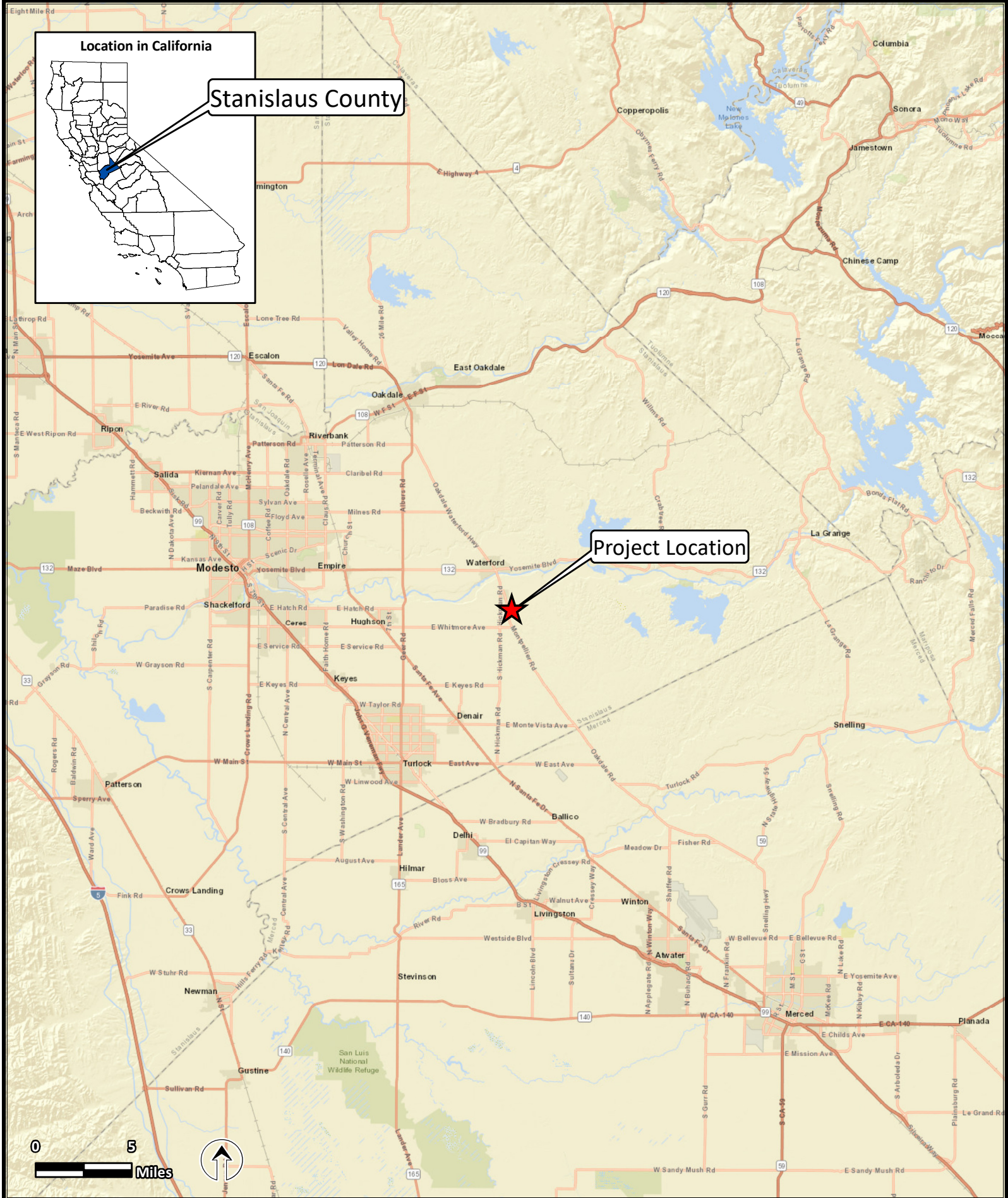
- New Bridge Foundations – The new bridge foundations would consist of driven steel pipe piles in a single row to a depth of 50 feet without a pile cap. Concrete seat type abutments would be formed and poured on top of the pile caps at the ends of the bridge. Concrete columns would be formed and poured for the intermediate support, and an infill wall would be formed and poured between the columns. A concrete pier cap would be formed and poured at the top of the pier.
- New Bridge Construction – The new bridge would be a precast/prestressed concrete slab girder. Precast concrete girders would be delivered to the site and erected onto the concrete abutments using one or two cranes. The concrete deck would then be poured and cured, and the bridge barrier, roadway approaches, and Midwest guardrail systems would be installed, and the roadway would be prepared for final surfacing and striping.

### ***Permits and Approvals Needed***

The following permits, reviews, and approvals are anticipated for project construction:

- A Clean Water Act (CWA) Section 404 Nationwide Permit and a CWA Section 401 Water Quality Certification would be obtained from the United States Army Corps of Engineers and Regional Water Quality Control Board (RWQCB).
- A Section 1602 Streambed Alteration Agreement would be obtained from California Department of Fish and Wildlife (CDFW).



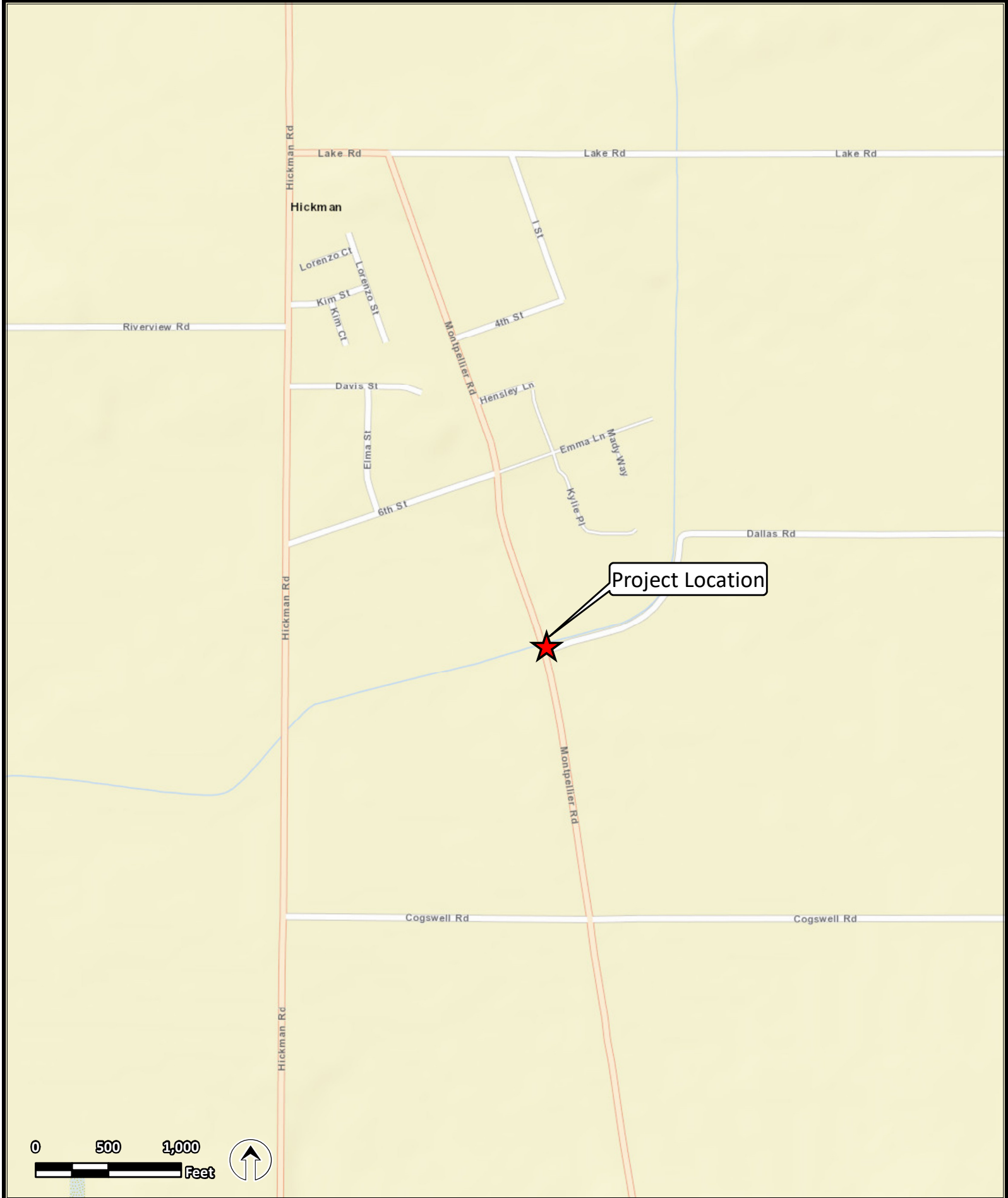


Sources: ESRI 2020.



**FIGURE 1. REGIONAL LOCATION**  
**Montpelier Road over Turlock Irrigation District Main Canal**  
**Bridge Replacement Project**

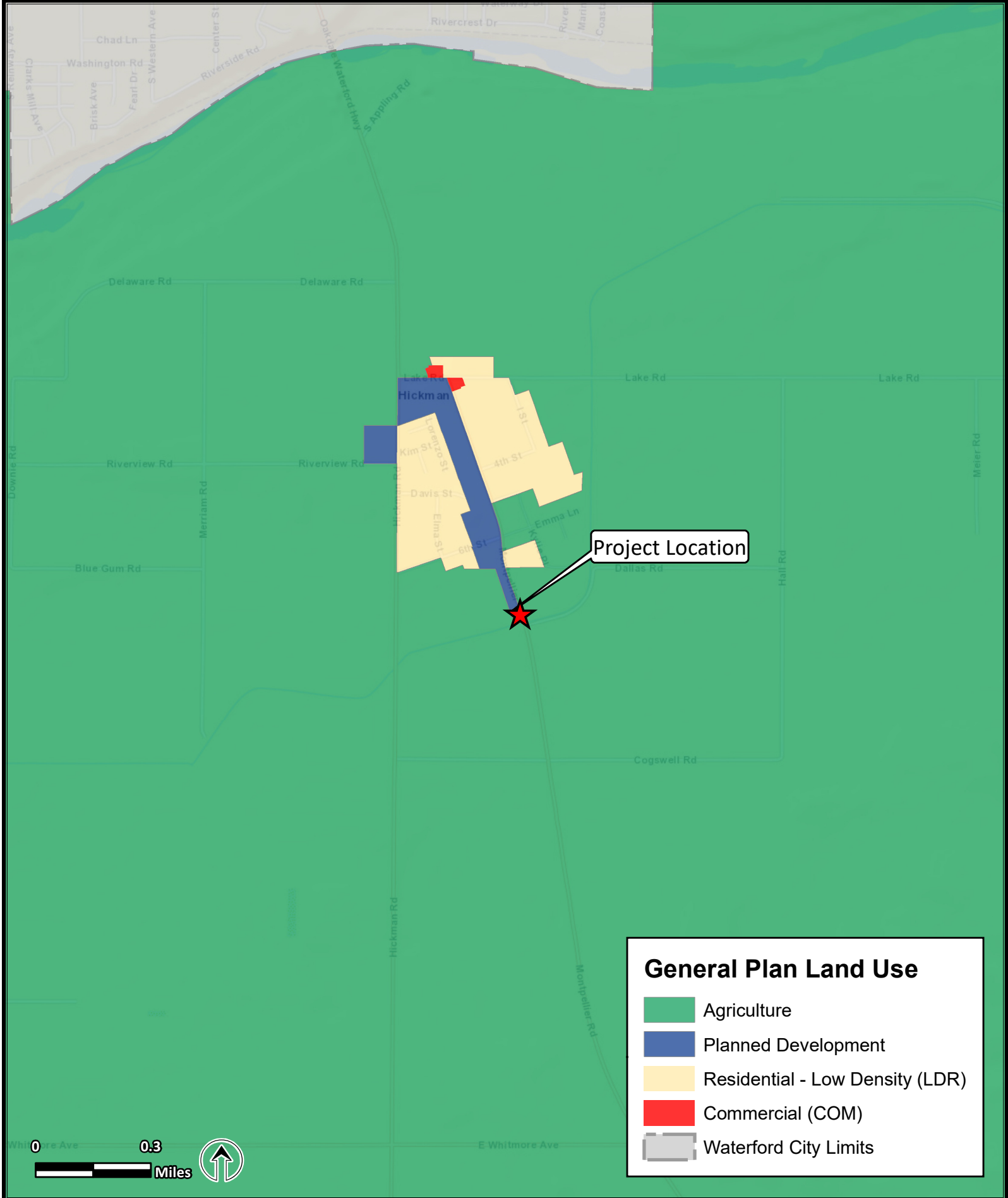




Sources: ESRI 2020.



**FIGURE 2. PROJECT LOCATION**  
**Montpelier Road over Turlock Irrigation District Main Canal**  
**Bridge Replacement Project**



Sources: Stanislaus County 2020; ESRI 2020.



**FIGURE 3. LAND USE**  
**Montpelier Road over Turlock Irrigation District Main Canal**  
**Bridge Replacement Project**



**FIGURE 4. DETOUR MAP**  
**Montpelier Road over Turlock Irrigation District Main Canal**  
**Bridge Replacement Project**

## 2.0 Environmental Factors Potentially Affected

Environmental factors that are checked contain at least one impact that has been determined to be a “Potentially Significant Impact.” Environmental factors unchecked indicate that impacts were determined to have resulted in no impacts, less than significant impacts, or less than significant impacts with mitigation measures incorporated into the project.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics                       | <input type="checkbox"/> Greenhouse Gas Emissions      | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Air Quality                      | <input type="checkbox"/> Hydrology & Water Quality     | <input type="checkbox"/> Transportation                     |
| <input type="checkbox"/> Biological Resources             | <input type="checkbox"/> Land Use & Planning           | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Utilities & Service Systems        |
| <input type="checkbox"/> Energy                           | <input type="checkbox"/> Noise                         | <input type="checkbox"/> Wildfire                           |
| <input type="checkbox"/> Geology & Soils                  | <input type="checkbox"/> Population & Housing          | <input type="checkbox"/> Mandatory Findings of Significance |

### 3.0 Determination

On the basis of this initial evaluation:

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



Signature

4-26-2023

Date

Chuck Covolo

Printed Name

Stanislaus County Department of Public Works

For

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## 4.0 Evaluation of Environmental Impacts

Potential environmental effects of the project are classified and described within the CEQA Environmental Checklist under the following general headings:

**“No Impact”** applies where the impact does not apply to projects like the one involved. For example, if the project area is not located in a fault rupture zone, then the item asking whether the project would result in or expose people to potential impacts involving fault rupture should be marked as “No Impact.”

**“Less Than Significant Impact”** applies where the impact would occur, but the magnitude of the impact is considered insignificant or negligible. For example, a development which would only slightly increase the amount of surface water runoff generated at a project area would be considered to have a less than significant impact on surface water runoff.

**“Less Than Significant Impact With Mitigation Incorporated”** applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” Incorporated mitigation measures should be outlined within the checklist and a discussion should be provided which explains how the measures reduce the impact to a less than significant level. This designation is appropriate for an MND, where all potentially significant issues have been analyzed and mitigation measures have been recommended that reduces all impacts to levels that are less than significant.

**“Potentially Significant Impact”** applies where the project has the potential to cause a significant and unmitigable environmental impact. If there are one or more items marked as “Potentially Significant Impact,” an EIR is required.

## 4.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code (PRC) Section 21099, would the Project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

#### Local Regulations

##### Stanislaus County General Plan

The Stanislaus County General Plan Conservation/Open Space Element and Land Use Element outlines the following goals and policies regarding visual resources (Stanislaus County, 2015):

- Goal One: Encourage the protection and preservation of natural and scenic areas throughout the County.
  - Policy Two: Assure compatibility between natural areas and development.
- Goal One: Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.
  - Policy Two: Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation, and enjoyment of scenic beauty.

### Environmental Setting

The project area is in a rural setting directly adjacent to land designated for AG, PD, and LDR use. Land surrounding the TID Main Canal consists of agricultural crops; there are orchard trees in all four quadrants adjacent to the bridge, with the closest trees located approximately 100 feet from the center of the bridge. Dallas Road parallels the TID Main Canal on the southeast side; it is a County-maintained paved road with an existing stop-controlled intersection at Montpelier Road. There are dirt access roads on both sides of



the channel west and east of the bridge. The shoulders of the road and access roads are largely unvegetated with small amounts of ruderal vegetation. The terrain immediately surrounding the current bridge is primarily flat with no significant landforms.

### **Discussion of Checklist Responses**

#### **a. Would the project have a substantial adverse effect on a scenic vista?**

**No Impact.** According to the Stanislaus County General Plan (General Plan), there are no designated scenic vistas within the county. There are no scenic vistas in the project area, and the project area is not visible from any scenic vistas. Views from the project area includes agricultural orchards. Therefore, the project would result in no impact on scenic vistas.

#### **b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact.** There project area does not include a state scenic highway. The nearest scenic highway is Interstate 5 (I-5) located approximately 32 miles west of the project area (California Department of Transportation, 2020a). Therefore, the project would result no impact on a state scenic highway.

#### **c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less Than Significant Impact.** Viewer groups potentially affected by project construction would include motorists and residents. The project area is visible from nearby rural residential properties. Views from the project area include the transportation facility and surrounding agricultural properties.

During project construction, staging and storage areas for vehicles, equipment, material, fuels, lubricants, and solvents would be located on the roadway approaches and the canal access road. Staging locations would temporarily block views of the surrounding land. In addition, construction of the realigned canal access road may require the removal of trees located on the edges of surrounding orchards. Only a few trees on each corner would be removed. The orchards would remain largely intact and the properties would still contain agricultural land. Visual quality of the surroundings would not be degraded due to the large number of trees remaining in view from the project area. Views of the project area would be restored following construction. Therefore, views of the surrounding landscape from the proposed bridge would be comparable in character and quality to existing views.

The project would include replacing the existing bridge with a 2-span, 2-lane bridge. The new bridge would be approximately 10.5 feet wider and 13 feet longer than the existing bridge. The new bridge structure was designed to have similar aesthetics to that of the existing bridge and would be located on the same alignment. Views from the proposed bridge of surrounding landscape would be comparable in character and quality to existing views.

Proposed improvements also include crash-tested concrete barriers along the new bridge, which would be of a slightly different visual character than the existing barriers. Guardrails, which were not part of the old bridge design, would be added to the new bridge. The guardrails would also be taller in order to meet code requirements for bicycle railings but they would not block or distort views of the surrounding areas

and views of the orchards would remain. Therefore, the project would result in a less than significant impact on visual character and quality.

**d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**No Impact.** There is no roadway lighting within the project area. The only source of nighttime lighting is from vehicle headlights. No new sources of lighting or glare would be installed as part of the proposed project. Therefore, the project would result in no impact on light and glare.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Aesthetics. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Aesthetics.

## 4.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resource Board. Would the project:</p>				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC section 12220(g)), timberland (as defined by PRC 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion incorporates the results of the Farmland Impacts Technical Memorandum that was prepared for this project (GPA Consulting, 2021).

### Regulatory Setting

#### State Regulations

##### Williamson Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is a California law for farmland protection. The Williamson Act enables local governments to enter into contracts with

private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value (California Department of Conservation, Division of Land Resource Protection, 2015). The intent of the Williamson Act is to encourage voluntary land conservation, particularly conservation of agricultural land in California. CEQA requires the review of projects that would convert Williamson Act contract land to non-agricultural uses.

## **Local Regulations**

### Stanislaus County General Plan

The General Plan Agriculture Element and Land Use Element outlines the following goals and policies regarding agricultural and forestry resources (Stanislaus County, 2015):

- Goal Two: Conserve our agricultural lands for agricultural uses.
  - Policy 2.2: The County shall support reasonable measures to strengthen the Williamson Act, making it a more effective tool for the protection of agricultural land.
- Goal One: Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.
  - Policy Two: Land designated AG shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation, and enjoyment of scenic beauty.
- Goal Three: Foster stable economic growth through appropriate land use policies.
  - Policy Seventeen: AG, as the primary industry of the County, shall be promoted and protected

## **Environmental Setting**

Land uses within and immediately adjacent to the project area include AG, PD, and LDR land uses; there is also a small section of Commercial (COM) land use north of the project area (Stanislaus County, 2015). According to the California Department of Conservation (CDOC) Important Farmland Map, the four parcels adjacent to the project are designated as Prime Farmland, and the TID Main Canal and a sliver of APN 019-001-006 are designated as Unique Farmland (California Department of Conservation, 2016). The agricultural land surrounding the project area is zoned as A-2-10 and A-2-40, which is general agriculture with a 10-acre minimum lot size, or 40-acre minimum lot size, respectively.

## **Discussion of Checklist Responses**

- a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to nonagricultural use?**

**Less Than Significant Impact.** The project would require permanent ROW acquisition of 0.14 acre of active Prime Farmland and Unique Farmland from adjacent parcels (APN 019-011-014, 019-011-029, 019-011-003, and 019-011-006) to accommodate the realigned canal access roads. The staging area would require approximately 0.11 acre TCE from the existing ROW adjacent to APN 019-011-006, which is currently not farmable land. As shown in **Appendix A**, a Natural Resources Conservation Service (NRCS) Farmland

Conversion Impact Rating Analysis was completed for the project. Only 0.14 acre (less than one percent) would be unfarmable after completion of the project due to permanent acquisition of farmland. Permanent impacts would result if the removal of orchard trees is required on the four adjacent parcels. The remaining farmland would continue to be used for agricultural purposes and would not be impacted by the project. The results of the site assessment totaled 85 points which is greater than the 60 point threshold; therefore, consultation with NRCS was required. The NRCS completed their respective portion of the site assessment, and determined the site is not subject to the Farmland Protection Policy Act. Therefore, the project would result in a less than significant impact related to conversion of farmland.

**b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**Less Than Significant Impact.** According to Government Code Section 51295, when a transportation project would acquire only portion of a parcel of land subject to a Williamson Act contract, the contract is deemed null and void only for that portion of the Williamson Act farmland taken, and the remaining land would continue to be subject to the preservation contract. The project would require permanent ROW acquisition of 0.024 acre from APN 019-011-003, which is under a Williamson Act contract. Per Government Code Section 51295, this portion taken for the bridge replacement would no longer be under a Williamson Act contract. The remaining farmland on this parcel would continue to be farmable. Therefore, the project would result in a less than significant impact on agricultural land and land under Williamson Act contract.

**c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC section 12220(g)), timberland (as defined by PRC 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact.** The project would not conflict with land zoned as forest land. There is no forest land in the project area. The parcels that would be acquired are zoned A-2-10 and A-2-40, and their acquisition would not impact land zoned forestland. Therefore, there would be no impact on forest land.

**d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** As described in the response to (c) above, no forest or timberland are located in the project area. Therefore, the project would result in no impact on forest land.

**e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

**Less Than Significant Impact.** As described in the response (a) through (d) above, less than one percent of the farmland adjacent to the project area would be unfarmable after completion of the project due to permanent acquisition. In addition, no forests or timberlands are located in the project area. Therefore, the project would result in a less than significant impact on farmland and forest land.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Agriculture and Forestry Resources. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Agriculture and Forestry Resources.

### 4.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Regulatory Setting

##### ***Federal Regulations***

###### *Federal Clean Air Act*

The National Ambient Air Quality Standards (NAAQS) were established by the Federal Clean Air Act of 1970 (FCAA), as amended in 1977 and 1990. The FCAA requires the United States (U.S.) Environmental Protection Agency (EPA) to establish NAAQS for six criteria pollutants including carbon monoxide (CO), ozone (O<sub>3</sub>), particulate matter equal to or smaller than 10 microns in diameter (PM<sub>10</sub>) or 2.5 microns in diameter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and oxides of nitrogen (NO<sub>x</sub>), measured by nitrogen dioxide (NO<sub>2</sub>).

##### ***State Regulations***

###### *California Clean Air Act*

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) requires that each local air district prepare and maintain an air quality management plan to achieve compliance with CAAQS. These standards are generally more stringent and apply to more pollutants than the NAAQS. The CCAA requires that each local air district prepare and maintain an air quality management plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for preparation of the State Implementation Plan (SIP) for the State of California. CARB also administers the state’s mobile source emissions control program and oversees air quality programs established by state statute, such as Assembly Bill (AB) 2588, the Air Toxics “Hot Spots” Information and Assessment Act of 1987.

California Air Resource Board Rules and Regulations

The following CARB Rule and Regulation is applicable to the project:

*In-Use Off-Road Diesel Vehicle Regulations*

This regulation limits vehicle idling to no more than five consecutive minutes and requires equipment to be reported to CARB and labeled.

**Local Regulations**

San Joaquin Valley Air Pollution Control District Air Quality Plans

The project area is located in the San Joaquin Valley Air Basin (SJVAB), under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for air quality monitoring in the eight counties of California’s Central Valley, including Stanislaus County. **Table 1** shows the current attainment status for the state and federal ambient air quality standards for the SJVAB.

**Table 1 Ambient Air Quality Standards & Valley Attainment Status**

Pollutant	Designation/Classification	
	Federal Standards <sup>a</sup>	State Standards <sup>b</sup>
O <sub>3</sub> 1-Hour	No Federal Standard <sup>f</sup>	Nonattainment/Severe
O <sub>3</sub> 8-Hour	Nonattainment/Extreme <sup>e</sup>	Nonattainment
PM <sub>10</sub>	Attainment <sup>c</sup>	Nonattainment
PM <sub>2.5</sub>	Nonattainment <sup>d</sup>	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
NO <sub>2</sub>	Attainment/Unclassified	Attainment
SO <sub>2</sub>	Attainment/Unclassified	Attainment
PB	No Designation/Classification	Attainment
H <sub>2</sub> S	No Federal Standard	Unclassified
SO <sub>4</sub>	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: (San Joaquin Valley Air Pollution Control District, n.d.)

Notes:

<sup>a</sup> See 40 CFR Part 81

<sup>b</sup> See CCR Title 17 Sections 60200-60210

<sup>c</sup> On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM<sub>10</sub> NAAQS and approved the PM<sub>10</sub> Maintenance Plan.

<sup>d</sup> The Valley is designated nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. EPA designated the Valley as nonattainment for the 2006 PM<sub>2.5</sub> NAAQS on November 13, 2009 (effective December 14, 2009).

<sup>e</sup> Though the Valley was initially classified as serious nonattainment for the 1997 8-hour O<sub>3</sub> standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

<sup>f</sup> Effective June 15, 2005, the EPA revoked the federal 1-hour O<sub>3</sub> standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme O<sub>3</sub> Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour O<sub>3</sub> nonattainment areas continue to apply to the SJVAB.

To work towards attainment of O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> standards, the SJVAPCD has adopted the following air quality plans:

- 2004 Extreme Ozone Attainment Demonstration Plan
- 2007 Ozone Plan
- 2009 Reasonably Available Control Technology SIP
- 2013 Plan for the Revoked 1-Hour Ozone Standard
- 2014 Reasonably Available Control Technology (RACT) SIP
- 2016 Plan for the 2008 8-Hour Ozone Standard
- 2020 RACT Demonstration
- 2008 PM<sub>2.5</sub> Plan
- 2012 PM<sub>2.5</sub> Plan
- 2016 PM<sub>2.5</sub> Plan
- 2018 PM<sub>2.5</sub> Plan
- 2007 PM<sub>10</sub> Maintenance Plan

*San Joaquin Valley Air Pollution Control District Rules and Regulations*

The following SJVAPCD Rules are applicable to the project:

*Rule 4101-Visible Emissions:*

The purpose of this rule is to prohibit the emissions of visible air contaminants to the atmosphere. This rule prohibits any single source emission (other than water vapor) from being discharged for a period or periods aggregating more than three minutes in any one hour. The following air contaminants are subject to this rule:

- Air contaminants that are as dark or darker than the number one shade designated on the Ringelmann Chart published by the United States Bureau of Mines.
- Air contaminants that are opaque enough to obscure an observer's view to a degree equal to or greater than the smoke described in the bullet point above.

*Rule 4102-Nuisance*

The purpose of this rule is to protect the health and safety of the public. This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.

*Rule 4201-Particulate Matter Concentration*

The purpose of this rule is to protect the ambient air quality by establishing a PM emission standard. This rule prohibits the release or discharge of dust, fumes, or total suspended PM emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions from any single source operation.

*Rule 8021-Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities*

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities. This rule prohibits any construction, demolition, excavation,



extraction, or other earthmoving activities to be performed unless the appropriate requirements described in Sections 5.1 through 5.5 of the rule are implemented. Sections 5.1 through 5.5 describe specific requirements to reduce dust emissions such as using water, posted speed limits on unpaved roads, and limiting construction in windy conditions.

*Rule 4641-Cutback, Slow Cure, and Emulsified Asphalt, Paving, and Maintenance Operations*

The purpose of this rule is to limit volatile organic compound (VOC) emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. This rule prohibits the manufacture for sale or use of any of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations:

- Rapid cure cutback asphalt;
- Medium cure cutback asphalt;
- Slow cure asphalt which as produced for application, contains more than 0.5 percent of organic compounds which evaporate at 500 °F or lower.
- Emulsified asphalt containing organic compounds, in excess of three percent by volume, which evaporate at 500 °F or lower.

*Rule 8041-Carryout and Trackout*

The purpose of this rule is to prevent or limit fugitive dust emissions from carryout and trackout. This rule requires equipment owners or operators to sufficiently prevent or cleanup carryout and trackout through the methods described in Sections 5.1 through 5.9 of the rule. Section 5.1 through 5.9 describe how to reduce carryout and trackout, cleanup of carryout and trackout, and when these sections need to be complied with. In addition, the rule prohibits the use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads.

*Rule 8061-Paved and Unpaved Roads*

The purpose of this rule is to limit fugitive dust emissions from paved and unpaved roads. This rule requires the implementation of control measures and design criteria to minimize fugitive dust.

*Stanislaus County General Plan*

The General Plan Agriculture Element and Conservation/Open Space Element outlines the following goals and policies regarding air quality (Stanislaus County, 2015):

- Goal Three: Protect the natural resources that sustain our agricultural industry.
  - Policy 3.1: The County shall continue to coordinate with the San Joaquin Valley Air Pollution Control District.
  - Policy 3.2: The County shall assist the San Joaquin Valley Air Pollution Control District in implementation of adopted plans and regulations.
- Goal Six: Improve air quality.
  - Policy Eighteen: The County will promote effective communication, cooperation, and coordination among agencies involved in developing and operating local and regional air quality programs.

## Discussion of Checklist Responses

### a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

**Less Than Significant Impact:** Project construction would be subject to the aforementioned SJVAPCD rules and regulations. With implementation of standard measures, such as applying water or dust suppressants to unpaved surface areas in compliance with applicable regulations listed above, the project would be consistent with the goals of applicable air quality plans.

Operation of the project would not generate new stationary or mobile sources of emissions because the project would maintain the same number of through lanes (one in each direction) and would not increase capacity or result in additional vehicles on the roadway. No long-term air quality impacts would result from the project. Therefore, the project would result in a less than significant impact on applicable air quality plans.

### b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

**Less Than Significant Impact.** Construction of the project would generate temporary, short-term emissions of various air pollutants. Construction activities with the potential to result in fugitive dust emissions include excavation and other earth-moving activities. Mobile source emissions include primarily NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, PM<sub>2.5</sub>, and diesel particulate matter (DPM). Emissions could also lead to the formation of O<sub>3</sub>, which is a regional pollutant that is derived from NO<sub>x</sub> and VOCs in the presence of sunlight and heat. Construction activities that have the potential to result in mobile source emissions include the use of construction equipment (bulldozers, trucks, and scrapers), truck delivery of construction materials, hauling of construction debris, and workers commuting to and from the project area. Mobile source emissions from construction equipment are highest during use of heavy-duty, diesel-fueled equipment.

Construction activities for the project would be required to comply with regulations to reduce the public's exposure to DPM and NO<sub>x</sub> emissions, such as the In-Use Off-Road Vehicle Diesel Regulation. Project construction would also be subject to SJVAPCD rules and regulations. Standard measures, such as applying water and dust suppressants to unpaved surface areas, would also be implemented.

As discussed in response (a), operation of the project would not generate new stationary or mobile sources of emissions because the project would maintain the same number of through lanes and would not increase capacity or result in additional vehicles on the roadway, and no long-term air quality impacts would result from the project. Therefore, the project would result in a less than significant impact related to criteria pollutants.

### c. Would the project expose sensitive receptors to substantial pollutant concentrations?

**Less Than Significant Impact.** Sensitive receptors are persons who are more susceptible to air pollution than the general population, including children, athletes, the elderly, and the chronically ill. Typical land uses where substantial numbers of sensitive receptors are often found are schools, daycare centers, parks, recreation areas, agricultural fields, medical facilities, nursing homes, and convalescent care facilities. Residential areas are also considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to

pollutants. The nearest rural-residential dwellings are located approximately 773 feet north of the existing bridge and approximately 555 feet north from the project area. The project area is surrounded by agricultural properties. Although agricultural workers would not be classified as a sensitive receptor, they would be exposed to higher levels of pollutants during construction due to their proximity to the project area.

Construction activities would result in short-term, project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for grading and paving activities. However, there would be relatively few pieces of off-road, heavy-duty diesel equipment in operation, and the construction period would be relatively short (approximately six to nine months). Construction would be conducted in compliance with standard measures and applicable regulations to minimize construction emissions. In addition, DPM is highly dispersive, and construction-related emissions of DPM would not be expected to result in exposure of sensitive receptors to substantial pollutant concentrations.

The project is not expected to increase criteria pollutant emissions during operation because the project would maintain the same number of through lanes and would not increase capacity or result in additional cars on the roadway. Therefore, the project would result in a less than significant impact related to exposing sensitive receptors to substantial pollutant concentrations.

**d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less Than Significant Impact.** Irritating odors are often associated with particulates. Sources include gasoline and diesel engine exhausts, paint spraying, and street paving. During construction, the project could result in potential odors from exhaust emissions from construction equipment used on the construction site, as well as the vehicles used to transport materials to and from the site, and from the motor vehicles of the construction crew. These exhaust emissions include VOC, CO, O<sub>3</sub>, NO<sub>2</sub>, and oxides of sulfur. However, odors would be temporary during construction. The project area is in a rural part of the county and odors would not affect a substantial amount of people. Following construction, odors would not be expected to be greater than the existing odors. Therefore, the project would result in a less than significant impact related to odors affecting a substantial number of people.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Air Quality. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Air Quality.

## 4.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
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 CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetland (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP); Natural Community Conservation Plan; or other approved local, regional, or state HCP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following discussion incorporates the results of the Natural Environment Study Minimal Impacts (NES(MI)) that was prepared for this project (GPA Consulting, 2022a).

### Regulatory Setting

#### ***Federal Regulations***

##### *Clean Water Act*

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the U.S. to maintain water quality standards for surface waters.

##### *Clean Water Act Section 404*

The United States Army Corps of Engineers (USACE) Regulatory Program regulates activities within federal wetlands and waters of the U.S. pursuant to Section 404 of the CWA. No discharge of dredged or fill

material into jurisdictional features is permitted unless authorized under an USACE Nationwide Permit or Individual Permit.

#### Clean Water Act Section 401

The State Water Resources Control Board and Regional Water Quality Control Board (RWQCB) are responsible for the administration of Section 401 of the CWA in the state of California. Under Section 401 of the CWA, applicants for federal licenses or permits must provide a Water Quality Certification that any discharges from a project would comply with the CWA, including state-established water quality standard requirements. For all work subject to an USACE Section 404 permit, project proponents must obtain a Water Quality Certification from the applicable RWQCB under CWA Section 401 stating that the project would comply with applicable water quality regulations.

#### Federal Endangered Species Act

The Federal Endangered Species Act (FESA) was established in 1973 to provide a framework to conserve and protect endangered and threatened species and their habitat. Section 7 of the FESA requires federal agencies to ensure that actions they engage in, permit, or fund, do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat for these species. Section 7 consultation provides for the “incidental take” of endangered and threatened wildlife species by federal entities if adverse effects to species cannot be avoided. Incidental take is defined by the FESA as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (50 CFR Part 10 and Part 21) protects migratory birds, their occupied nests, and their eggs from disturbance and/or destruction. “Migratory birds” under the MBTA include all bird species listed in 50 CFR Part 10.13, as updated in December 2013 (United States Fish and Wildlife Service, 2013). In accordance with the Migratory Bird Treaty Reform Act of 2004 the United States Fish and Wildlife Service (USFWS) included all species native to the U.S. (or U.S. territories) that are known to be present as a result of natural biological or ecological processes. In addition, the USFWS provided clarification that the MBTA does not apply to any nonnative species whose presence in the U.S. are solely the result of intentional or unintentional human-assisted introduction (United States Fish and Wildlife Service, 2018). Nonnative bird species not protected by the MBTA include, but is not limited to, the house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and rock pigeon (*Columba livia*).

#### Executive Order 13112

Executive Order (EO) 13112 directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. This order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species.

## ***State Regulations***

### **Porter Cologne Act**

The RWQCB also asserts authority over waters of the state under the Porter-Cologne Act, which establishes a regulatory program to protect water quality and to protect beneficial uses of state waters. The Porter-Cologne Act empowers the RWQCB to formulate and adopt a Water Quality Control Plan that designates beneficial uses and establishes such water quality objectives that in its judgment would ensure reasonable protection of beneficial uses. Each RWQCB establishes water quality objectives that would ensure the reasonable protection of beneficial uses and the prevention of water quality degradation. Dredge or fill activities with the potential to affect water quality in these waters must comply with Waste Discharge Requirements issued by the RWQCB.

### **California Fish and Game Code**

Under the California Fish and Game Code Section 1602, the limits of CDFW jurisdiction within streams and other drainages extends from the top of the stream bank to the top of the opposite bank, to the outer drip line in areas containing riparian vegetation, and/or within the 100-year floodplain of a stream or river system containing fish or wildlife resources. Under Section 1602, a Streambed Alteration Agreement must be issued by the CDFW prior to the initiation of construction activities that may substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel, or bank, of any river, stream, or lake; or deposit debris, waste, or other materials that could pass into any river, stream, or lake under CDFW's jurisdiction.

Section 2126 of the California Fish and Game Code states that it is unlawful for any person to take any mammal that are identified within Section 2118, including all species of bats.

Sections 3503, 3513, and 3800 of the California Fish and Game Code prohibit the take of birds protected under the MBTA and protects their occupied nests. In addition, Section 3503.5 of the California Fish and Game Code prohibits the take of any birds in the order Falconiformes or Strigiformes (birds-of-prey) and protects their occupied nests. Pursuant to Section 3801 and 3800, the only species authorized for take without prior authorization from the CDFW is the English sparrow and European starling.

State-listed species and those petitioned for listing by the CDFW are fully protected under the California Endangered Species Act (CESA). Under Section 2080.1 of the California Fish and Game Code, if a project would result in take of a species that is both federally and state listed, a consistency determination may be completed in lieu of undergoing a separate CESA consultation. Under Section 2081, if a project would result in take of a species that is state-only listed as threatened or endangered, then an incidental take permit from the CDFW is required.

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit the take or possession of 37 fully protected bird, mammal, reptile, amphibian, and fish species. Each of the statutes states that no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species, and states that no previously issued permit or licenses for take of the species "shall have any force or effect" for authorizing take or possession. The CDFW will not authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

### California Environmental Quality Act

Section 15380 of the CEQA Guidelines requires that species of special concern be included in an analysis of project impacts. California Species of Special Concern include species that are native to the State of California and are experiencing population declines but are not currently listed as threatened or endangered, all state and federally protected and candidate species, Bureau of Land Management, and United States Forest Service sensitive species. Species considered declining or rare by the California Native Plant Society (CNPS) or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing, are also included under species of special concern.

### **Local Regulations**

#### Stanislaus County General Plan

The General Plan Conservation/Open Space Element outlines the following goals and policies regarding biological resources (Stanislaus County, 2015):

- Goal One: Encourage the protection and preservation of natural and scenic areas throughout the County.
  - Policy Three: Areas of sensitive wildlife habitat and plant life (e.g., vernal pools, riparian habitats, flyways, and other waterfowl habitats, etc.) including those habitats and plant species listed by state or federal agencies shall be protected from development and/or disturbance.
- Goal Two: Conserve water resources and protect water quality in the County.
  - Policy Six: Preserve natural vegetation to protect waterways from bank erosion and siltation.
- Goal Ten: Protect fish and wildlife species of the County.
  - Policy 29: Habitats of rare and endangered fish and wildlife species, including special status wildlife, and plants shall be protected.

### **Environmental Setting**

#### **Biological Study Area**

The Biological Study Area (BSA) includes areas that could be directly or indirectly impacted by the project, either temporarily or permanently including the staging of construction equipment. The limits of the BSA were determined in coordination with the project team. The BSA encompasses an approximately 75-foot to 150-foot buffer around the anticipated limits of construction. The BSA includes areas that could be directly and indirectly impacted by the proposed project, either temporarily or permanently. Impacts are identified as direct, indirect, permanent, or temporary. The BSA is approximately 8.13 acres and encompasses the existing Montpelier Road, which runs north to south directly over the bridge. The BSA also includes the TID Main Canal, a man-made, artificially flooded water system that appears to flow east to west under the bridge.

#### **Special Status Species**

A CNDDDB species list was obtained on February 24, 2021 and updated on September 21, 2022 and September 20, 2022, to identify federally and state listed species with the potential to be in the BSA based on their recorded geographical range. USFWS and National Marine Fisheries Service (NMFS) species lists

were obtained on February 24, 2021, for the same purpose and to identify potential critical habitat and Essential Fish Habitat within the BSA. The following discussion describes the special-status plant and wildlife species with potential to be in the BSA based on (1) a record reported in the California Natural Diversity Database (CNDDDB), USFWS, and NMFS species lists, (2) the presence of suitable habitat, and (3) survey results.

A literature research and biological survey were conducted. A reconnaissance survey and jurisdictional delineation were conducted within the BSA. **Table 2** below summarizes the special status species with potential to be in the BSA. Special-status species with no potential to be in the BSA are not included in **Table 2**.

**Table 2 Special Status Species with Potential to be in the BSA**

Common and Scientific Names	USFWS	CDFW	General Habitat Requirements	Habitat Present/Absent	Rationale for Species Presence/Absence
<b>Reptiles</b>					
<i>Emys marmorata</i> western pond turtle	--	SSC	The western pond turtle is found in slow moving rivers, streams, lakes, ponds, wetlands, reservoirs, and brackish estuarine waters. This species prefers areas that provide logs, algae, or vegetation for cover, and boulders, partially submerged logs, vegetation mats, or open mud banks for basking.	HP	There is slow moving water in a canal with earthen banks suitable for basking in the BSA; therefore, this species has potential to be in the BSA.

Source: (California Department of Fish and Wildlife, 2018; California Department of Fish and Wildlife, 2019); (CaliforniaHerps, 2021)

Table Key: Habitat Present [HP] – There is habitat present within the BSA. State Species of Special Concern (SSC)

The nesting habitat typically preferred by the western pond turtle is absent from the BSA. The canal is heavily disturbed, and there are few previous documented observations of the species in the area. However, there is limited foraging habitat and the species may pass through the BSA.

Plants

According to the CNDDDB, CNPS, and USFWS searches, 14 special-status plants have the potential to be in the BSA based on recorded geographical distribution. However, based on habitat requirements and survey results, no special-status plant species are expected to be in the BSA. In addition, no special-status plant species were observed in the BSA during the reconnaissance survey conducted on May 11, 2021.

Animals

According to the CNDDDB, NMFS, and USFWS searches, 27 special-status wildlife species have the potential to be in the BSA based on recorded geographical distribution. Based on habitat requirements and survey results, there is potential for one special-status animal species to be in the BSA, the western pond turtle



(*Emys marmorata*). No special-status animal species were observed in the BSA during the field survey conducted on May 11, 2021.

There is potential for migratory birds to be nesting and foraging in the BSA and surrounding areas. During the biological survey, bird species were observed foraging in or flying over the BSA, including cliff swallow, house sparrow, and American robin. In addition, cliff swallows were observed actively nesting under the bridge during the biological survey on May 11, 2021.

### ***Natural Communities***

According to the CNDDDB search, Northern Hardpan Vernal Pools have the potential to be in the BSA based on recorded geographical distribution. However, based on field surveys, this natural community is absent from the BSA.

### ***Habitat Connectivity***

A migration or wildlife corridor is an area of habitat that connects two or more patches of habitat that would otherwise be isolated from each other. Wildlife corridors are typically adjacent to urban areas. A functional wildlife corridor allows for ease of movement between habitat patches and is important in preventing habitat fragmentation. Habitat fragmentation is typically caused by human development and can lead to a decrease in biodiversity and ecosystem functionality.

The habitat in the BSA is highly fragmented, and there is no native habitat. The land in and surrounding the BSA is primarily used for almond orchards. Compacted dirt access roads run parallel to the canal within the BSA. According to the CDFW Biogeographic Information and Observation System (BIOS), the BSA is not located within a wildlife corridor. It is unlikely the BSA would be used as a migration or travel corridor but may be used for local wildlife movement and foraging.

### ***Jurisdictional Waters***

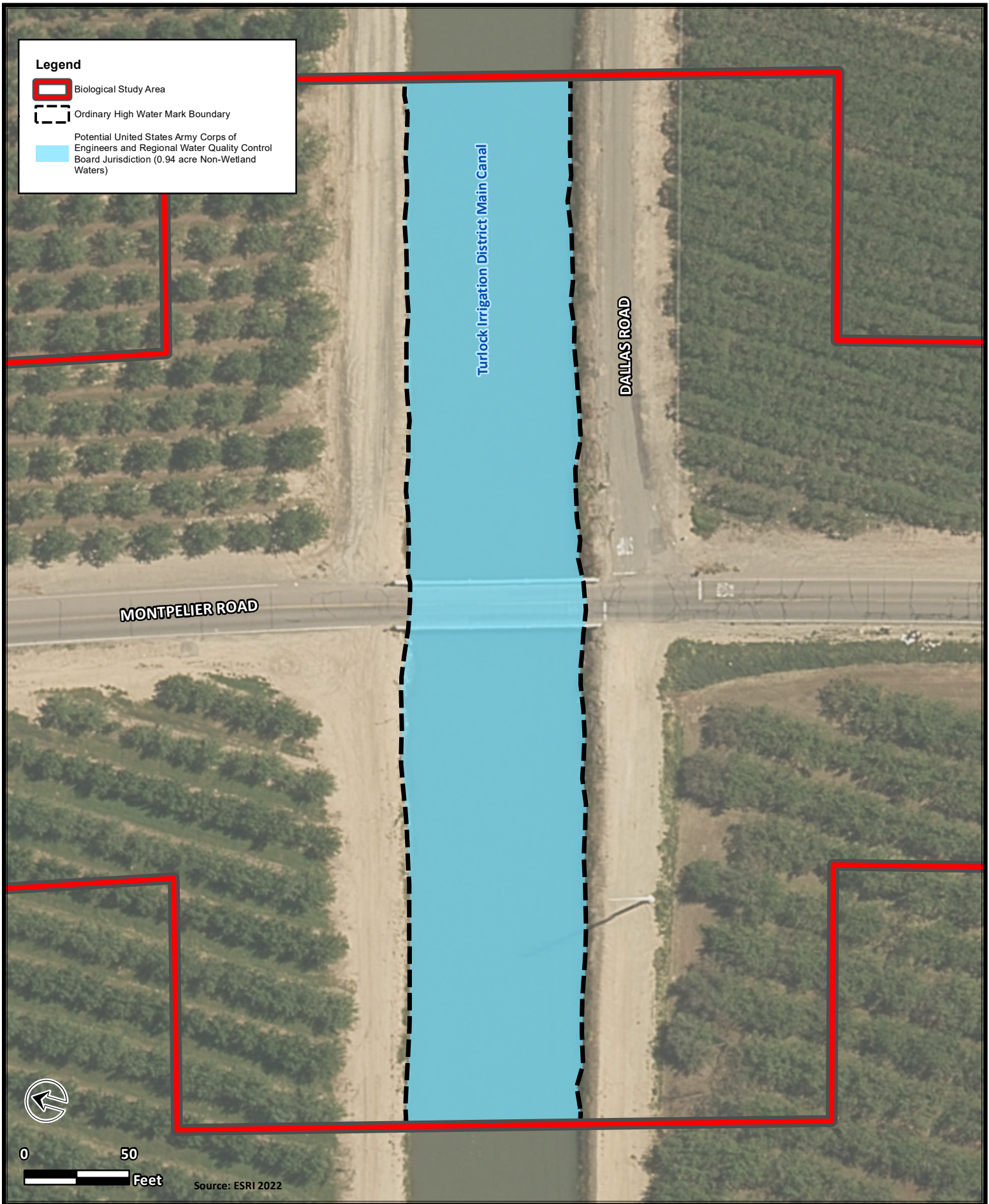
The BSA was evaluated for wetland and non-wetland waters under jurisdiction of the USACE and RWQCB by delineating the ordinary high water mark (OHWM) and assessing the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. The canal appears to receive water from Turlock Lake, a man-made reservoir, approximately nine miles east and upstream of the BSA. The canal system spills out through several points into the San Joaquin River, a traditional navigable waterway, approximately 22 miles west and downstream of the BSA. Natural and man-made tributaries of traditional navigable waterways, with relatively permanent flows, fall under jurisdiction of the USACE and RWQCB. Therefore, the canal is expected to fall under jurisdiction of the USACE and the RWQCB. Approximately 0.94 acre of non-wetland waters of the U.S. were delineated within the BSA (see **Table 3** and **Figure 5**, Potential United States Army Corps of Engineers and Regional Water Quality Control Board Jurisdiction).

Canals with a defined bed and bank are expected to fall under CDFW jurisdiction. Based on aerial imagery and field surveys, the canal has a defined bed and bank, conveys water, and has minimal annual vegetation along the banks. Additionally, the canal appears to have enough water to support aquatic wildlife, though none were observed during survey efforts. Therefore, the canal is expected to fall under CDFW jurisdiction. The BSA was evaluated for areas under jurisdiction of the CDFW by delineating the top of bank to the top of bank. Approximately 1.09 acres under CDFW jurisdiction were delineated within the BSA (see **Table 4** and **Figure 6**, Potential California Department of Fish and Wildlife Jurisdiction).

**Table 3 Jurisdictional Features in the Biological Study Area**

<b>Regulatory Agency</b>	<b>Jurisdictional Wetlands (acres)</b>	<b>Jurisdictional Non-Wetland Waters (acres)</b>
United States Army Corps of Engineers	--	0.94
Regional Water Quality Control Board	--	0.94
California Department of Fish and Wildlife	--	1.09

Source: (GPA Consulting, 2022a)



**FIGURE 5. POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project**





**FIGURE 6. POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION  
Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project**

## Discussion of Checklist Responses

- a. **Would the project 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 CDFW or USFWS?**

**Less Than Significant Impact.** Construction of the new bridge and temporary access roads, and demolition of the existing bridge could result in direct and indirect impacts on the western pond turtle should individuals be in the construction area. Direct impacts could include trampling or crushing this species or destruction of their burrows, resulting in mortality. Indirect impacts could include increased vibration and human activity from construction activities, which could disturb this species. Adverse impacts on the western pond turtle are not anticipated since they are not expected in the construction area. Therefore, the project would result in a less than significant impact on special status species. In addition, implementation of avoidance and minimization measures **BIO-1** through **BIO-11** would further reduce impacts.

- b. **Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS?**

**No Impact.** There is no riparian habitat within the BSA. In addition, there are no special-status communities expected to be in the BSA. Therefore, the project would result in no impact on any sensitive natural communities.

- c. **Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

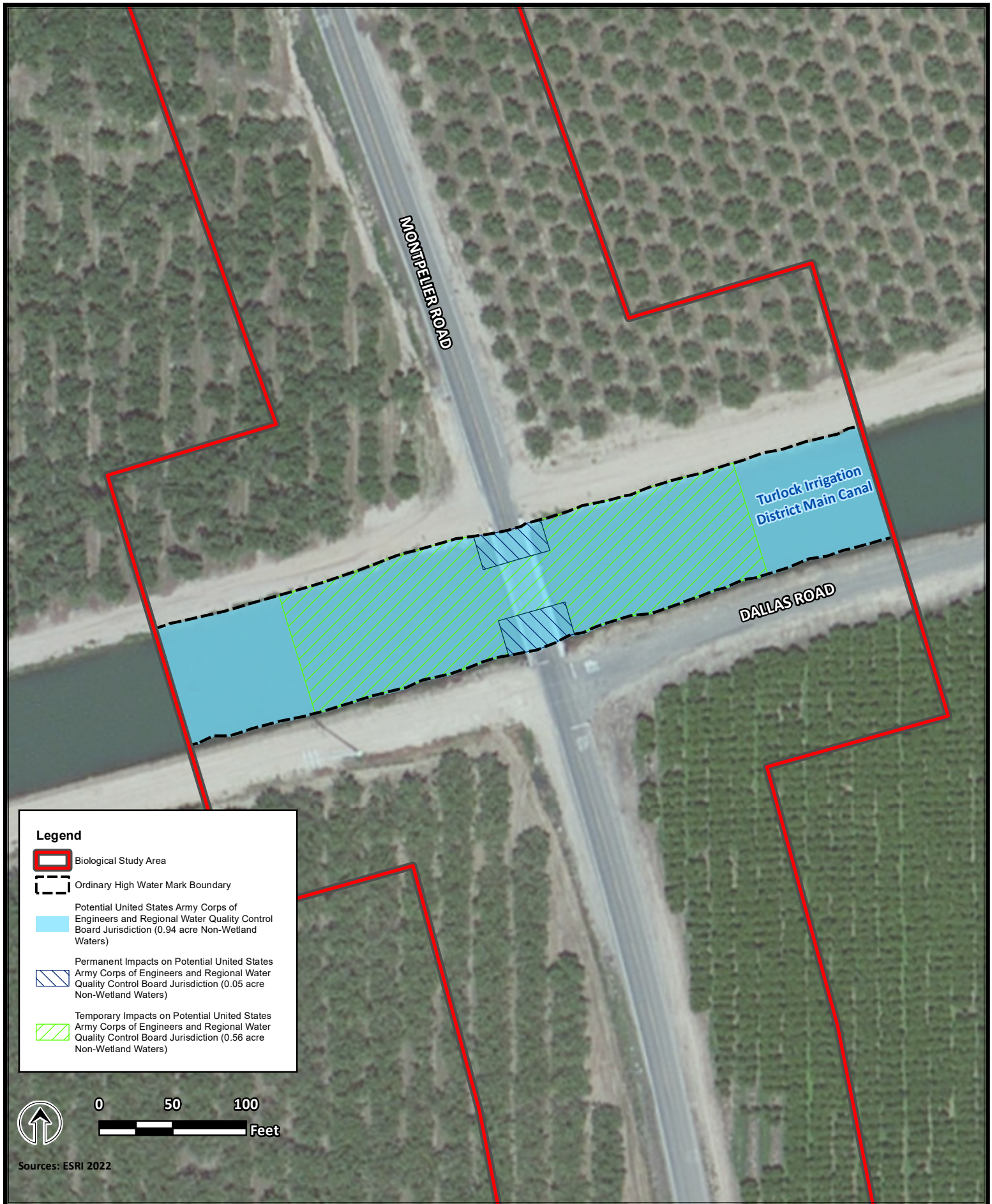
**Less Than Significant Impact.** Construction activities, including demolition of the existing bridge, grading, installation of rock slope protection, and construction of the new bridge would result in temporary and permanent impacts on jurisdictional areas. Equipment access for excavation of the bridge piers, installation of rock slope protection, grading, and realignment of the canal access roads during construction would result in temporary impacts on the canal. Ground disturbance and excavation for the bridge piers would result in temporary impacts on approximately 0.56 acre of non-wetland waters under jurisdiction of the USACE and RWQCB, and approximately 0.65 acre under CDFW jurisdiction (see **Table 4**, **Figure 7**, Impacts on Potential United States Army Corps of Engineers and Regional Water Quality Control Board Jurisdiction and **Figure 8**, Impacts on California Department of Fish and Wildlife Jurisdiction). Installation of rock slope protection would result in permanent impacts on approximately 0.05 acre of non-wetland waters under jurisdiction of the USACE and RWQCB, and approximately 0.07 acre under CDFW jurisdiction.

**Table 4 Temporary and Permanent Impacts on Jurisdictional Features in the BSA**

Regulatory Agency and Jurisdiction	Temporary Impacts (acres)	Permanent Impacts (acres)
United States Army Corps of Engineers Wetlands	--	--
United States Army Corps of Engineers Non-Wetland Waters	0.56	0.05
Regional Water Quality Control Board Wetlands	--	--
Regional Water Quality Control Board Non-Wetland Waters	0.56	0.05
California Department of Fish and Wildlife Jurisdiction	0.65	0.07

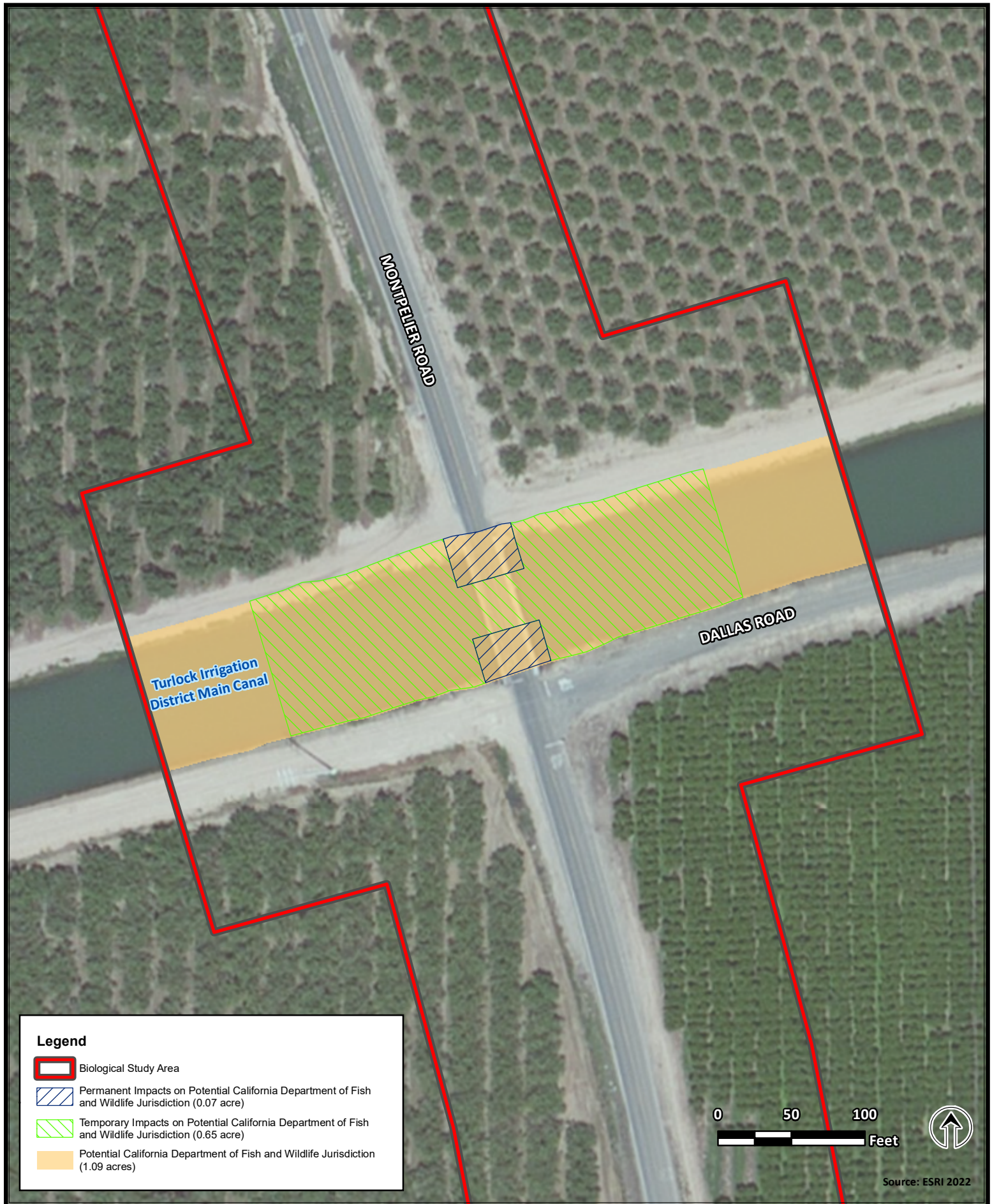
Source: (GPA Consulting, 2022a)





**FIGURE 7. IMPACTS ON POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION  
Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project**





**FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION  
Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project**

The project would result in minor temporary and permanent impacts to jurisdictional features. Therefore, the project would result in a less than significant impact on jurisdictional features. In addition, avoidance and minimization measures **BIO-1** through **BIO-10** would further reduce impacts on jurisdictional waters, and the project would be constructed in compliance with applicable water quality and dust control regulations and conditions within the regulatory permits.

**d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**Less Than Significant Impact.** Nesting birds could be directly impacted by construction activities if they were to be nesting under the bridge or in vegetation within the construction area. In addition, these species could be indirectly impacted by loss of habitat resulting from vegetation or structure removal. However, it is unlikely the BSA would be used as a migration or travel corridor. Therefore, the project would result in a less than significant impact on migratory wildlife and wildlife nursery sites. Implementation of avoidance and minimization measures **BIO-12** through **BIO-16** would further reduce impacts and the project would comply with the MBTA and California Fish and Game Code.

**e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact.** The General Plan Conservation/Open Space Element includes policies to preserve, protect, and enhance open space, agricultural land, and natural resources in the Stanislaus County. Applicable policies and consistency determinations within this element are included in **Table 5**.

**Table 5 Project Consistency with Applicable Local Policies Governing Natural Resources**

Section of Policy Number	Policy/Ordinance	Project Consistency Evaluation
Open Space and Conservation Element		
Policy 3	Areas of sensitive wildlife habitat and plant life (e.g., vernal pools, riparian habitats, flyways, and other waterfowl habitats, etc.) including those habitats and plant species listed by state or federal agencies shall be protected from development and/or disturbance.	<i>Consistent.</i> Disturbance of sensitive wildlife habitat would be avoided or minimized through measures <b>BIO-1</b> through <b>BIO-11</b> .
Policy 6	Preserve natural vegetation to protect waterways from bank erosion and siltation.	<i>Consistent.</i> Existing vegetation would be preserved to the extent feasible, and with the implementation of measure <b>BIO-8</b> , all temporarily disturbed areas would be re-contoured to pre-construction conditions.
Policy 29	Habitats of rare and endangered fish and wildlife species, including special status wildlife, and plants shall be protected.	<i>Consistent.</i> Disturbance of special-status species habitats would be minimized or avoided through measures <b>BIO-1</b> through <b>BIO-11</b> .



The project is not anticipated to conflict with any local policies or ordinances protecting biological resources. Therefore, the project would result in no impact on local policies or ordinances protecting biological resources.

**f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan (HCP); Natural Community Conservation Plan; or other approved local, regional, or state HCP?**

**No Impact.** The BSA is not located within the limits of a regional conservation plan such as an HCP or Natural Community Conservation Plan; therefore, the project would result in no impact on provisions of an adopted HCP; Natural Community Conservation Plan; or other approved local, regional, or state HCP.

**Avoidance, Minimization, and Mitigation Measures**

To avoid and/or minimize potential impacts on jurisdictional waters, the following measures would be implemented:

**BIO-1** Work areas would be reduced to the maximum extent feasible.

**BIO-2** Pesticides and/or herbicides would not be used as part of the project.

**BIO-3** BMPs, such as silt fencing, fiber rolls, and straw bales, would be implemented during construction to minimize dust, dirt, and construction debris from entering the jurisdictional features and/or leaving the construction area.

**BIO-4** Appropriate hazardous material BMPs would be implemented to reduce the potential for chemical spills or contaminant releases into the jurisdictional features, including any non-stormwater discharge.

**BIO-5** All equipment refueling and maintenance would be conducted in the upland staging area, a minimum of 50 feet from TID Main Canal and its banks. In addition, vehicles and equipment would be checked daily for fluid and fuel leaks, and drip pans would be placed under all equipment that is parked and not in operation. Leaking vehicles or equipment would not be operated until repaired. All workers would be informed of the importance of preventing spills and the appropriate measures to take should a spill happen.

**BIO-6** Stationary equipment such as motors, pumps, generators, compressors, and welders located within 50 feet of TID Main Canal and its banks would be positioned over drip-pans, including when in operation.

**BIO-7** During demolition of the existing bridge, all grindings and asphaltic-concrete waste would be immediately removed offsite or be temporarily stored onsite. If the waste is stored onsite, the waste would be placed on construction grade plastic sheeting, geotextile fabric, or similar impervious material, and would be stored a minimum of 100 feet from TID Main Canal. On or before the date of project completion, the waste would be transported to an approved disposal site.

- BIO-8** Any temporary erosion control implemented during construction would be completed using non-invasive species. At project completion, all temporarily disturbed areas would be re-contoured to pre-construction conditions.
- BIO-9** High visibility Environmental Sensitive Area (ESA) protective fencing would be installed around the project limits of TID Main Canal to prevent construction staff or equipment from encroaching further on jurisdictional waters.
- BIO-10** Worker Environmental Awareness Training for biological resources, including jurisdictional areas, sensitive habitat, and special-status species would be given to all personnel working on site. The training would include the sensitivity of the area to anthropogenic activities, legal protection afforded to the biological resources, penalties for violations of federal and state laws, reporting requirements, and project features designed to reduce impacts on the biological resources. This training would be conducted by a qualified biologist.

To avoid and/or minimize potential impacts on the western pond turtle, the following measure would be implemented:

- BIO-11** If western pond turtles are found, an ESA protective fencing buffer would be installed. The fencing would have a buffer radius of 25 feet around the species of concern, or as directed by a qualified biologist.

To avoid and/or minimize potential impacts on the migratory birds, the following measures would be implemented:

- BIO-12** Trimming and removal of vegetation would be minimized and performed outside of the nesting season (February 1 to August 31), to the extent feasible.
- BIO-13** In the event that trimming or removal of vegetation and/or initial ground disturbance must be conducted during the nesting season, nesting bird surveys would be completed within 500 feet of the construction area (500 feet for raptors and 100 feet for other birds), where feasible within county right of entry, by a qualified biologist no more than 72 hours prior to trimming or ground disturbance activities. Surveys would be repeated if construction activities are suspended for 14 days or more.
- BIO-14** If nesting birds are found within 500 feet of the construction area, appropriate buffers (typically 100 feet for birds and 500 feet for raptors) consisting of orange flagging/fencing or similar would be installed and maintained until nesting activity has ended, as determined in coordination with the project biologist and regulatory agencies, as appropriate.
- BIO-15** In the year prior to construction, cliff swallow nests and other nests would be removed under the supervision of a qualified biologist during the non-breeding season (typically September 1 to January 31). In addition, nest removal would be conducted during the non-active season (November 1 – February 28) for bats, as there is potential for bats to utilize swallow nests for roosting. Further, the inactive nests would also be checked for bats prior to removal.

**BIO-16** During the nesting season (typically February 1 to August 31), the construction area would be monitored a minimum three days per week to ensure that any partially-built nests would be removed from the bridge to prevent swallows from nesting on the bridge structure and no new nests are built. If an active nest is observed, project biologists would coordinate with regulatory agencies as appropriate. Monitoring and nesting deterrence would continue until birds no longer attempt to nest on the bridge.

## 4.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion incorporates the results of Archaeological Survey Report that was prepared for this project (Duke Cultural Resource Management, LLC, 2022).

### Regulatory Setting

#### State Regulations

##### CEQA Section 15064.5

Under CEQA, Title 14, CCR Section 15064.5(a)(3), a resource is considered historically significant if it meets one of the following four criteria:

- It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- It is associated with the lives of persons important in our past;
- It embodies the distinctive characteristics of a type, period, region, or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or
- It has yielded, or may be likely to yield, information important in prehistory or history.

CEQA requires public agencies and private interests to identify the potential adverse impacts or environmental consequences of their project for any object or site of significance with respect to history. CEQA also provides protection for paleontological remains.

##### California Public Resources Code (PRC)

##### *PRC 21083.2, 5097.5, 30244, and 21084.1*

According to PRC 21083.2 (a), if archaeological resources are determined to be significant, then the impacts on that resource should be addressed. PRC 5097.5 prohibits the excavation and/or the removal of a “vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.” PRC 30244 requires reasonable mitigation of adverse impacts on paleontological resources resulting from development on public land.

PRC 21084.1 gives the lead agency power to determine that a resource is a historical resource, even if the resource is not listed or eligible for listing in the California Register of Historical Resources or a local register of historical places. In addition, the lead agency can also determine that a resource is a historical resource, even if it is not deemed significant in a historical resource survey.

#### *Native American Heritage Act (PRC 5097.9)*

The Native American Heritage Act, passed by the State of California in 1976, established the Native American Heritage Commission (NAHC) for protecting Native American religious values on state property. The NAHC not only protects the heritage of Native Americans, but also ensures their participation in matters concerning heritage sites. The commission's duty is to assist both federal and state agencies in protecting Native American sacred places and provide recommendations concerning Native American heritage in accordance with environmental law and policy. The act protects burials from disturbance, vandalism, and accidental destruction. It also stipulates which specific procedures laid out in the California Health and Safety Code (HSC) must be implemented if a Native American burial is uncovered during project construction or archaeological data recovery.

#### *Assembly Bill 52 (PRC 21080.1, 21080.3.1, and 21080.3.2)*

As of July 1, 2015, AB 52 requires public agencies to consult with California Native American tribes identified by the NAHC for the purpose of mitigating impacts on tribal cultural resources. The specific directives of the bill are as follows:

“Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section (PRC Section 21080.1(d)).”

#### *California Health and Safety Code Section 7050.5*

The State of California HSC Section 7050.5 requires that if human remains are discovered during ground disturbing activities, the County Coroner must be notified, and no further disturbance is authorized to occur until the County Coroner has made a determination of origin and disposition of the remains. If the human remains are determined to be prehistoric, the coroner must notify the NAHC, who would determine and notify a Most Likely Descendant (MLD). The MLD then inspects the site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

### ***Local Regulations***

#### *Stanislaus County General Plan*

The General Plan Conservation/Open Space Element outlines the following goals and policies regarding cultural resources (Stanislaus County, 2015):

- **Goal Eight: Preserve areas of national, state, regional, and local historical importance.**
  - Policy Twenty-Four: The County will support the preservation of Stanislaus County's cultural legacy of archeological, historical, and paleontological resources for future generations.
  - Policy Twenty-Five: "Qualified Historical Buildings" as defined by the State Building Code shall be preserved.

## **Environmental Setting**

The project area is located in a rural part of Stanislaus County, directly adjacent to land designated for AG, PD, and LDR uses. The Area of Potential Effects (APE) is defined under Section 106 of the NHPA (36 CFR Part 800), as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The land within the APE consists of the bridge, a portion of the TID Main Canal, portions of Montpelier Road, and portions of the adjacent orchards on all four corners. Where the APE cuts across a parcel, only that portion of the parcel is included in the APE.

A record search of the APE and a surrounding 1-mile radius was conducted at the Central California Information Center (CCIC) to identify any historic properties or previous cultural resources studies on file. Three previously recorded historical resources were documented within the APE and within a one-mile radius. Two of these resources, the Montpelier Bridge over TID Main Canal and an abandoned portion of the Southern Pacific Railroad, were found not eligible for the NRHP or CRHR. One cultural resource, the TID Main Canal, is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage and embody the distinctive characteristics of a type, period, region, or method of installation, or represents the work of an important creative individual, or possesses high artistic values. Therefore, for the purposes of this project only, the TID Main Canal was assumed to be eligible at the state level of significance under NRHP Criterion A, with a period of significance between 1887 and 1900.

There are no known archaeological or prehistoric resources in the project vicinity. Pedestrian reconnaissance field surveys were conducted to examine the APE for evidence of resources. Disturbances within the APE includes the TID Main Canal, Montpelier Bridge, and remnants of the Southern Pacific Railroad with modern refuse along the banks of the canal. The topography of the APE is generally level with the exception of the canal banks. The area is vegetated with several failed trees within an otherwise healthy orchard as seen throughout the four properties adjacent to the APE. Sediment in the APE consists of light tannish-brown sandy loam.

## **Discussion of Checklist Responses**

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?**

**Less Than Significant Impact.** The Montpelier Bridge over TID Main Canal and an abandoned portion of the Southern Pacific Railroad, were found not eligible for the NRHP or CRHR; therefore, they are not considered historic resources pursuant to § 15064.5. For the purposes of this project only, the TID Main Canal is assumed to be eligible at the state level of significance under NRHP Criterion A, with a period of significance between 1887 and 1900.

The integrity of immediate setting, design, materials, workmanship, and feeling of the TID Main Canal have been lost due to a number of improvements over the years. The integrity of association and immediate setting have been diminished as a result. Alterations beyond those required by maintenance have occurred within the segment, most notably the widening of the Turlock Main Canal between 1916 and 1953. Similarly, the segment does not convey the feeling and association of a specific time period, as it has been substantially altered over time since initial construction (GPA Consulting, 2022e). The segment of the Turlock Main Canal within the APE does not appear eligible for the NRHP as a contributor to the assumed eligible TID, of which it is a part. The segment of canal has been substantially altered and upgraded. Thus, it lacks integrity from the 1887 to 1900 period of significance established for the TID.

Construction activities would include demolition of the existing bridge, grading, installation of rock slope protection and construction of the new bridge. The existing bridge foundations will be removed to 3 feet below original ground. This would include excavation below the existing canal bottom at the locations of the existing foundations. The new bridge foundations will consist of driven steel pipe piles in a single row to a depth of 50 feet without a pile cap. Concrete seat type abutments will be formed and poured on top of the pile caps at the ends of the bridge. Concrete columns will be formed and poured for the intermediate support, and an infill wall will be formed and poured between the columns. A concrete pier cap will be formed and poured at the top of the pier. The canal banks will be lined with rock slope protection in front of the abutments; no rock slope protection will be placed on the bottom of the canal. The canal bottom will be restored to pre-project conditions.

The segment within the APE has already been substantially altered and would not be considered a contributing segment due to a lack of integrity. Therefore, it is anticipated that no aspect of the undertaking would alter, directly or indirectly, any of the characteristics of the historic property that qualify it for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Therefore, the project would result in a less than significant impact on historical resources.

**b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

**Less Than Significant Impact.** There are no known or discovered archaeological resources in the project area and due to the nature of previous ground disturbances within the APE for the construction of the bridge and existing road, along with the research and survey results, the potential to adversely affect unknown potentially intact buried archeological deposits that might be eligible for NRHP listing is low. Therefore, the project would result in a less than significant impact on archaeological resources. Measure **CUL-1** would be implemented if previously unidentified resources are uncovered.

**c. Would the project disturb any human remains, including those interred outside of formal cemeteries?**

**Less Than Significant Impact.** Construction of the project would include ground-disturbing activities that could unearth previously undiscovered human remains interred outside of a formal cemetery, should they be present in the project limits. However, the project area is located in a rural part of Stanislaus County that is not within or near a formal cemetery and the land within and surrounding the project area has already been disturbed; therefore, no human remains are expected. Therefore, the project would result in a less than significant impact on human remains. Measure **CUL-2** would be implemented if human remains are discovered.

### **Avoidance, Minimization, and/or Mitigation Measures**

To avoid and/or minimize potential impacts on Cultural Resources, the following measures would be implemented:

- CUL-1** If previously unidentified cultural materials are encountered or unearthed during construction, work would be halted in that area until a qualified archaeologist can assess the nature and significance of the find. Additional surveys would be required if the project limits change to include areas not previously surveyed.
  
- CUL-2** In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, steps would be taken in compliance with the CCR Section 15064.5. All construction activities would cease, and the County Coroner would be contacted if any human remains are discovered, in accordance with 14 CCR Section 15064.5(e). If the coroner determines that the human remains are of Native American origin, the NAHC would be notified to determine the MLD for the area. The MLD would make recommendations for the arrangements for the human remains per PRC Section 5097.98.



## 4.6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

#### State Regulations

##### Executive Order S-01-07

This EO sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California’s transportation fuels was to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. In 2018, the EO was extended to a 20 percent decrease in the carbon intensity of California’s transportation fuels by the year 2030. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 greenhouse gas (GHG) reduction goals (University of California, Berkeley Law, 2019).

##### Senate Bill 375, Chapter 728, 2008, Sustainable Communities and Climate Protection

This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it would achieve the emissions target for its region. The Stanislaus County regional emissions goal is to reduce GHG emissions by 16 percent by 2035 (California Air Resources Board, 2018).

##### In-Use Off-Road Diesel Vehicle Regulations

This regulation limits vehicle idling to no more than five consecutive minutes and requires equipment to be reported to CARB and labeled.

##### California Long-Term Energy Efficiency Strategic Plan

This plan provides a roadmap for achieving maximum energy savings across all major sectors in the State of California and identifies strategies for achieving goals for energy.

#### Local Regulations

##### Stanislaus County General Plan

The General Plan Conservation/Open Space Element outlines the following goals and policies regarding energy resources (Stanislaus County, 2015):

- Goal Eleven: Conserve resources through promotion of waste reduction, reuse, recycling, composting, ride-sharing programs, and alternative energy sources such as mini-hydroelectric plants, gas and oil exploration, and transformation facilities such as waste-to-energy plants.
  - Policy Thirty-One: New construction by the County shall meet or exceed code requirements for energy conservation.

### **Environmental Setting**

The project area includes an existing transportation facility. The project area does not currently require energy resources to operate.

### **Discussion of Checklist Responses**

- a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Less Than Significant Impact.** During the six to nine month construction period, construction vehicles, worker vehicles, and equipment (e.g., generators) would require the use of fuel (gasoline and diesel) and electricity to operate. Energy consumption during construction would be temporary and would result in a negligible increase in regional energy consumption. Operation would not require an ongoing or permanent commitment of energy resources. Compliance with the previously mentioned policies and regulations would allow the project to use energy efficiently and only when necessary. Therefore, the project would result in a less than significant impact on energy resources.

- b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**No Impact.** Stanislaus County's goal is to reduce regional GHG emissions by 16 percent by 2035. As discussed in response (a) above, fuel consumption from construction vehicles and equipment would be temporary and would represent a negligible increase in regional energy consumption. The project would support the County's emission reduction goal through the implementation of energy standard measures, such as the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation limits vehicle idling and reduces intake of fuels. Compliance with energy standard measures, would reduce energy usage. Once operational, no energy would be required for the project. The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the project would result in no impact on state or local plans for renewable energy or energy efficiency.

### **Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Energy. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Energy.

## 4.7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Regulatory Setting

#### ***Federal Regulations***

##### *Clean Water Act*

###### *Section 404*

The USACE Regulatory Program regulates activities within federal wetlands and waters of the U.S. pursuant to Section 404 of the CWA. No discharge of dredged or fill material into jurisdictional features is permitted unless authorized under an USACE Nationwide Permit or Individual Permit.

###### *Section 401*

The State Water Resources Control Board and RWQCB are responsible for the administration of Section 401 of the CWA in the state of California. Under Section 401 of the CWA, applicants for federal licenses or

permits must provide a Water Quality Certification that any discharges from a project will comply with the CWA, including state-established water quality standard requirements. For all work subject to an USACE Section 404 permit, project proponents must obtain a Water Quality Certification from the applicable RWQCB under CWA Section 401 stating that the project would comply with applicable water quality regulations.

### ***State Regulations***

#### ***Alquist-Priolo Earthquake Fault Zoning Act***

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of such buildings on the surface trace of active faults. By facilitating seismic retrofitting to strengthen buildings, including historical buildings, against ground shaking, policies and criteria are also intended to provide citizens with increased safety and to minimize the loss of life during and immediately following earthquakes.

#### ***Seismic Hazard Mapping Act***

The Seismic Hazards Mapping Act was passed in 1990 to address non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The purpose of the Seismic Hazards Mapping Act is to reduce threats to public health and safety and to minimize property damage caused by earthquakes, strong ground shaking, liquefaction, landslides, or other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones, and cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation must be conducted, and appropriate mitigation measures must be incorporated into the project's design.

#### ***California Building Code***

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

#### ***California Geological Survey***

The California Geological Survey (formerly the Division of Mines and Geology) was created in 1860 and is dedicated to providing scientific products and services related to the state's geology, seismology, and mineral resources that affect the health, safety, and business interests of the people of California. Seismic and Geotechnical Hazard Zones include active and potentially active faults identified by the California Geological Survey under the provisions of the Alquist-Priolo Earthquake Fault Zones Act (California PRC, Division 2, Chapter 7.5). Faults that are considered active, based on published and unpublished information, as well as seismically induced liquefaction and landslide areas, are also identified in the Seismic and Geotechnical Hazard Zones Policy Map.

California Administrative Code, Section 4307 et seq. and Public Resources Code Section 5097.5

In California, paleontological resources are afforded protection by CEQA; California Administrative Code, Title 14, Section 4307 et seq.; and PRC Section 5097.5. CEQA requires that public agencies not approve a project as proposed if there is a feasible alternative or reasonable mitigation measures available that would substantially lessen the significant environmental effects of the project (Chapter 1, Section 21002). PRC 5097.5 protects vertebrate fossil localities situated on public land, including those localities that have produced fossilized footprints or any other paleontological feature.

**Local Regulations**

Stanislaus County General Plan

The General Plan Conservation/Open Space Element outline the following goals and policies regarding geology and soils:

- Goal Two: Conserve water resources and protect water quality in the County.
  - Policy Six: Preserve natural vegetation to protect waterways from bank erosion and siltation.
- Goal Five: Reserve, as open space, lands subject to natural disaster in order to minimize loss of life and property of residents of Stanislaus County.
  - Policy Sixteen: Discourage development on lands that are subject to flooding, landslide, faulting, or any natural disaster to minimize loss of life and property.

Chapter 14.14 – Stormwater Management and Discharge Control regulates non-stormwater discharge into the stormwater conveyance system by regulating activities that may result in pollutants entering the system, the following is applicable to this project:

- Section 14.14.120 - Reduction of Pollutants in Stormwater. This ordinance regulates any activity that may result in pollutants entering the stormwater system and identifies set measures. For construction related activities (under subsection B) all applicable federal, state, and local laws, ordinances, or regulations must be complied with, including the current state of California NPDES general permit for stormwater discharges associated with construction activity. Additionally, all construction activities that may contribute to stormwater pollution or contamination must comply with BMPs consistent with the California Stormwater Quality Association BMP Handbooks or equivalent guidelines.

**Environmental Setting**

**Regional Geology**

California is divided into 11 geomorphic provinces, each naturally defined by unique geologic and geomorphic characteristics. The project area is situated in the eastern portion of the Great Valley geomorphic province, specifically within the San Joaquin Valley south of the town of Hickman. The Great Valley is defined geologically as an alluvial plain, covering about 20,000 square miles. Surrounding the Great Valley are the Cascades to the north, Sierra Nevada to the east, Tehachapi Mountains to the south, and Coast Ranges to the west (California Water Science Center, 2021).

Locally, the project area is in the Tuolumne River floodplain composed of Holocene-age alluvium generated from sources in the Sierra Nevada Mountains and Foothills to the east. The project area is within the Modesto Formation landform, the last major aggradation in the San Joaquin Valley during the late Pleistocene epoch (40,000-20,000 years ago). The Modesto Formation typically consists of

discontinuous, lenticular clay and silt lenses interbedded with sand-rich sediments derived from the Sierra Nevada and the Coast Ranges. Buried archaeological deposits are rare for Pleistocene landforms. As such, the potential for encountering buried archaeological deposits is low. Early to middle Holocene landforms have a moderate sensitivity for buried cultural resources (Duke Cultural Resources Management, LLC, 2022).

A single geologic unit is recognized with the project area. Pleistocene non-marine colluvial deposits are abundant within the San Joaquin Valley with younger Quaternary non-marine deposits located within drainages and the valley floor. Pleistocene non-marine colluvial deposits are active and recently active colluvium on hillsides but include inactive accumulations of colluvium that might be as old as late Pleistocene. Sediments contain angular rock fragments, derived from disaggregation of underlying bedrock (Duke Cultural Resource Management, LLC, 2022).

Paleontological resources include fossils, which are the preserved remains or traces of animals, plants, and other organisms from prehistoric time (i.e., the period before written records). Fossils and traces of fossils are preserved in sedimentary rock units (formed by the deposition of material at the Earth's surface); and are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance or natural causes, such as erosion by wind or water. The rock types underlying the project area are from the Pleistocene-Holocene period (California Department of Conservation, n.d.). This period of rock formation is considered young and would be unlikely to carry paleontological resources. In addition, the project area has been previously disturbed.

The project is not within an Alquist-Priolo Earthquake Zone and there are no active faults within the vicinity of the project area. The nearest fault zone is the Melones Fault Zone located approximately 20 miles east of the project area (California Department of Conservation, 2015). The project is not located within or adjacent to an active fault zone.

### ***Topography***

The topography within the project area and surrounding areas is generally flat with no significant landforms. However, the slope of the canal bank provides a slight change in topography. The elevation in the project area is approximately 170 feet above mean sea level.

### ***Soil Characteristics***

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey for the Eastern Stanislaus County, there is only one soil unit mapped within the project area: Hanford Sandy Loam, Moderately Deep Over Silt, 0 to 1 Percent Slopes. Hanford Sandy Loam, Moderately Deep Over Silt, 0 to 1 Percent Slopes is comprised of alluvium derived from igneous rock. This soil unit has a moderate water capacity, a low runoff class, and is well-drained with a depth to water table of 80 inches (Natural Resources Conservation Science, 2021a).

An expansive soil is prone to large volume changes (swelling and shrinking) that are directly related to changes in water content; with higher moisture levels, the soils would swell, and with lower moisture levels, the soils would shrink. The soil textures in the project area have a low to moderate shrink and swell characteristics. According to the NRCS Web Soil Survey, the soil textures in the project area has a low to high susceptibility to erosion (Natural Resources Conservation Science, 2021a).

Soil liquefaction occurs when a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress, usually earthquake shaking or other sudden change in stress condition, causing it to behave like a liquid. Other types of ground failure resulting from seismic activities include collapsible soils, subsidence (the gradual caving in or sinking of an area of land), landslides, and lateral spreading (landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement). According to the General Plan Safety Element, the area west of I-5 in Stanislaus County is susceptible to landslide (Stanislaus County, 2015). The project is located approximately 37 miles east of I-5 and is not in an area susceptible to landslides.

## Discussion of Checklist Responses

### a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

**No Impact.** The project is not within an Alquist-Priolo Earthquake Zone and there are no active faults within the vicinity of the project area. Therefore, the project would result in no impact related to the rupture of a known earthquake fault.

- ii) **Strong seismic ground shaking?**

**No impact.** The project would be designed to meet current seismic standards and would not increase exposure to existing hazards in the project area. In addition, construction of the project would not increase the chances of seismic ground shaking. Therefore, the project would result in no impact related to seismic ground shaking.

- iii) **Seismic-related ground failure, including liquefaction?**

**No Impact.** The project would not expose people or structures to new potential impacts involving seismic-related ground failure, in comparison to current existing conditions. Therefore, the project would result in no impact related to seismic-related ground failure.

- iv) **Landslides?**

**No Impact.** The project is not in an area at risk of landslides and would not increase exposure to landslides. Therefore, the project would result in no impact related to landslides.

### b. Would the project result in substantial soil erosion or the loss of topsoil?

**Less Than Significant Impact.** The project would comply with the requirements of the RWQCB NPDES permits, as well as the California Fish and Game Code Section 1602 Streambed Alteration Agreement and CWA Section 401 and 404 Permits, which require implementation of protective measures to minimize erosion. Water would also be used for dust control to reduce erosion during construction. Therefore, the project would result in a less than significant impact on soil erosion. In addition, measure **BIO-3** would be implemented to further minimize erosion in the project area.

- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

**No Impact.** As discussed above in response a(iii), the project area is not located near or within a liquefaction or landslide zone. Therefore, the project would result in no impact on unstable soil.

- d. Would the project be located on expansive soil, creating substantial direct or indirect risks to life or property?**

**Less Than Significant Impact.** The soils in the project area have low to moderate shrink swell characteristics, but the project would be designed to accommodate existing soils, and would not be expected to result in impacts related to expansive soils, including risks to life or property (Natural Resources Conservation Science, 2021a). Therefore, the project would result in a less than significant impact related to expansive soils.

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** The project would not include any uses, features, or facilities that would generate wastewater and would not include construction of any septic or wastewater disposal systems. Therefore, the project would result in no impact related to the use of septic tanks or wastewater disposal systems.

- f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant Impact.** The project area has been previously disturbed and is unlikely to carry paleontological resources. Therefore, the project would result in a less than significant impact on paleontological resources or unique geological features.

### **Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Geology and Soils. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Geology and Soils.



## 4.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Regulatory Setting

#### State Regulations

##### Assembly Bill 1493

AB 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the ARB to develop and adopt the nation’s first GHG emission standards for automobiles. The regulation declares that global warming is a matter of increasing concern for public health and the environment. In 2004, the State of California submitted a request for a waiver from federal clean air regulations, as the state is authorized to do under the FCAA, to allow the state to require reduced CO<sub>2</sub> tailpipe emissions. In June 2009, the U.S. EPA granted the waiver request, enabling the state to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

A national policy aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the U.S. was implemented following the waiver request. The new standards covered model years 2012 to 2016 with the goal of raising passenger vehicle fuel economy to a fleet average of 35.5 miles per gallon by 2016. CARB extended this ruling with a goal of an annual rate of improvement between three to six percent for the years 2017-2025.

##### Executive Order S-3-05

The goal of this EO is to reduce California’s GHG emissions to 1) 2000 levels by 2010, 2) 1990 levels by 2020, and 3) 80 percent below 1990 levels by 2050. This EO also intended for the statewide GHG emissions limit to continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551(b)). The law requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

##### Assembly Bill 32 - California Global Warming Solutions Act of 2006

The Global Warming Solutions Act of 2006 sets the same overall GHG emissions reduction goals outlined in EO S-3-05 while further mandating that the ARB create a plan that includes market mechanisms and implements rules to achieve “real, quantifiable, cost-effective reductions of GHG.” In October 2008, ARB published its Scoping Plan, which is the state’s plan to achieve GHG reductions in the State of California required by AB 32. The Scoping Plan contains the main strategies the State of California will implement to

achieve reduction of GHG emissions. The initial Scoping Plan was first approved by ARB on December 11, 2008 and is updated every five years. The first update of the Scoping Plan was approved by the ARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030-2035) on the road to reaching the 2050 goals. Currently, the Scoping plan's goal is to reduce GHG emissions 40 percent below 1990 levels by 2030, and carbon neutrality by 2045. AB 32 also increased the urgency around the adoption of green building standards. In the Scoping Plan, ARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions.

#### Senate Bill 391 -Chapter 585, 2009 California Transportation Plan

SB 391 requires the state's long-range transportation plan to meet California's climate change goals under AB 32.

#### Senate Bill 97

SB 97 requires amendments to the State CEQA Guidelines for addressing GHG emissions, which became effective on March 18, 2010. These amendments created stricter emission standards for automobiles and light duty trucks.

#### Senate Bill 375, Chapter 728, 2008, Sustainable Communities and Climate Protection

SB 375 requires the CARB to set regional emissions reduction targets from passenger vehicles. The MPO for each region must then develop a SCS that integrates transportation, land use, and housing policies to plan for the achievement of the emissions target for their region.

#### California Building Code

The CBC contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the BSC. In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

#### Green Building Standards

Green building standards are contained in the CBC and regulate the construction of new buildings and improvements. The focus of green building standards is to improve environmental performance. The green buildings standards were most recently updated in 2019.

### **Local Regulations**

#### Stanislaus County General Plan

The General Plan Agriculture Element and Conservation/Open Space Element outlines the following goals and policies regarding greenhouse gas emissions (Stanislaus County, 2015):

- Goal Three: Protect the natural resources that sustain our agricultural industry.
  - Policy 3.1: The County shall continue to coordinate with the San Joaquin Valley Air Pollution Control District.

- Policy 3.2: The County shall assist the San Joaquin Valley Air Pollution Control District in implementation of adopted plans and regulations.
- Goal Six: Improve air quality.
  - Policy Eighteen: The County will promote effective communication, cooperation, and coordination among agencies involved in developing and operating local and regional air quality programs.

*Stanislaus Council of Governments 2014 Regional Transportation Plan/Sustainable Communities Strategy*

The StanCOG 2014 Regional Transportation Plan (RTP)/SCS outlines how the County will implement requirements from AB 32 and SB 375 into their transportation and land use planning. The StanCOG 2014 RTP/SCS includes how the County will invest in transportation, accommodate growth, and support the public's need in compliance with these regulations.

### **Environmental Setting**

GHGs are gases that trap heat in the atmosphere. The transportation sector (i.e., the movement of people and goods by cars, trucks, trains, ships, airplanes, and other vehicles) accounts for 41 percent of total GHG emissions in California (California Air Resources Board, 2019). The majority of GHG from transportation are carbon dioxide (CO<sub>2</sub>) emissions resulting from the combustion of petroleum-based products, like gasoline, in internal combustion engines (United States Environmental Protection Agency, 2017). The largest sources of transportation-related GHG emissions include passenger cars and light-duty trucks, which account for over half of the emissions from the sector. The sources of GHG emissions within the project area are limited to the internal combustion engine vehicles that use the bridge and for agricultural purposes.

### **Discussion of Checklist Responses**

**a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less Than Significant Impact.** During construction, the use of construction equipment, delivery of construction materials and waste, and worker commutes would contribute to the generation of GHGs. GHG emissions would be largely from vehicle exhaust. Compliance with the In-Use Off-Road Diesel Vehicle Regulation would reduce emissions during construction. The contribution of construction GHG emissions to climate change would be minimal since construction would be temporary. Operation of the project is not expected to increase GHG emissions because the new bridge would have the same number of through lanes (one in each direction) and would not increase capacity or result in additional cars on the roadway. Therefore, the project would result in a less than significant impact on project generated GHGs.

**b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less Than Significant Impact.** While the project would result in GHG emissions during construction, the project would not result in an increase of operational GHG emissions. The project would not conflict with any policies from the current ARB Climate Change Scoping Plan Update or the StanCOG 2014 RTP/SCS (Stanislaus Council of Governments, 2014) that are applicable to the project. Therefore, the project would result in a less than significant impact related to applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact related to Greenhouse Gas Emissions. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Greenhouse Gas Emissions.

## 4.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project Area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following discussion incorporates the results of the Hazardous Waste Initial Site Assessment (ISA) that was prepared for this project (Sierra Geotech DBE, Inc., 2023)

### Regulatory Setting

#### ***Federal Regulations***

##### *Resource Conservation and Recovery Act*

The Resource Conservation and Recovery Act (RCRA) was created in 1976 to govern the disposal of solid waste and hazardous waste. RCRA gives U.S. EPA the authority to control hazardous waste, creating a “cradle-to-grave” waste management system. The goal is to reduce environmental impacts due to improper disposal of waste. States implement non-hazardous waste programs and issue permits in compliance with U.S. EPA and state regulations. U.S. EPA enforces regulations for hazardous waste and implements hazardous waste permits.

## **State Regulations**

### Government Code section 65962.5, Hazardous Waste and Substances Site List- Site Cleanup (Cortese List)

Government Code section 65962.5, Hazardous Waste and Substances Site List– Site Cleanup (Cortese List) is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California EPA to develop at least annually an updated Cortese List. California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

### California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) is the primary hazardous waste statute in California. The HWCL implements RCRA as a “cradle-to-grave” waste management system in the state. A cradle-to-grave waste management system assesses impacts at each stage of a products lifecycle. The law states that waste generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes. The law exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of wastes and waste management activities that are not covered by RCRA.

### California Code of Regulations

Most state and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the CCR, Title 22, Division 4.5. Title 22 contains detailed compliance requirements for hazardous waste generators and transporters, and treatment, storage, and disposal facilities. Because California is a fully authorized state according to RCRA, most RCRA regulations have been duplicated and integrated into Title 22. However, because the DTSC regulates hazardous waste more stringently than the U.S. EPA, Title 22 contains fewer exemptions and exclusions than 40 CFR 260.

## **Local Regulations**

### Stanislaus County General Plan

The General Plan Safety Element outlines the following goals and policies regarding hazards (Stanislaus County, 2015):

- Goal One: Prevent loss of life and reduce property damage as a result of natural disasters.
  - Policy One: The County will adopt (and implement as necessary) plans inclusive of the Multi-Jurisdictional Hazard Mitigation Plan, to minimize the impacts of a natural and man-made disasters.
  - Policy Five: Stanislaus County shall support efforts to identify and rehabilitate structures that are not earthquake resistant.
- Goal Two: Minimize the effects of hazardous conditions that might cause loss of life and property.
  - Policy Six: All new development shall be designed to reduce safety and health hazards.
  - Policy Thirteen: The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required.

- Policy Fifteen: The County will support the Federal Emergency Management Agency (FEMA) Flood Insurance Program so that residents who qualify may purchase such protection.

## **Environmental Setting**

### ***Contaminated Sites***

To assess existing conditions in the project area, a field inspection was performed. The field inspection consisted of surveying the project corridor on foot and visually assessing the project area and adjacent properties from public ROW. At the time of the site visit, no specific indicators of releases, spills, or other acute indications of likely Recognized Environmental Conditions (REC) were observed (Sierra Geotech DBE, Inc., 2023).

Following the site investigation, a database search report was prepared by Environmental Data Resources, Inc. A regulatory records search of this nature was based on information published by federal, state, and local regulatory agencies and is used to determine whether the project area or nearby properties are listed as having a past or present record of actual or potential environmental impacts from hazardous substances or materials. Regulatory listings include only those facilities that are known to the regulatory agencies at the time of publication (Sierra Geotech DBE, Inc., 2023).

The database search report determined there were no reported hazardous materials spills or releases within the project area or immediately adjacent properties. However, two sites within 0.5 mile were found in public databases for reported past hazardous spills and releases. Both were listed as being “In Compliance/No Action Required” and would not pose environmental concern. Based on Sierra Geotech’s project area inspection, interviews with the owner/representative of adjacent properties, and database searches, there was no evidence that underground storage tanks are or have been within or immediately adjacent to the project area (Sierra Geotech DBE, Inc., 2023).

Based on the government records search, site investigation, aerial photograph review, and historical stewardship of the project corridor, two RECs were identified. The first REC is associated with the use prolonged use of agricultural chemicals in the area surrounding the project area. The historical records determined that a portion of the project area and surrounding properties have been subject to intensive agricultural uses since at least the early 1900s. Historical agricultural practices employed in the region during this period include the use various products containing nitrate, chlordane, DDD/DDE/DDT, endrin, other insecticides, pesticides, fumigants, herbicides, pentachlorophenol, toxaphene, and other contaminants. However, no specific evidence of documented historical releases of these contaminants were discovered. The second REC is the potential for lead to be present in soils at hazardous levels adjacent to Montpelier Road and the historic railway within the project area. Montpelier Road and the railway have been thoroughfares in the region during periods in which lead was an ingredient in gasoline. Therefore, there is potential for aerially deposited lead to be present in soils at hazardous levels (Sierra Geotech DBE, Inc., 2023).

### ***Disaster Routes***

Disaster routes are used during times of crisis to save lives, protect property, and minimize impacts on the environment. During a disaster, pre-identified disaster routes have priority for clearing, repairing, and restoration over all over roads. The County developed an Emergency Response Plan to address planned

responses to extraordinary emergency situations. The Emergency Response does not identify Montpelier Road as part of an evacuation route (Stanislaus County, 2021).

### **Airports**

There are two public use airports in the county: the Modesto City-Co-Harry Sham Field Airport located approximately 10 miles west of the project area, and the Oakdale Airport located approximately 10 miles northwest of the project area.

### **Discussion of Checklist Responses**

**a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less Than Significant Impact.** Hazardous materials stored or disposed of during project construction could present a hazard to construction workers, the public, or the environment. During construction, vehicles and equipment would contain or require the temporary use of potentially hazardous substances, such as fuels, lubricating oils, and hydraulic fluid. In addition, construction would require excavation, and underground utilities in the project area could present a hazard if unidentified during excavation. Lead at hazardous levels could also create unsafe working conditions for construction workers and others traveling through the project area if soil is disturbed. However, hazardous materials are not anticipated to be encountered. Following construction, the project would not create any hazard to the public. Therefore, the project would result in a less than significant impact related to the transport, use, and disposal of hazardous materials. In addition, to further reduce impacts, measure **HAZ-1** would be implemented to ensure utility owners mark the locations of underground transmission lines and facilities. Measures **HAZ-2** and **HAZ-3** would be implemented to avoid and minimize impacts related to hazards during construction. Measure **HAZ-4** would be implemented to screen for aerially deposited lead within the project area.

**b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impacts.** See discussion in response a) above.

**c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Less Than Significant Impact.** No schools are located within 0.25 mile of the project area. The closest school to the project is Hickman Charter School, located approximately 0.3 mile north of the project area. Therefore, the project would result in a less than significant impact related to hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

**d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**



**No Impact.** There are no Cortese List sites in the project area. Therefore, the project would result in no impact related to hazardous waste sites.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

**No Impact.** The project area is not located within two miles of any public or private airport or airstrip. The Oakdale Airport located approximately 10 miles from the project area. The project would not conflict with any airport land use plan or operation of nearby airports and would not pose any airport-related safety hazard to people working in the project area. Therefore, the project would result in no impact related to an airport land use plan.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact.** Project construction is anticipated to last between six to nine months, during which the bridge would be closed and traffic would be detoured around the project area using existing roads (see **Figure 4**, Detour Route). Temporary signage would be placed along the route to provide wayfinding for vehicles. This detour would not substantially affect emergency response times. Full access to Montpelier Road and Dallas Road would be restored following construction activities. Therefore, the project would have a less than significant impact on emergency response and evacuation plans.

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**No Impact.** According to the General Plan Safety Element, wildland fires are generally limited to the foothills located along the Diablo Range and Sierra Nevada Foothills (Stanislaus County, 2015). The project is located approximately 35 miles from the Diablo Range and 35 miles from the Sierra Nevada Foothills. Therefore, the project would result in no impact on wildland fires.

### **Avoidance, Minimization, and/or Mitigation Measures**

The following measures would be implemented during construction to avoid or minimize impacts related to hazardous materials.

**HAZ-1** The Underground Service Alert of Northern California would be notified by calling 811 at least two working days prior to subsurface excavation to ensure that utility owners mark the locations of underground transmission lines and facilities.

**HAZ-2** A site-specific Health and Safety Plan consistent with local requirements would be prepared.

**HAZ-3** For any previously unknown hazardous waste/material encountered during construction, the procedures outlined in the Caltrans Unknown Hazards Procedures would be followed.

**HAZ-4** A preliminary investigation and screening for aerially deposited lead within the corridor would be conducted.

## 4.10 Hydrology and Water Quality

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

The following discussion incorporates the results of the Water Quality Technical Memorandum and Natural Environment Study (Minimal Impacts) prepared for this project (GPA Consulting, 2022c; GPA Consulting, 2022a).

### Regulatory Setting

#### ***Federal Regulations***

##### *Clean Water Act*

Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The U.S. EPA delegated the implementation and administration of the NPDES program in the State of California to the California SWRCB. The SWRCB established nine RWQCBs. The SWRCB enacts and enforces the federal NPDES program, and all water quality programs and regulations that cross regional boundaries. The nine RWQCBs enact, administer, and

enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems.

## ***State Regulations***

### ***Porter Cologne Water Quality Control Act***

The Porter-Cologne Water Quality Control Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. The act predates the CWA and regulates discharges to waters of the state. Waters of the state include groundwater and surface waters not considered waters of the U.S. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDR) and may be required even when the discharge is already permitted or exempt under the CWA. Section 13240 of the Porter-Cologne Act requires each RWQCB to formulate and adopt water quality control plans, or basin plans, for all areas within its respective region. The project is located within the San Joaquin River Basin, which is under the jurisdiction of the Central Valley RWQCB Office.

### ***Water Quality Control Plan for the Central Valley Basin***

The Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin Fifth Edition (Basin Plan) lists the beneficial uses of surface waters and ground waters in the San Joaquin River Basin (Central Valley Regional Water Quality Control Board, 2018). Beneficial uses generally include, but are not limited to, domestic, municipal, agricultural, and industrial supply, power generation, recreation, aesthetic enjoyment, navigation, and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. The Basin Plan also includes water quality objectives, which are the limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

### ***Sustainable Groundwater Management Act***

The Sustainable Groundwater Management Act consists of three bills signed by California Governor Edmund G. Brown Jr. in 2014 that allows local agencies to customize groundwater sustainability plans to suit the economic and environmental needs of their region. Under this legislation, local and regional authorities have developed Groundwater Sustainability Agencies (GSA) that oversee the preparation and implementation of local Groundwater Sustainability Plans (GSP) (University of California Davis, Division of Agriculture and Natural Resources, 2019).

## ***Local Regulations***

### ***Stanislaus County General Plan***

The General Plan Conservation/Open Space Element outlines the following goals and policies regarding water resources (Stanislaus County, 2015):

- Goal Two: Conserve water resources and protect water quality in the County
  - Policy Six: Preserve natural vegetation to protect waterways from bank erosion and siltation.

### Stanislaus County Municipal Code

The Stanislaus County Municipal Code (County’s Municipal Code) includes County ordinance concerning water quality and identifies regulated activities as they relate to water quality (Stanislaus County, 2020). Chapter 14.14 – Stormwater Management and Discharge Control regulates non-stormwater discharge into the stormwater conveyance system by regulating activities that may result in pollutants entering the system, the following is applicable to this project:

- Section 14.14.120 - Reduction of Pollutants in Stormwater. This ordinance regulates any activity that may result in pollutants entering the stormwater system and identifies set measures. For construction related activities (under subsection B) all applicable federal, state, and local laws, ordinances, or regulations must be complied with, including the current state of the State of California NPDES general permit for stormwater discharges associated with construction activity. Additionally, all construction activities that may contribute to stormwater pollution or contamination must comply with BMPs consistent with the California Stormwater Quality Association BMP Handbooks or equivalent guidelines.

### Turlock Subbasin Groundwater Sustainability Management Plan

The Turlock Subbasin GSP provides information on groundwater conditions and implementation of sustainability goals for the subbasin. The Sustainable Groundwater Management Act requires Groundwater Sustainability Agencies in medium-priority and high-priority basins to develop and implement Groundwater Sustainability Plans. The Turlock Subbasin GSP describes how the basin will reach long-term sustainability.

## **Environmental Setting**

### **Hydrology**

#### Regional Hydrology

The project area is located within the Salado Creek-San Joaquin River Watershed (HUC 1804000204) within the Turlock Lake Subwatershed (HUC 180400020404) (United States Geological Survey, 2016). The project area is located within the Lower San Joaquin River Subbasin (HUC 18040002). The Lower San Joaquin River Parent Watershed extends across approximately 587, 246 acres in the Central Valley.

The TID Main Canal is the only waterway in the project area. The canal flows in a westerly direction, then splits into two separate canal systems approximately one mile downstream. The TID Main Canal is an earthen bottom irrigation canal. An earthen bottom irrigation canal is an unlined man-made feature used to convey water to the surrounding agricultural fields for irrigation use. The TID Main Canal has controlled flows to restrict irrigation water flow either mechanically or manually. In addition, its banks and vegetation are managed regularly. The TID Main Canal receives water from Turlock Lake in the east, which is a man-made reservoir constructed by the TID in 1913. Turlock Lake is primarily filled by seasonal rains and diversions from the Tuolumne River located just north of the reservoir. Most canals owned and operated by the TID are gravity-fed (Turlock Irrigation District, 2018). Therefore, it is likely that the canal in the project area is also gravity-fed. Because the flow is heavily regulated by multiple control points both upstream and downstream of the project area, the canal is not expected to be substantially influenced by natural storm events.

### ***Floodplain***

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 06099C0625E and 06099C0600E, the project area is within Zone X, which is an area of minimal flooding (Federal Emergency Management Agency, 2009). In addition, the project area is not located within or adjacent to a federal regulatory floodway. Therefore, the project area is not located in a floodplain.

### ***Groundwater***

The project area is located within the Turlock Subbasin of the San Joaquin Valley Groundwater Basin. The Turlock Subbasin is located between the Tuolumne and Merced Rivers and is bordered by the San Joaquin River on the west and crystalline basement rock of the Sierra Nevada foothills on the east. The boundaries of the Turlock Subbasin are shared with the Modesto, Delta-Mendota, and Merced Groundwater Subbasins. According to the Basin Plan, the groundwater beneficial uses within the Turlock Subbasin include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply (West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies, 2022).

For the 2021 water year, recharge within the Turlock Subbasin was estimated to be approximately 262,400 acre-feet (af). The 2021 water year extraction of the subbasin was estimated to be approximately 557,200 af (West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies, 2022). Two tests were performed to determine the depth of groundwater in the project area. A soil boring was drilled to a depth of 81.5 feet in the project area and no groundwater was encountered. In addition, a cone penetration test was conducted in the project area and groundwater was not encountered at a depth of 89 feet.

### **Discussion of Checklist Responses**

#### **a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

**Less than Significant Impact.** Modifications to existing drainage patterns are not anticipated; however, culverts may be required temporarily to channel water away during work within the TID Main Canal. Construction activities in the TID Main Canal would include the removal of the existing piers. During construction, ground-disturbing and demolition activities could cause dust, soil, and the release of construction debris and materials to fall into the TID Main Canal. Additionally, oil, fuel, and other petroleum products from construction equipment could be accidentally released during construction and absorbed into the soil, resulting in impacts on water quality within the TID Main Canal. However, with compliance of CWA Section 404 and 401 permits, water quality standards would be met, and surface water quality would not be degraded.

Excavation to a maximum depth of 15 feet is anticipated for constructing pile caps. Groundwater is not expected to be encountered at this depth and the project would not affect groundwater quality. Therefore, the project would result in a less than significant impact on surface and groundwater quality. In addition, measures **BIO-1** through **BIO-9** would be implemented to reduce construction impacts to the greatest extent feasible.

**b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less than Significant Impact.** Project construction would not substantially impact groundwater recharge. Operation of the project would not require the use of any water and project construction would use a minimal amount of water. The new bridge would result in a minor increase of impervious surface of 0.10 acre. However, water would still be able to reach pervious surfaces and infiltrate into the soil, similar to existing conditions. This would not impact the amount of groundwater recharged into aquifers. Therefore, the project would result in a less than significant impact on groundwater supplies.

**c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface, in a manner that would:**

**i) Result in substantial erosion or siltation on- or off-site?**

**Less than Significant Impact.** According to the NRCS Web Soil Survey, the soils in the project area have a low to high susceptibility for erosion (Natural Resources Conservation Science, 2021a). The project would not alter the existing drainage pattern and would not lead to increased erosion. In addition, water would be used to reduce potential erosion as well. Therefore, the project would result in a less than significant impact on soil erosion. Measures **BIO-3** and **BIO-8** would be implemented to further reduce risk of erosion and the project would comply with the California Fish and Game Code Section 1602 Streambed Alteration Agreement and CWA Section 401 Water Quality Certification.

**ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?**

**Less Than Significant Impact.** The project would include replacing the existing bridge with a longer and wider bridge along the same alignment. The existing drainage patterns would be maintained. Operation of the project would result in an increase of approximately 0.10 acre of impervious surface area from the widened bridge deck. With the minor increase to impervious surface area, the project would result in a minimal increase in runoff flow. However, the project would be designed to accommodate anticipated runoff and flooding would not occur. Therefore, the project would have a less than significant impact on surface runoff.

**iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**Less Than Significant Impact.** Although the project would result in a minor increase in surface runoff, the project would be designed to accommodate existing and anticipated runoff levels. Standard road drainage features would accommodate the minimal increase of runoff flow and no additional pollutants would result from the project. In addition, the new bridge would not result in an increase in traffic volumes. This would not result in an increase in pollutant runoff from vehicles. Therefore, the project would have a less than significant impact on runoff.

**iv) Impede or redirect flood flows?**

**No Impact.** The project is outside of a floodplain and flood flows are not expected. Therefore, the project would result in no impact on flood flow.

**d. Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**No Impact.** The project area is not located within a floodplain, or within a federal regulatory floodway (Federal Emergency Management Agency, 2009). Additionally, the project is not in a tsunami or seiche zone (California Department of Conservation, 2019). Therefore, the project would result in no impact related to the risk of inundation.

**e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less Than Significant Impact.** Standard BMPs, including erosion control measures, would be incorporated into the project to comply with the RWQCB's Water Quality Control Plan. The RWQCB's goal for the Water Quality Control Plan is to support the water quality in the Central Valley Basin. The Turlock Subbasin GSP creates goals to protect groundwater quality and groundwater levels. Groundwater would not be extracted for this project, and the project is unlikely to degrade the groundwater quality. Maximum excavation would be 15 feet and groundwater would not be reached. This complies with the Turlock Subbasin GSP. Therefore, the project would result in a less than significant impact on a water quality control plans or sustainable groundwater management plans. Implementation of measures **BIO-3** and **BIO-8** and compliance with relevant permits would further reduce impacts.

**Avoidance, Minimization, and/or Mitigation Measures**

**BIO-1** through **BIO-9** are also applicable to minimizing Water Quality impacts. See avoidance, minimization, and mitigation measures in *Section 4.4 Biological Resources*.

## 4.11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion incorporates the results of the Land Use and Community Impacts Memorandum prepared for this project (GPA Consulting, 2022b).

### Regulatory Setting

#### Local Regulations

##### Stanislaus County General Plan

The General Plan Land Use Element outlines the following goals and policies regarding land use (Stanislaus County, 2015):

- Goal One: Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.
  - Policy One: Land will be designated and zoned for AG, residential, COM, industrial, or historical uses when such designations are consistent with other adopted goals and policies of the General Plan.
  - Policy Two: Land designated AG shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation, and enjoyment of scenic beauty.
- Goal Two: Ensure compatibility between land uses.
  - Policy Fourteen: Uses shall not be permitted to intrude into or be located adjacent to an agricultural area if they are detrimental to continued agricultural usage of the surrounding area.
- Goal Three: Foster stable economic growth through appropriate land use policies.
  - Policy Seventeen: Agriculture, as the primary industry of the County, shall be promoted and protected.

### Environmental Setting

The project area is in a rural area directly adjacent to land use designated for AG, PD, and LDR use. The project area is designated as AG and PD.



## Discussion of Checklist Responses

### a. Would the project physically divide an established community?

**Less Than Significant Impact.** The project would include replacing an existing bridge on the same alignment; therefore, operation of the project would not divide the existing community. Roadway users and nearby residents would be temporarily impacted by the full closure of the Montpelier Road Bridge for the entire duration of construction, which is anticipated to last between six and nine months. The roadway closure would include the bridge over the TID Main Canal and Dallas Road at the intersection with Montpelier Road. However, an approximately 1.75-mile-long detour would be provided throughout project construction. Vehicles traveling south on Montpelier Road would likely be diverted to travel west on 6th Street, south on Hickman Road, and east on Cogswell Road. Vehicles traveling north on Montpelier Road would travel the same route in reverse. No improvements are proposed along the detour routes. Temporary signage would be placed along the route to provide wayfinding for vehicles. Full access to Montpelier Road and Dallas Road would be restored following construction activities. Therefore, the project would result in a less than significant impact related to physically dividing the community.

### b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Less Than Significant Impact.** The project would require permanent ROW acquisitions and TCEs on parcels where the new bridge and roadway approaches would be constructed. The permanent ROW acquisitions (an approximate total of 0.14 acre) are on land designated by the CDOC as Unique Farmland and Prime Farmland. The permanent ROW acquisitions would permanently convert the land to bridge/roadway use. Conversion of agricultural land to non-agricultural land would conflict with aforementioned General Plan policies if the productivity of prime agricultural land was impaired. However, ROW acquisitions would not substantially impair the productivity of the agricultural land given that less than one percent of the farmland acquired would become unfarmable. In addition, the remaining farmland on this parcel would continue to be farmable. Therefore, the project would result in a less than significant impact on a land use plan.

## Avoidance, Minimization, and/or Mitigation Measures

The project would result in a less than significant impact on Land Use. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Land Use.

## 4.12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

#### State Regulations

##### Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) encourages the production, conservation, and protection of California’s mineral resources. SMARA requires that the State Mining and Geology Board map areas throughout the State of California that contain regionally significant mineral resources. These mineral resources are classified based on the Mineral Resource Zone (MRZ) system, which classifies MRZs into four categories:

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3: Areas containing mineral deposits for which the significance cannot be determined from available data.
- MRZ-4: Areas where available information is inadequate for assignment of any other MRZ category.

#### Local Regulations

##### Stanislaus County General Plan

The General Plan Conservation/Open Space Element outlines the following goals and policies regarding mineral resources (Stanislaus County, 2015):

- Goal Nine: Manage extractive mineral resources to endure an adequate supply without degradation of the environment.
  - Policy Twenty-Six: Surface mining in areas classified by the State Division of Mines and Geology as having significant deposits of extractive mineral resources shall be encouraged.
  - Policy Twenty-Seven: The County shall emphasize the conservation and development of lands having significant deposits of extractive mineral resources by not permitting uses that threaten the potential to extract the minerals.

- Policy Twenty-Eight: Lands used for the extraction of mineral resources shall be reclaimed as required by the Surface Mining and Reclamation Act of 1975 (SMARA) to minimize undesirable impacts.

### **Environmental Setting**

The county contains significant mineral deposits (MRZ-2a) mostly composed of aggregate minerals. Aggregate minerals are most commonly used for development and concrete production. According to the General Plan, the project area is not an aggregate resource area (County of Stanislaus, 1993; Conservation, 2015). In addition, there are no active mines within the project area (California Department of Conservation, 2015).

### **Discussion of Checklist Responses**

- a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** The project area is not within a mineral resource area. Therefore, the project would result in no impact on mineral resources.

- b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

**No Impact.** See discussion in response (a) above.

### **Avoidance, Minimization, and/or Mitigation Measures**

The project would result in no impact on Mineral Resources. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Mineral Resources.

## 4.13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following discussion incorporates the results of the Noise Technical Memorandum prepared for this project (Ambient Air Quality and Noise Consulting, 2021).

### Regulatory Setting

#### *State and Local Regulations*

##### Construction Noise

##### *Caltrans Standard Specifications*

Caltrans Standard Specifications include specifications for the control of noise and vibration associated with construction activities. Section 14-8.02, Noise Control, requires that noise from construction activities not exceed 86 A-weighted decibels (dBA) maximum sound level ( $L_{max}$ ) at 50 feet from the job site between the hours of 9:00 p.m. and 6:00 a.m. (California Department of Transportation, 2018; Ambient Air Quality and Noise Consulting, 2021).

##### *Stanislaus County Code Chapter 10.46 Noise Control*

Stanislaus County limits noise generated by construction equipment to an average sound level of not greater than 75 decibels between the hours of 7:00 p.m. and 7:00 a.m. at the property line of residential land uses (Ambient Air Quality and Noise Consulting, 2021; County of Stanislaus, n.d.).

##### Vibration

There are no federal, state, or local regulatory standards for construction generated groundborne vibration. However, Caltrans has developed vibration criteria based on potential structural damage risks and human annoyance. Caltrans-recommended criteria for the evaluation of groundborne vibration levels, with regard to structural damage and human annoyance, are summarized in **Table 6**. The criteria apply to continuous vibration sources, which include vehicle traffic and most construction activities. All damage criteria for buildings are in terms of ground motion at the buildings' foundations. No allowance is included for the amplifying effects of structural components (California Department of Transportation,

2020b). As shown in **Table 6**, the threshold for architectural damage commonly applied to construction activities is a peak particle velocity (ppv) of 0.3 inch per second (in/sec) for fragile structures and 0.5 in/sec ppv for newer structures. Levels above 0.2 in/sec ppv may result in increased levels of annoyance for people in buildings (California Department of Transportation, 2020b).

**Table 6 Summary of Groundborne Vibration Levels and Potential Effects**

Vibration Level (in/sec ppv)	Human Reaction	Effect on Buildings
0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type.
0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected.
0.10	Level at which continuous vibrations begin to annoy people.	Virtually no risk of “architectural” damage to normal buildings.
0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations).	Threshold at which there is a risk of “architectural” damage to fragile buildings.
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Potential risk of “architectural” damage may occur at levels above 0.3 in/sec ppv for older residential structures and above 0.5 in/sec ppv for newer structures.

*Notes: The vibration levels are based on peak particle velocity in the vertical direction for continuous vibration sources, which includes most construction activities*

*Source: (California Department of Transportation, 2020b; Ambient Air Quality and Noise Consulting, 2021)*

### Environmental Setting

The areas adjacent to the project area consist predominantly of a mix of agricultural and rural-residential land uses. The nearest residential dwellings are located approximately 773 feet north of the existing bridge and approximately 555 feet north of Montpelier Road. No fragile or historic structures were identified in the project vicinity (Ambient Air Quality and Noise Consulting, 2021).

Short-term noise measurements were conducted on November 17th, 2021, for the purposes of documenting the ambient noise environment in the project area. Two noise measurements were conducted along Montpelier Road, to the southeast and northwest of the existing bridge. Noise-measurement survey data is summarized in **Table 7**.

**Table 7 Summary of Short-Term Noise Measurements**

Monitoring Location	Primary Noise Sources	Measurement Period	Noise Level (dBA)	
			Leq	Lmax
Southeast of bridge, approximately 10 feet from roadway edge	Traffic on Montpelier Road	11:40 a.m. - 11:50 a.m.	56.4	71.1
Northwest of bridge, approximately 10 feet from roadway edge		11:55 a.m. - 12:05 p.m.	54.3	70.4

*Source: (Ambient Air Quality and Noise Consulting, 2021)*

Based on the measurements conducted, ambient noise levels in the project area are primarily influenced by vehicular traffic on Montpelier Road. Measured daytime noise levels (in dBA equivalent continuous sound level [ $L_{eq}$ ]) generally ranged from the low to mid-50s, and typically decrease with increased distance from the roadway. Ambient evening and nighttime noise levels are typically five to 10 dBA lower than daytime noise levels.

**Discussion of Checklist Responses**

- a. **Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less Than Significant Impact.** During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. **Table 8** summarizes noise levels produced by construction equipment commonly used on roadway and bridge construction projects.

**Table 8 Typical Construction Equipment Noise Levels**

Equipment	Noise Level 50 feet from Source (dBA)	
	$L_{max}$	$L_{eq}$
Backhoes	78	74
Bulldozers	82	78
Compressors	78	74
Cranes	81	73
Concrete Pump Trucks	81	74
Impact Pile Drivers	101	94
Dump Trucks	77	73
Hydraulic Break Rams	90	80
Front End Loaders	79	75
Pneumatic Tools	85	82
Pumps	81	78
Rollers	80	73
Scrapers	84	80

*Notes: Based on measured instantaneous noise levels ( $L_{max}$ ), average equipment usage rates, and calculated average hourly ( $L_{eq}$ ) noise levels derived from the FHWA Road Construction Noise Model.*

*Source: (Ambient Air Quality and Noise Consulting, 2021; Federal Highway Administration, 2008)*

Average-hourly noise levels associated with the operation of individual pieces of construction equipment can range from approximately 73 to 94 dBA  $L_{eq}$ . Based on the levels depicted in **Table 8**, individual pieces of construction equipment would generate intermittent noise levels ranging from approximately 77 to 101 dBA  $L_{max}$  at a distance of 50 feet.

The nearest existing residential dwellings are located approximately 773 feet from the existing bridge and approximately 555 feet from the limits of construction. Noise produced by construction equipment decreases at a rate of about six decibels (dB) per doubling of distance from the source. Based on this attenuation rate, the distances to the nearest dwellings, the equipment noise levels identified in **Table 8**, and assuming multiple pieces of equipment operating simultaneously, the highest predicted average-hourly noise levels at the nearest residential dwellings would range from approximately 52 to 71 dBA  $L_{eq}$ . Intermittent noise levels could reach levels up to approximately 78 dBA  $L_{max}$  for brief periods of time. Actual noise levels would vary depending on various factors, including the type and number of pieces of equipment used and duration of use. Predicted construction-generated noise levels at the nearest residence are summarized in **Table 9**.

**Table 9 Predicted Construction Noise Levels at the Nearest Residential Dwelling**

Activity	Noise Level (dBA)	
	$L_{eq}$	$L_{max}$
Bridge Demolition	59	66
Bridge Construction	57	57
Pile Driving	71	78
Road Construction & Paving	52	59

*Notes: Noise levels were calculated based on the equipment levels noted in Table 8 and assuming multiple pieces of equipment operating simultaneously. Noise levels are based on distances of 773 feet from the bridge to the nearest residential dwelling for bridge demolition, bridge construction, and pile drilling activities, and 555 feet from potential road construction and paving activities.*  
 Source: (Ambient Air Quality and Noise Consulting, 2021)

In comparison to ambient daytime noise levels, construction-generated noise levels at the nearest residential dwellings would be detectable. Activities conducted during the more noise-sensitive nighttime hours would be of particular concern for residential dwellings given the potential for increased levels of annoyance and sleep disruption to building occupants. Pile driving activities would also not be conducted during nighttime hours; therefore, noise levels from 7:00 p.m. to 7:00 a.m. would not exceed noise level limitations outlined in Stanislaus County Code Chapter 10.46 Noise Control. Therefore, the project would result in a less than significant impact related to generating noise in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. In addition, measures **NOI-1** through **NOI-5** would be implemented to reduce construction noise levels.

**b. Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?**

**Less Than Significant Impact.** Construction related groundborne vibration levels associated with the project would be largely associated with the operation of off-road equipment (e.g., vibratory rollers, hoe rams, bulldozers, trucks, and jackhammers). In addition, the use of pile drivers is anticipated to be required for this project. Groundborne vibration levels commonly associated with off-road equipment used on roadway and bridge construction projects are summarized in **Table 10**. As indicated, groundborne vibration levels associated with construction equipment generally range from approximately 0.003 to 0.65 in/sec ppv at 25 feet.

**Table 10 Representative Vibration Levels for Construction Equipment**

Equipment	Peak Particle Velocity at 25 Feet (in/sec)
Vibratory Roller	0.210
Hoe Ram	0.089
Large Bulldozers	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Impact Driver (typical)	0.650
Jackhammer	0.035
Small Bulldozers	0.003

Source: (Ambient Air Quality and Noise Consulting, 2021; California Department of Transportation, 2020b)

Predicted groundborne vibration levels at these nearest residential structures were quantified based on these distances and the reference noise levels identified in **Table 8**. Predicted groundborne vibration levels at the nearest existing structures are summarized in **Table 11**.

**Table 11 Predicted Construction Vibration Levels at the Nearest Structure**

Activity	Peak Particle Velocity (in/sec)
Bridge Demolition	0.001
Bridge Construction (Pile Driving) <sup>1</sup>	0.018
Bridge Construction	0.001
Road Construction & Paving	0.004

Notes: Groundborne vibration levels were calculated based on representative equipment levels noted in Table 10. Groundborne vibration levels based on distances of 773 feet from the bridge to the nearest residence for bridge demolition, bridge construction, and pile drilling activities, and 555 feet from potential road construction and paving activities.

<sup>1</sup> Modeled conservatively using the upper range PPV of a pile driver.

Source: (Ambient Air Quality and Noise Consulting, 2021)

As shown in **Table 11**, groundborne vibration levels at the nearest residence would range from approximately 0.001 in/sec ppv to 0.018 in/sec ppv. Groundborne vibration levels at this nearest structure would not exceed the commonly applied criteria for structural damage of 0.5 in/sec ppv. However according to **Table 6**, vibration levels would be perceptible. Construction activities would be short-term and potential disturbance associated with groundborne vibration would be minimal. Therefore, the project would result in a less than significant impact related to generation of excessive groundborne vibration. Measures **NOI-1** through **NOI-5** would further reduce noise related to construction activities.

- c. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The project area is not within two miles of a public airport. There are two public use airports in Stanislaus County, the Modesto City-Co-Harry Sham Field Airport located approximately 10 miles from the project area, and the Oakdale Airport located approximately 10 miles from the project area. Therefore, the project would result in no impact on an airport land use plan.



### **Avoidance, Minimization, and/or Mitigation Measures**

The following measures would be implemented to avoid or minimize construction noise and vibration levels:

- NOI-1** Per Caltrans' Standard Specifications, Section 14-8.02 Noise Control, construction noise levels would be limited to 86 dBA  $L_{max}$  at 50 feet during the nighttime hours of from 9:00 p.m. to 6:00 a.m.
- NOI-2** To the extent possible and in accordance with County of Stanislaus noise-control requirements, construction activities, excluding activities required to occur without interruption or activities that would pose a significant safety risk to workers or citizens, would be limited to between the daytime hours of 7:00 a.m. and 7:00 p.m.
- NOI-3** Internal combustion engines would be equipped with a muffler of a type recommended by the manufacturer.
- NOI-4** A County permit would be obtained for construction activities that occur during the nighttime hours of 7:00 p.m. to 7:00 a.m., or on Sundays or national holidays.
- NOI-5** During construction, noise-reduction measures, such as idling limitations for construction equipment, would be implemented.

## 4.14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

#### Local Regulations

##### Stanislaus County General Plan

The General Plan Land Use Element outlines the following goal and policy regarding population and housing (Stanislaus County, 2015):

- Goal Four: Ensure that an effective level of public service is provided in unincorporated areas.
  - Policy Twenty-Four: Future growth shall not exceed the capabilities/capacity of the provider of services such as sewer, water, public safety, solid waste management, road systems, schools, health care facilities, etc.

### Environmental Setting

According to the 2021 United States Census population estimate, Stanislaus County has a population of 552,999 individuals and a total of 183,898 housing units (United States Census Bureau, 2021).

### Discussion of Checklist Responses

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**No Impact.** The project would not include the construction of homes or businesses. In addition, the project would not increase capacity. As such, the project would not induce population growth. Therefore, the project would result in no impact on population growth.

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The project would not involve the displacement of housing units or people. Partial parcel acquisition would be required to complete the project; however, acquisition of those parcels would not displace any residents. Therefore, the project would result in no impact on displacing people or housing.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in no impact on Population and Housing. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Population and Housing.

## 4.15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Regulatory Setting

### Local Regulations

#### Stanislaus County General Plan

The General Plan Land Use Element outlines the following goal and policy regarding public services (Stanislaus County, 2015):

- Goal Four: Ensure that an effective level of public service is provided in unincorporated areas.
  - Policy Twenty-Four: Future growth shall not exceed the capabilities/capacity of the provider of services such as sewer, water, public safety, solid waste management, road systems, schools, health care facilities, etc.

### Environmental Setting

The project area is located approximately two miles southeast of the City of Waterford between Cogswell Road and 6th Street. The areas adjacent to the project area consist predominantly of a mix of agricultural and rural-residential land uses. The nearest residential dwellings are located approximately 773 feet north of the existing bridge and approximately 555 feet north of Montpelier Road.

Two community facilities are located northeast of the project area: Hickman Community Church (approximately 0.7 mile to the northeast), and Hickman Charter School (approximately 0.3 mile to the north). Hickman Elementary is part of the Hickman Community Charter district. Commercial and industrial businesses, and a government facility, including two local markets, an auto-body shop, a roadway maintenance equipment shop, and a United States Post Office are located approximately 0.7 mile to one mile north and northwest of the project area between Hickman Road and Montpelier Road.

Emergency services that respond to the project area include:

- **Fire Protection:** Stanislaus Consolidated Fire Protection District Station 2; 129 East Street, Waterford, CA 95386
- **Police Protection:** Stanislaus County Sheriff; 7018 Pine Street, Hughson, CA 95326

### Discussion of Checklist Responses

a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

i) **Fire protection?**

**Less Than Significant Impact.** Roadway users and nearby residents would be temporarily impacted by the full closure of the Montpelier Road Bridge for the entire duration of construction, which is anticipated to last between six and nine months. The roadway closure would include the bridge over the TID Main Canal and Dallas Road at the intersection with Montpelier Road. However, an approximately 1.75-mile-long detour would be provided throughout project construction. Vehicles traveling south on Montpelier Road would likely be diverted to travel west on 6th Street, south on Hickman Road, and east on Cogswell Road. Vehicles traveling north on Montpelier Road would travel the same route in reverse. No improvements are proposed along the detour routes. Temporary signage would be placed along the route to provide wayfinding for vehicles. This detour would not substantially affect response times. Full access to Montpelier Road and Dallas Road would be restored following construction activities. The project would not induce growth or result in the need for new government facilities. Therefore, the project would result in a less than significant impact related to physical impacts on government facilities or maintaining service ratios, response times, or other performance objectives for emergency services.

ii) **Police Protection**

**Less Than Significant Impact.** See discussion in response a(i) above.

iii) **Schools?**

**Less Than Significant Impact.** There are no schools within 0.25 mile of the project area. The closest school to the project is Hickman Charter School located 0.3 mile north from the project area. The project would not include residential development, would not result in an increase in population, and would not increase the potential number of students within the service area of the Hickman Community Charter district. Therefore, the project would result in no impact related to performance objectives for schools.

iv) **Parks?**

**No Impact.** The closest park is South Reinway Park and Trailhead located approximately three miles northwest to the project area. The project would not include residential development and would not increase the potential number of residents within the service area of the City of Waterford Parks and

Recreation Department. In addition, the project would not increase the need for recreational facilities. Therefore, the project would result in no impact related to performance objectives for parks.

**v) Other Public Facilities?**

**Less Than Significant Impact.** The project would not include residential development and would not increase the potential number of residents within the project vicinity that could result in an increase demand for other public services such as public libraries. The project would potentially cause delays due to the road closure during construction. However, a detour route would be provided to minimize traffic delays. Therefore, the project would result in a less than significant impact related to performance objectives for other public facilities.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Public Services. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Public Services.

## 4.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

No federal or state plans, policies, regulations, or laws related to recreation are applicable to the project.

### Local Regulations

#### Stanislaus County General Plan

The General Plan Land Use Element and Conservation/Open Space Element outlines the following goals and policies regarding recreation (Stanislaus County, 2015):

- Goal One: Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.
  - Policy Two: Land will be designated and zoned for AG, residential, COM, industrial, or historical uses when such designations are consistent with other adopted goals and policies of the General Plan.
- Goal One: Encourage the protection and preservation of natural and scenic areas throughout the County.
  - Policy One: Maintain the natural environment in areas dedicated as parks and open space.
- Goal Four: Provide for the open-space recreational needs of the residents of the County.
  - Policy Twelve: Provide a system of local and regional parks which will serve the residents of the County.

### Environmental Setting

There are no parks or recreational facilities within or adjacent to the project area. The closest recreational facility is South Reinway Park and Trailhead located approximately three miles northwest of the project area. The City of Waterford Parks and Recreation Department maintains and operates this recreational facility.

### **Discussion of Checklist Responses**

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**No Impact.** The project would not result in population growth or generate increased demand for recreational facilities. Construction of the project also would not necessitate the closure of any parks. Therefore, the project would result in no impact related to the increased use of existing neighborhoods, regional parks, or recreational facilities.

- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**No Impact.** The project would not require ROW acquisitions from recreational facilities and would not require the construction of any such facilities. Therefore, the project result in no impact related to the construction or expansion of recreational facilities.

### **Avoidance, Minimization, and/or Mitigation Measures**

The project would result in no impact on Recreation. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Recreation.



## 4.17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion incorporates the results of the Traffic Memorandum that was prepared for this project (GPA Consulting, 2022d).

### Regulatory Setting

#### Stanislaus County General Plan

The General Plan Circulation Element outlines the following goal and policy regarding transportation (Stanislaus County, 2015):

- Goal One: Provide and maintain a transportation system throughout the County for the movement of people and goods that also meets land use and safety needs for all modes of transportation.
  - Policy Two: The Circulation system shall be designed and maintained to promote safety by combining multiple modes of transportation into a single, cohesive system.

### Environmental Setting

Montpelier Road is designated in the General Plan as a major collector road, which provides access to the adjacent agricultural properties and movement of moderate volumes of people and goods in rural, urban, and industrial zones.

### Discussion of Checklist Responses

- a. **Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

**Less Than Significant Impact.** The project would not increase existing traffic capacity. Therefore, the project would result in no impact on a circulation plan, policy, or ordinance.

**b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**Less Than Significant Impact.** CEQA Guidelines section 15064.3, subdivision (b) outlines criteria for analyzing transportation impacts. Per CEQA Guidelines section 15064.3 subdivision (b), transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact.

Roadway users and nearby residents would be temporarily impacted by the full closure of the Montpelier Road Bridge for the entire duration of construction, which is anticipated to last between six and nine months. The roadway closure would include the bridge over the TID Main Canal and Dallas Road at the intersection with Montpelier Road. However, an approximately 1.75-mile-long detour would be provided throughout the construction period. Vehicles traveling south on Montpelier Road would likely be diverted to travel west on 6th Street, south on Hickman Road, and east on Cogswell Road. Vehicles traveling north on Montpelier Road would travel the same route in reverse. The detour route would temporarily increase vehicle miles traveled. However, this increase would be negligible and full access to Montpelier Road and Dallas Road would be restored following construction activities. During operation, the project would not increase the capacity of the roadway. Therefore, the project would result in a less than significant impact on CEQA Guidelines section 15064.3.

**c. Would the project substantially increase hazards due to a geometric design feature or incompatible uses?**

**No Impact.** The existing bridge is at risk of bridge failure due to scour. The project would include the replacement of the bridge to enhance safety on the bridge. The project would be designed to meet current safety and geometric standards. Therefore, the project would result in no impact related to geometric hazards.

**d. Result in inadequate emergency access?**

**Less Than Significant Impact.** Construction of the project is anticipated to last between six and nine months. For the duration of construction, the bridge would be closed, and traffic would be detoured around the project area using existing roads. Emergency responders would be detoured; however, they would still be able to conduct operations. Therefore, the project would result in a less than significant impact on emergency access.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in less than significant impact on Transportation. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Transportation.

## 4.18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion incorporates the results of Archaeological Survey Report that was prepared for this project (Duke Cultural Resource Management, LLC, 2022).

### Regulatory Setting

#### ***Federal Regulations***

##### *Assembly Bill 52*

In 2014, AB 52 added the term “tribal cultural resources” to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects). Defined in PRC Section 21074(a), a tribal cultural resource is a California Register of Historical Resources (CRHR) or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource.

#### **Environmental Setting**

The APE is located within the territory of native Northern Valley Yokuts speakers. Their territory extended from north of the Calaveras River south to the source of the San Joaquin River. The western limit is recorded as the eastern side of the Coast Range, while the eastern limit is the foothills of the Sierra Nevada Mountains. Two studies identified the project area and the Tuolumne River region as belonging to Taulamni or Tauhalames Northern Yokuts (Duke Cultural Resources Management, LLC, 2022). Tribal Cultural Resources could include, but are not limited to, Native American human remains, funerary objects, items or artifacts, sites, features, places, landscapes, or objects with cultural values to the tribe.

A record search of the APE and a surrounding 1-mile radius was conducted at the CCIC to identify any historic properties or previous cultural resources studies on file. No tribal historic resources or tribal cultural resources were documented within the search radius. In addition, seven previous studies were conducted within one mile of the APE and no cultural resources or sacred sites were identified by the NAHC, or by the interested Native American individuals and groups identified by the NAHC. No tribes responded to or provided information on tribal cultural resources in the project area in response to invitations to consult under Section 106. Pedestrian reconnaissance field surveys were also conducted to examine the APE for evidence of cultural resources. No tribal cultural resources were observed within the APE.

### ***Native American Consultation***

Within Stanislaus County, there are no California Native American tribes traditionally or culturally affiliated with the project area who have requested in writing that they be consulted for the purposes of AB 52, pursuant to PRC Section 21080.3.1. However, as part of NEPA compliance and pursuant to Section 106, consultation with the NAHC was conducted. An inquiry for tribes associated with the area in the Sacred Lands File (SLF) was submitted September 21, 2021, and a response letter was received from the NAHC on February 8, 2022. The NAHC indicated negative results for the SLF but provided a list of six groups represented by nine individuals with connections to the area. Section 106 notification letters were sent on February 14, 2022 to the Calaveras Band of Mi-Wuk Indians (Miwok), California Valley Miwok Tribe (Miwok), North Valley Yokuts Tribe (Costanoan, Northern Valley Yokut), Southern Sierra Miwuk (Miwok), Tule River Indian Tribe (Yokut), and Wukashe Indian Tribe/Eshom Valley Band (Foothill Yokut, Mono). Emails were used to follow up with all tribal representatives on March 1, 2022. However, as of October 2022, no responses were received.

### **Discussion of Checklist Responses**

- a. **Would the project cause a substantial adverse change in the significance of a tribal cultural resource (TCR), defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k)?**

**Less than Significant Impact.** Construction would include ground disturbing activities that could unearth Tribal Cultural Resources should they be present in the project limits. Due to the nature of previous ground disturbances within the APE, the potential to adversely affect unknown, potentially intact buried archaeological deposits that might be eligible for NRHP listing is low and Tribal Cultural Resources are not expected to be encountered. Therefore, the project would result in a less than significant impact on tribal cultural resources. If Tribal Cultural Resources are unearthed, implementation of the avoidance and minimization measures **CUL-1** and **CUL-2** would be implemented.

- b. **Would the project cause a substantial adverse change in the significance of a tribal cultural resource (TCR), defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c)**

**of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

**Less than Significant Impact.** See discussion from response (a) above.

**Avoidance, Minimization, and/or Mitigation Measures**

**CUL-1** and **CUL-2** are also applicable to minimizing Tribal Cultural Resources impacts. See avoidance, minimization, and mitigation measures in *Section 4.5 Cultural Resources*.

## 4.19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Would the Project:</b>				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

#### State Regulations

##### California Assembly Bill 939

California AB 939 (California Integrated Waste Management Act) requires each city and county to divert 50 percent of its solid waste from landfill disposal through source reduction, recycling, and composting.

##### Senate Bill 1016

SB 1016 (Solid Waste Disposal Measurement Act) was implemented to provide a simplified measure of a jurisdiction's performance in accordance with AB 939 by moving to a per capita disposal rate.

#### Environmental Setting

Privately owned companies that provide electricity, natural gas, water and sewer, and telephone services are regulated by the California Public Utilities Commission (CPUC). The CPUC is available to help resolve disputes and work through issues unresolvable through the service provider. Publicly owned utilities, such as power, gas, and cable television and internet services, are not regulated by the CPUC.

Underground utilities are attached to the edge of the existing bridge and overhead utilities are located south of the bridge and parallel to the canal. Additionally, several service boxes and manholes are located along the approach roadways adjacent to the bridge.

### Discussion of Checklist Responses

- a. **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

**Less Than Significant Impact.** Intermittent disruptions and relocation of utilities could be required to complete the project. During construction, the overhead utilities may be de-energized when large cranes and other high vertical clearance equipment are present. Following project construction, the utilities attached to the side of the bridge would be relocated to the new edge of deck. The project would not require relocation of any utility poles within the project area. All utility work would be conducted in coordination with the service providers. All affected property owners would be notified if services would require interruption. Following project construction, all utilities would be restored or moved to their permanent locations. Therefore, the project would result in a less than significant impact related to the relocation of utilities.

- b. **Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

**Less Than Significant Impact.** The project would require temporary water supplies to meet dust control specifications. However, the project would not involve the construction of any permanent structures or facilities that would require additional water supplies. Likewise, the project would not increase population or alter the distribution of population in the project area such that additional water supplies would be required. The project would not expand agriculture and thus would not require additional agricultural water supply. Therefore, the project would result in a less than significant impact on water supplies.

- c. **Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**No Impact.** The project would not include any uses, features, or facilities that would generate wastewater and would not require the need for wastewater treatment. Therefore, the project would result in no impact on the capacity of wastewater treatment.

- d. **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less Than Significant Impact.** The County is subject to AB 939 and SB 1016 requirements. Fink Road Landfill is owned by the County and has a remaining capacity of 7,184,701 cubic yards (CalRecycle, 2017). The project would generate solid waste during construction. The demolished existing bridge structure would require disposal, as would demolished portions of the roadway approaches and adjacent driveways. Some amount of material excavated for construction of the bridge abutments and pier would also require disposal. However, the disposal of solid waste during construction would be short-term, and operation of the project would not result in the long-term generation, or disposal, of solid waste.

Demolition of the existing bridge and portions of roadway would be performed in accordance with County standards supplemented by Caltrans Specifications modified to meet stricter environmental permit requirements. All concrete and other debris resulting from the demolition would be removed from the project area and properly disposed of by the contractor. There would be sufficient capacity at the Fink Road Landfill to accommodate project waste. The County would be required to comply with AB 939 and SB 1016 requirements of diverting 50 percent of its solid waste from landfill disposal through source reduction, recycling, and composting. Therefore, the project would result in a less than significant impact related to solid waste reduction goals.

**e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**No Impact.** Project operation would not result in the long-term generation, or disposal, of solid waste. The disposal of solid waste during construction would be short-term. Disposal of construction debris would comply with AB 939 and SB 1016 requirements. Therefore, the project would result in no impact on solid waste regulations.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Utilities and Service Systems. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Utilities and Service Systems.



## 4.20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

#### State Regulations

##### Government Code Section 51179

California Government Code Section 51179 requires the California Department of Forestry and Fire Protection to designate areas, or make recommendations for local agency designation of areas, that are at risk from significant fire hazards based on fuels, terrain, weather, and other relevant factors (California Department of Forestry and Fire Protection, 2013). These areas at risk of interface fire losses are referred to by law as "Fire Hazard Severity Zones" (FHSZ). The law requires different zones to be identified (Moderate to Very High). All "State Responsibility Areas" and any "Fire Hazard Severity Zone" designations require wildfire protection building construction and defensible space regulations, with limited exceptions. Wildfire protection building construction and defensible space regulations require managing the hazardous vegetation around houses and reduce the potential severity of wildfire exposure.

#### Local Regulations

##### Stanislaus County General Plan

The General Plan Safety Element outlines the following goals and policies regarding wildfire (Stanislaus County, 2015):

- Goal One: Prevent loss of life and reduce property damage as a result of natural disasters.

- Policy One: The County will adopt (and implement as necessary) plans inclusive of the Multi-Jurisdictional Hazard Mitigation Plan, to minimize the impacts of a natural and man-made disasters.
- Goal Two: Minimize the effects of hazardous conditions that might cause loss of life and property.
  - Policy Six: All new development shall be designed to reduce safety and health hazards.

## Environmental Setting

According to the General Plan Safety Element, wildland fires are generally limited to the foothills located along the Diablo Range and Sierra Nevada Foothills (Stanislaus County, 2015). The project area is located approximately 40 miles from the Diablo Range and 35 miles from the Sierra Nevada Foothills. The project area is within a Local Responsibility Area. Local Responsibility Areas are not required to report adopted ordinances to the California Department of Forestry and Fire Protection that may affect communities' hazard mapping and building code requirements. According to the California Department of Forestry and Fire Protection, the county does not have any Very High Fire Hazard Severity Zones within the Local Responsibility Area (California Department of Forestry and Fire Protection, 2007).

## Discussion of Checklist Responses

### a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

**Less Than Significant Impact.** Disaster routes are used during times of crisis to save lives, protect property, and minimize impact to the environment. During a disaster, pre-identified disaster routes have priority for clearing, repairing, and restoration over all other roads. The County developed an Emergency Response Plan to address planned responses to extraordinary emergency situations. The Emergency Response does not identify Montpelier Road as part of an evacuation route (Stanislaus County, 2021). Detour routes would be temporary and would not substantially affect emergency response times. Full access to Montpelier Road and Dallas Road would be restored following construction activities. Therefore, the project would have a less than significant impact on emergency response and evacuation plans.

### b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**No Impact.** Construction of the project would not be likely to start a wildfire given the distance to the nearest fire hazard area. The purpose of the project is to improve safety and reduce the risk of bridge failure by replacing a functionally obsolete bridge that is deemed scour critical with a new bridge that would meet current Caltrans design standards. As such, the project would not exacerbate or increase wildfire risk due to design feature. Therefore, the project would result in no impact related to exacerbating wildfires.

### c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**Less than Significant Impact.** Construction and maintenance of the bridge would require equipment usage. Construction equipment would require the use of combustible equipment that could create sparks.

The presence of construction equipment and fuel sources could temporarily exacerbate fire risk in the project area. BMPs including site vegetation maintenance would be implemented to reduce the potential for fire hazards in the project area. However, the project area is not within a high-risk fire hazard area and construction impacts would be temporary. Therefore, the project would result in a less than significant impact related to exacerbating fire risk.

**d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**No Impact.** According to the General Plan Safety Element, the area west of I-5 in Stanislaus County is susceptible to landslide (Stanislaus County, 2015). The project is located approximately 37 miles east of I-5 and is not in an area susceptible to landslides. Additionally, the topography within the project area and surrounding land is generally flat with no notable landforms. Therefore, the project would result in no impacts related to landslides.

**Avoidance, Minimization, and/or Mitigation Measures**

The project would result in a less than significant impact on Wildfire. The project would not require Avoidance, Minimization, and/or Mitigation Measures for Wildfire.

## 4.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion of Checklist Responses

- 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 Impact.** The project would not substantially degrade the quality of the environment. In addition, the project would comply with all required permits. Impacts to species are not anticipated. Therefore, the project would result in less than significant impact on the quality of the environment, fish or wildlife species habitat, fish or wildlife population, plant or animal communities, number or restricting the range of a rare or endangered plant or animal, or important examples of the major periods of California history or prehistory. As described in the *Biological Resources* section, implementation of measures **BIO-1** through **BIO-16** would be implemented to avoid or minimize impacts on biological resources. The *Cultural Resources* section describes measures **CUL-1** and **CUL-2** which would avoid or minimize impacts on cultural and tribal resources.

- b. Does the project have impacts that are individually limited, but cumulatively considerable?**

**Less Than Significant Impact** According to 14 CCR § 15355, “Cumulative impacts” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact when added to other closely related past,

present, and reasonably foreseeable future projects. **Table 12** provides a summary of projects within two miles of the project area, which is used in the cumulative impact analysis. The project would not result in any significant impacts. Because the project’s impacts would be less than significant and is not anticipated to occur at the same time as project listed in **Table 12**, the project would not contribute considerably to cumulative impacts. Therefore, project impacts would be less than cumulatively considerable. Implementation of the measures **BIO-1** through **BIO-16**, **CUL-1** and **CUL-2**, **HAZ-1** through **HAZ-4**, and **NOI-1** through **NOI-5** would further reduce impacts.

**Table 12 Projects Within Two Miles of the Project Area**

Project Name	Project Description	Project Location in Relation to Project Area	Status
Hickman Road over Tuolumne River Bridge Replacement	Replacing Hickman Road over Tuolumne River	Approximately 1.5 miles north of project	Under construction; estimated project completion is summer 2022
Pavement Maintenance Project	Rehabilitating and maintenance on Hickman Road	Approximately 0.3 mile east of project	In design phase

Sources: (Stanislaus County, 2022a; Stanislaus County, 2022b)

**c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less Than Significant Impact.** The IS analysis shows that the project would not have environmental effects causing substantial adverse effects on human beings, directly or indirectly. Therefore, the project would result in a less than significant impact related to adverse environmental effects on human beings. Impacts associated with biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, and noise would all be reduced with implementation of avoidance and minimization measures **BIO-1** through **BIO-16**; **CUL-1** and **CUL-2**; **HAZ-1** through **HAZ-4**; and **NOI-1** through **NOI-5**.

## 5.0 Public Outreach

On June 8, 2022, the County placed a newspaper ad in the *Modesto Bee* to inform the public that an in-person public meeting was scheduled for 5:30 p.m. on June 15, 2022, at the Beard Park Pavilion. The purpose of the public meeting was to inform the community of the project. Representatives from the project team, including County staff and the design consultant attended the meeting.

The public meeting held was an open-house style, with information for the project on storyboards set up on easels around the pavilion. The storyboards included information about the purpose of the project, plan and elevation views of the proposed bridge and roadway improvements, description of project features, proposed detour routes, and a summary of the project completion timeline. Additional printed materials were provided to the attendees to take home which consisted of a list of frequently asked questions and a comment card to provide attendees the opportunity to submit written comments or questions to the County.

Two members of the public attended the meeting, and no comments or concerns were received.

## **6.0 List of Preparers**

The following staff assisted in the preparation of this document:

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## 8.0 List of Technical Studies

The following studies were prepared for this environmental document:

- Ambient Air Quality & Noise Consulting. *Construction Noise & Groundborne Vibration Technical Memorandum - Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project, Stanislaus County.* 2021
- Duke Cultural Resource Management, LLC. *Archeological Survey Report – Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement.* 2022
- GPA Consulting. *Assumption of Eligibility – Montpelier Road over Turlock Irrigation District.* 2022
- GPA Consulting. *Aquatic Resource Delineation - Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project.* 2022
- GPA Consulting. *Farmland Impacts Technical Memorandum for Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project (Bridge #38C-0157).* 2022
- GPA Consulting. *Finding of No Adverse Effect for the Montpelier Road over Turlock Irrigation District Main Canal Bridge (Bridge No. 38C-0157) Replacement Project.* 2023
- GPA Consulting. *Historic Property Survey Report - Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project.* 2023
- GPA Consulting. *Land Use and Community Impacts Memorandum - BRLS-5938 (260) – Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement.* 2022
- GPA Consulting. *Natural Environment Study (Minimal Impacts) – Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement Project, Stanislaus County, California.* 2022
- GPA Consulting. *Traffic Memorandum - BRLS-5938 (260) – Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement.* 2022
- GPA Consulting. *Water Quality Technical Memorandum - BRLS-5938 (260) – Montpelier Road over Turlock Irrigation District Main Canal Bridge Replacement.* 2022

- Sierra Geotech DBE Inc. *Hazardous Waste Initial Site Assessment - Montpelier Road over TID Main Canal Bridge Replacement Project. 2023*

## **Appendix A Farmland Conversion Impact Rating Analysis**

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>	3. Date of Land Evaluation Request	4. Sheet 1 of _____
---	------------------------------------	---------------------

1. Name of Project	5. Federal Agency Involved
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2. Type of Project	6. County and State
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<b>PART II (To be completed by NRCS)</b>	1. Date Request Received by NRCS	2. Person Completing Form
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3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated   Average Farm Size
---	--

5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ %	7. Amount of Farmland As Defined in FPPA Acres: _____ %
------------------	---	--

8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS
--	---	---

<b>PART III (To be completed by Federal Agency)</b>	<b>Alternative Corridor For Segment</b>			
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	Corridor A	Corridor B	Corridor C	Corridor D
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A. Total Acres To Be Converted Directly				
---	--	--	--	--

B. Total Acres To Be Converted Indirectly, Or To Receive Services				
---	--	--	--	--

C. Total Acres In Corridor				
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<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
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A. Total Acres Prime And Unique Farmland				
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B. Total Acres Statewide And Local Important Farmland				
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C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
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D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
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<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>				
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<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	Maximum Points			
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1. Area in Nonurban Use	15			
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2. Perimeter in Nonurban Use	10			
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3. Percent Of Corridor Being Farmed	20			
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4. Protection Provided By State And Local Government	20			
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5. Size of Present Farm Unit Compared To Average	10			
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6. Creation Of Nonfarmable Farmland	25			
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7. Availability Of Farm Support Services	5			
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8. On-Farm Investments	20			
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9. Effects Of Conversion On Farm Support Services	25			
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10. Compatibility With Existing Agricultural Use	10			
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TOTAL CORRIDOR ASSESSMENT POINTS	160			
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<b>PART VII (To be completed by Federal Agency)</b>				
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Relative Value Of Farmland (From Part V)	100			
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Total Corridor Assessment (From Part VI above or a local site assessment)	160			
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<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>			
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1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?  YES <input type="checkbox"/> NO <input type="checkbox"/>
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5. Reason For Selection:
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Signature of Person Completing this Part:	DATE
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*Karimsh Juma*

NOTE: Complete a form for each segment with more than one Alternate Corridor

## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

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