

Draft

# Pleasant Valley Road over South San Joaquin Irrigation District Bridge Replacement Project

Initial Study / Mitigated Negative Declaration



Prepared for:  
Stanislaus County  
Department of Public Works

June 2018



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## Executive Summary

Stanislaus County (County) Department of Public Works proposes to replace the existing bridge on Pleasant Valley Road over South San Joaquin Irrigation District (SSJID) Main Canal (Bridge No. 38C-0154) located in the northeastern part of Stanislaus County, 0.3 mile east of Victory Road, and approximately 5 miles east of the town of Escalon. Land use surrounding the Project site consists of agricultural lands with interspersed rural residences.

The purpose of this Project is to remove the existing structure and replace it with a new bridge designed to current structural and geometric standards while minimizing adverse impacts to the SSJID Main Canal and the surrounding area. The existing Pleasant Valley Road Bridge over the SSJID Main Canal is a four span timber structure supported on reinforced concrete pier and abutment walls. The deck consists of a steel pan with asphalt concrete fill. The timber members of the bridge have deteriorated over time. Emergency temporary repairs were made to one of the main stringers that had failed and a large pot hole in the deck (caused by the failed stringer) in February of 2013.

This Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) was submitted to the State Clearinghouse on 06/22/2018, for a 30-day public review period that will end on 07/21/2018. During the public review period, the Draft IS/MND is available for review at the Stanislaus County Department of Public Works (1716 Morgan Road, Modesto, CA 95358), Oakdale Public Library (151 S 1<sup>st</sup> Avenue, Oakdale, CA 95361), and Escalon Branch Library (1540 2<sup>nd</sup> Street, Escalon, CA 95320) during business hours, and at the following website: <http://www.stancounty.com/publicworks/projects.shtm>.

This IS/MND was prepared for the Project to assess the potential effects on the environment and the significance of those effects. Based on the results of the ISMND, the Project would not have any significant effects on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

- The Project would not affect mineral or recreational resources.
- The Project would have a less than significant effect on aesthetics, agricultural and forest resources, air quality, geology and soils, greenhouse gas emissions, energy, hydrology and water quality, land use and land use planning, population and housing, tribal cultural resources, and utilities and services.
- The Project would have a less-than significant effect, once mitigation measures are implemented, on biological resources, cultural resources, hazards and hazardous materials, noise, public services, and transportation and traffic.
- No substantial evidence exists that the Project would have a significant negative or adverse effect on the environment.
- The Project incorporates standard construction measures, as described in the ISMND, and all applicable mitigation measures, as listed below and described in the IS.

In addition to standard construction measures required by Caltrans Standard Specifications and other applicable laws, regulations, and policies, the following mitigation measures would be implemented as part of the Project to avoid or minimize potential environmental impacts. Implementation of these mitigation measures would reduce the potentially significant environmental impacts of the Project to a less than significant level.

**Table 1. Mitigation Measures****Table 1. Mitigation Measures**

Potential impact	Mitigation measures	Timing	Responsible party	Level of significance after mitigation
<b>Biological Resources</b>				
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	<p><b>MM BIO-1:</b> <i>Conduct Preconstruction surveys for Western pond turtles and relocate them if necessary.</i> If dewatering is necessary, the construction area shall be dewatered prior to construction activities. DFW shall be notified prior to dewatering activities. No more than two weeks prior to the commencement of ground-disturbing activities, the County shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the Project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles. The results of these surveys will be documented in a technical memorandum that will be submitted to DFW (if turtles are documented).</p>	Prior to and during construction activities	Stanislaus County	Less than significant
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	<p><b>MM BIO-2:</b> <i>Conduct a Preconstruction Raptor Survey and Nesting Migratory Bird and Establish No-disturbance Buffers, if Necessary</i> <u><i>Burrowing Owls</i></u> Surveys shall be conducted by a qualified biologist to determine presence/absence of burrowing owls and/or occupied burrows in and within 500 feet of the BSA according to the DFW's Staff Report on Burrowing Owls (DFW 2012). A winter survey will be conducted between December 1 and January 31 and a nesting survey will be conducted between April 15 and July 15. Preconstruction surveys will also be conducted within 30 days prior to construction to ensure that no additional burrowing owls have established territories since the initial surveys. If no burrowing owls are found during any of the surveys, no further mitigation will be necessary. If burrowing owls are found, then the following measures shall be implemented prior to the commencement of construction:</p> <ul style="list-style-type: none"> <li>• During the non-breeding season (September 1 through January 31) burrowing owls occupying the Project area should be evicted by passive relocation as described in DFW's Staff Report on Burrowing Owls (March 2012).</li> <li>• During the breeding season (February 1 through August 31) occupied burrows shall not be</li> </ul>	Prior to and during construction activities	Stanislaus County	Less than significant

**Table 1. Mitigation Measures**

	<p>disturbed and shall be provided with a 250 ft protective buffer unless a qualified biologist approved by DFW verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.</p> <p><b><u>Swainson's Hawk</u></b></p> <p>Prior to construction, surveys will be conducted by a qualified biologist to determine presence/absence of nesting Swainson's hawk in and within 0.50 miles of the Project area according to the <i>Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley</i> (Swainson's Hawk Technical Advisory Committee 2000). If no Swainson's hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson's hawk nests are found, DFW will be consulted regarding measures to reduce the likelihood of forced fledging of young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a no-work zone around the nest until the young have fledged as determined by a qualified biologist.</p> <p><b><u>Bridge and Tree Migratory Nesting Bird Species</u></b></p> <p>The removal of trees will be conducted to avoid the migratory bird nesting season (February 1–August 31). In addition, to ensure there are no effects on nesting birds, a qualified biologist will conduct preconstruction tree surveys of the trees to be removed, and within 500 feet of the Project construction area. Survey work will be done no more than 2 days prior to initiation of tree removal to minimize the potential that nests are initiated after the survey and prior to removal. If any occupied nests are detected the tree will be flagged, a minimum buffer of 100 feet between the nest and construction zone will be established, and that area will be avoided until the qualified biologist has determined the nest is no longer occupied/active. Once the biologist has determined that young have fledged and the nest is no longer active, the flagged tree can be removed.</p> <p>The preconstruction tree surveys will include evaluation of other trees in the construction zone and within 500 feet of the construction zone to determine if nests are in nearby trees that would not need to be removed. If nesting migratory birds are discovered in the construction area, then construction in the immediate vicinity of those trees should be delayed to avoid the nesting season (February 1–August 31). If construction activities cannot avoid the nesting season, then any trees with nests should be flagged, a minimum 100-foot buffer established between the nest and construction zone, and avoidance of the area until a qualified biologist has determined the young have fledged and the nest is no longer occupied. Once the nest is no</p>		
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**Table 1. Mitigation Measures**

	<p>longer active, construction in the immediate vicinity of that tree can be resumed. If no active nests are identified during the preconstruction survey, no further mitigation is necessary. If construction activities (i.e. vegetation and tree removal) are scheduled to begin during the non-breeding season (September–January), preconstruction surveys would not be necessary.</p>			
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	<p><b>MM BIO-3: Return Temporarily Disturbed Areas to Pre-Project Conditions</b></p> <p>All temporarily disturbed areas will be returned to pre-Project conditions upon completion of construction. These areas will be properly protected from washout and erosion using appropriate erosion control devices including coir netting, hydroseeding, and revegetation.</p>	During and Following Construction	Stanislaus County	Less than significant
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	<p><b>MM BIO-4: Replace Removed Trees with Native Species</b></p> <p>The tree replacement proposed as part of the Project would result in planting species that are better suited to the urban corridor as far as size (i.e., appropriate for planting relative to overhead and buried utility lines and near buildings) and resistance to disease (i.e., elm disease). In addition, as recommended by the County's Code, planting in correctly spaced and designed tree planters with automatic irrigation would improve the survivability of the trees thereby providing an improved environmental and urban landscape condition in the corridor.</p>	During and Following Construction	Stanislaus County	Less than significant

**Table 1. Mitigation Measures**

biological resources, such as a tree preservation policy or ordinance.				
<b>Cultural Resources</b>				
Project implementation has the potential to discover unanticipated cultural and paleontological resources during ground-disturbing activities.	<p><b>MM CUL-1:</b> <i>Discovery of Cultural or Paleontological Resources during Ground-Disturbing Activities.</i> If cultural or paleontological resources are discovered during ground-disturbing activities, all activity in the vicinity shall cease until the discovery is evaluated by an archaeologist or paleontologist working under the direction of a Principal Investigator who meets the requirements of the Secretary of the Interior's Qualification Standards. If the archaeologist/paleontologist determines that the resources may be significant, no further work in the vicinity of the resources shall take place until appropriate treatment is determined and implemented.</p> <p>The need for archaeological and Native American monitoring during the remainder of the Project will be re-evaluated by the archaeologist as part of the treatment determination. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.</p> <p>In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, the Project proponent will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.</p>	During construction activities	Stanislaus County	Less than significant
Project implementation has the potential to discover unanticipated human remains during ground-disturbing activities.	<p><b>MM CUL-2:</b> <i>Halt Work if Human Skeletal Remains are Identified during Construction.</i> If human skeletal remains are uncovered during Project construction, work must immediately halt and the Stanislaus County Coroner must be contacted to evaluate the remains; the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines must be followed. If the County Coroner determines that the remains are Native American, coroner will contact the Native American Heritage Commission (NAHC), in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC will notify and appoint a Most Likely Descendent (MLD). The MLD will work with a qualified archaeologist and County to decide the proper treatment of the human remains and any associated funerary objects.</p>	During construction activities	Stanislaus County	Less than significant

**Table 1. Mitigation Measures**

<b>Hazards and Hazardous Materials</b>				
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	<b>MM HAZ-1:</b> ACM. For ACMs, the contractor will conduct National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance testing as part of the Project startup. During construction, building materials associated with the pavement striping yellow paint will be abated by a California Licensed abatement contractor and disposed of as a hazardous waste.	Prior to and during construction activities	Stanislaus County	Less than significant
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.	<b>MM HAZ-2:</b> LBP. During construction, building materials associated with the pavement striping yellow paint and painted areas on the existing bridge structure will be abated by a California Licensed abatement contractor and disposed of as a hazardous waste.	Prior to and during construction activities	Stanislaus County	Less than significant
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.	<b>MM HAZ-3:</b> <i>Development of a Health and Safety Plan (HASP).</i> A HASP shall be developed for the Project. The HASP shall describe appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances shall be tested, handled and disposed of in accordance with appropriate federal, state and local regulations.	Prior to and during construction activities	Stanislaus County	Less than significant

**Table 1. Mitigation Measures**

<b>Noise</b>					
Project implementation has the potential expose persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; Expose persons to, or generation of, excessive groundborne vibration or groundborne noise levels; Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	<p><b>MM NO-1:</b> <i>Elevated Noise Level during Construction.</i></p> <p>During construction, the noise level may be temporarily elevated. To minimize the impact, all construction in or adjacent to residential areas shall follow the following procedures for noise control: Construction operations shall be limited to Monday through Friday, 7:00 AM to 8:00 PM. The following control measures shall be implemented in order to minimize noise and vibration disturbances at sensitive receptors during periods of construction</p> <ul style="list-style-type: none"> <li>• Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).</li> <li>• Utilize construction methods or equipment that will provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.</li> <li>• Turn off idling equipment</li> </ul>	Prior to and during construction activities	Stanislaus County	Less than significant	
<b>Transportation and Traffic</b>					
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; Result in substantial adverse physical impacts associated with fire and police protection; Result in inadequate emergency access.	<p><b>MM TRAF-1:</b> <i>Standard Traffic Management Plan.</i> The construction contractor for the Project shall implement a standard traffic management plan to minimize traffic disruption and ensure adequate access is maintained to surrounding properties. Temporary disruptions to access for residences in the area shall be minimized by coordinating construction activities to provide alternative access points and/or by coordinating construction schedule with property owners. Additionally, prior to the start of construction, the contractor shall coordinate with the police and fire departments and local public and private ambulance and paramedic providers in the area to prepare a Construction Period Emergency Access Plan. The Emergency Access Plan shall identify phases of the Project and construction scheduling and shall identify appropriate alternative emergency access routes.</p>	Prior to and during construction activities.	Stanislaus County	Less than significant	

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# INITIAL STUDY

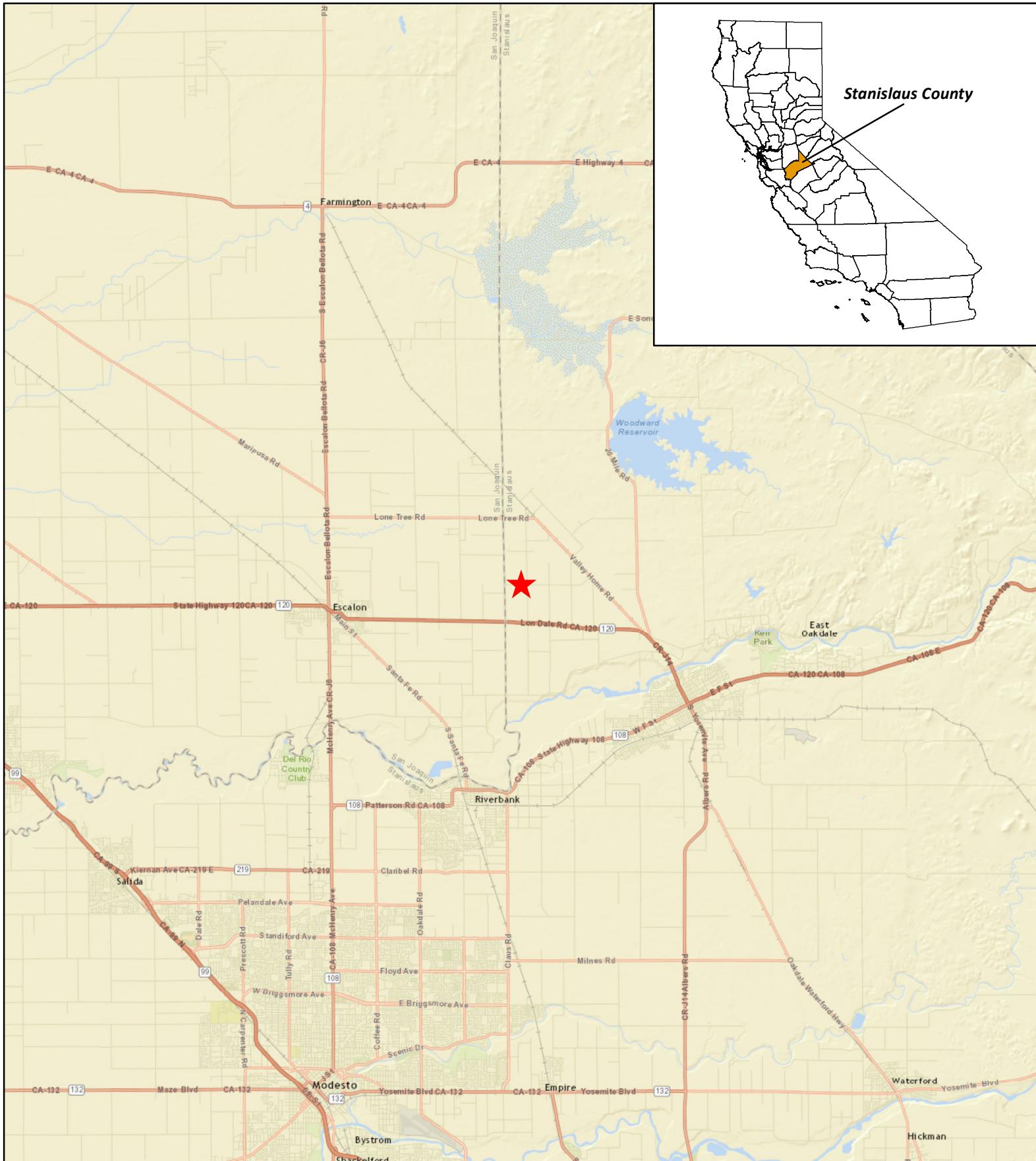
## Proposed Project

<b>1. Project Title:</b>	Pleasant Valley Road Bridge Replacement Project BRLO 5938 (226)
<b>2. Lead Agency Name and Address:</b>	Stanislaus County
<b>3. Contact Person and Phone Number:</b>	Nathaniel Tumminello, Project Manager (209)525-4101
<b>4. Project Location:</b>	Pleasant Valley Road over South San Joaquin Main Canal, Stanislaus County
<b>5. Project Sponsor's Name and Address:</b>	Stanislaus County Department of Public Works 1716 Morgan Road Modesto, CA 95358
<b>6. General Plan Designation(s):</b>	Agriculture
<b>7. Zoning Designation(s):</b>	General AG 10 Acre

## Introduction

Stanislaus County (County) Department of Public Works proposes to replace the existing bridge on Pleasant Valley Road (Bridge No. 38C-0154) over South San Joaquin Irrigation District (SSJID) Main Canal (Project). The Project is located in the northeastern part of Stanislaus County, 0.3 mile east of Victory Road, and approximately 5 miles east of the town of Escalon (**Figures 1 & 2**). The general setting is rural residential and agricultural.

The Project is funded primarily by the federal-aid Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA) through Caltrans Local Assistance. The replacement bridge would meet current applicable County, American Association of State Highway and Transportation Officials (AASHTO), and Caltrans design criteria and standards.



## Project Location



0 1.25 2.5 5 Miles

**drake haglan**  
AND ASSOCIATES

Source: ESRI Online Basemap, Google Street Maps, Stanislaus County  
Coordinate System NAD 83 State Plane California III FIPS  
0403 Feet  
Notes: This map was created for informational and display purposes only

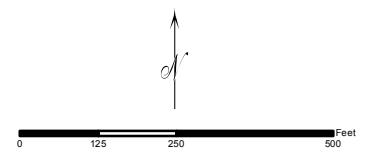
Project Name:  
Pleasant Valley Road over San Joaquin Main Canal  
Bridge (38C-0154) Replacement Project  
Stanislaus County, CA

## Regional Location Map

# Figure 1



★ Project Location



## Project Purpose and Need

The existing Pleasant Valley Road Bridge over the SSJID Main Canal is a four span timber structure supported on reinforced concrete pier and abutment walls. The deck consists of a steel pan with asphalt concrete fill. The timber members of the bridge have deteriorated over time. Emergency temporary repairs were made to one of the main stringers that had failed and a large pot hole in the deck (caused by the failed stringer) in February of 2013. The existing bridge is in need of replacement.

The purpose of the Project is to remove the existing structure and replace it with a new bridge designed to current structural and geometric standards while minimizing adverse impacts to the SSJID Main Canal and the surrounding area.

## Project Description

### *Existing Bridge*

The Pleasant Valley Road Bridge over the SSJID Main Canal was built in 1964. The structure consists of a four span timber structure supported on reinforced concrete pier and abutment walls. The deck consists of a steel pan with asphalt concrete fill.

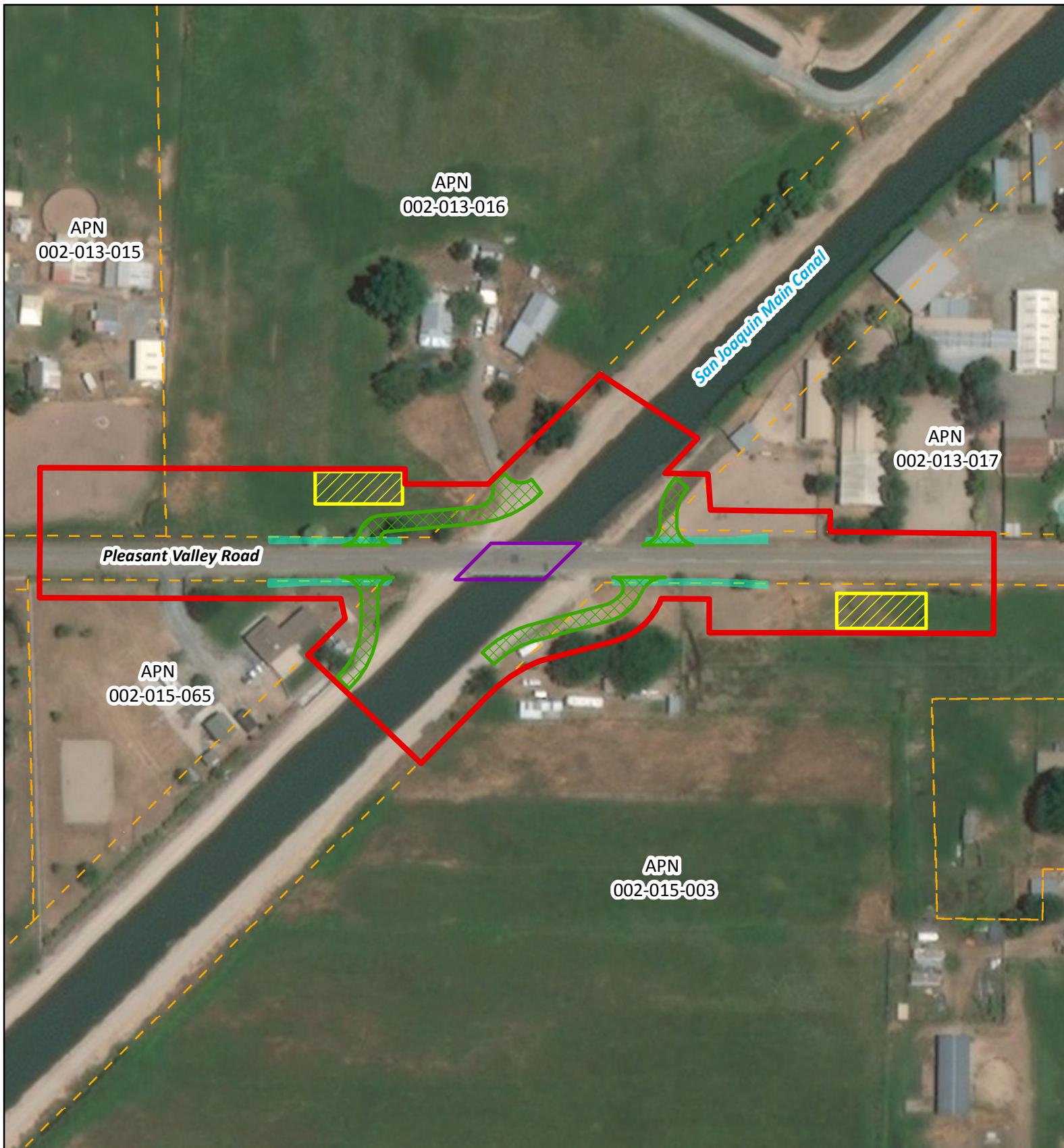
The existing Pleasant Valley Road bridge was last inspected by Caltrans in January 2015 and has a current sufficiency rating (SR) of 80.7 out of a possible score of 100. Many of the main timber stringers have moderate to severe cracking that has been progressively getting worse over time. In January of 2013, Caltrans noted that the cracking in one of the stringers had progressed to a point where the stringer had structurally failed. Per Caltrans' direction, Stanislaus County performed a temporary emergency repair on the failed stringer in March of 2013. Due to the condition of the timber stringers, the existing bridge is in need of replacement. The existing bridge does not have barrier end treatments and the existing side mounted timber railing does not satisfy safety requirements.

The Caltrans Bridge Inspection Report dated January 9, 2015 identifies major deficiencies:

- The AC deck has transverse cracks of 0.25 inch wide spaced at 4 feet on the center.
- The left exterior Stringer 1 in Span 1 near Pier 2 has a 0.15 inch wide horizontal split at the top half, approximately 6.5 feet long.
- The rest of the timber stringers have areas of dampness with white efflorescence, but show no signs of distress.
- There is a minor rock pocket on the pier nose at the upstream (left) side of Piers 3 and 4, approximately at mid-height.

### *Replacement Bridge*

The replacement bridge would be a two span cast-in-place post tensioned concrete slab. The replacement bridge would be located on the same alignment as the existing bridge. The bridge replacement Project would also include the installation of concrete channel lining in the vicinity of the replacement bridge extending 50 feet upstream, below, and 50 feet downstream of the replacement structure. The Project would also include canal grading work extending approximately 150 feet upstream of the bridge to get rid of the scour hole as well as removal of the mound of sediment approximately 150 feet downstream of the bridge (**Figure 3**).



- [Red Box] Area of Direct Impact (ADI)
- [Purple Box] Proposed Bridge
- [Green Box] Proposed Driveway Realignment

- [Yellow Hatched Box] Proposed Staging Areas
- [Teal Box] Proposed Roadside Drainages
- [Dashed Yellow Box] Parcel Boundaries

0 50 100 200 Feet

The terrain at the Project site is very flat and existing drainage patterns are not well defined. Flooding is evident along the adjacent private properties, especially at the northeast corner of the bridge. The existing road profile through the Project site and canal levees are higher than the grades of the surrounding properties. As a result, the existing roadway storm runoff is draining directly onto the adjacent private properties and ponding. The South San Joaquin Irrigation District (District) has stated that they would not allow storm water from the bridge deck and road approaches to drain into the SSJID Main Canal since they do not have a Discharge Agreement with Stanislaus County. The Project would address existing drainage issues on the Project site by incorporating a combination of shallow roadside ditches and improvements to infiltrations rates along Pleasant Valley Road.

In order to remove the existing bridge, construct the replacement bridge, install the concrete canal lining, and perform the canal channel grading, temporary culverts would be needed to convey the maximum winter time (non-irrigation time) flow in the canal (500 cfs) through the Project site. Temporary earth berms would be constructed upstream and downstream of the proposed canal improvements. The berms would be approximately 12 feet high (full height of the canal) and fitted with three (3) six foot diameter temporary culverts running through the Project site from berm to berm. The water surface elevation at the upstream end of the Project would be 11 feet above the canal invert and 8.5 feet above the canal invert at the downstream end of the Project.

### ***Demolition and Construction Staging***

Demolition of the existing bridge would be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete, timber and other debris resulting from the demolition of the existing bridge would be removed from the Project site and disposed of by the contractor. The contractor would prepare a bridge demolition plan.

### ***Right-of-Way***

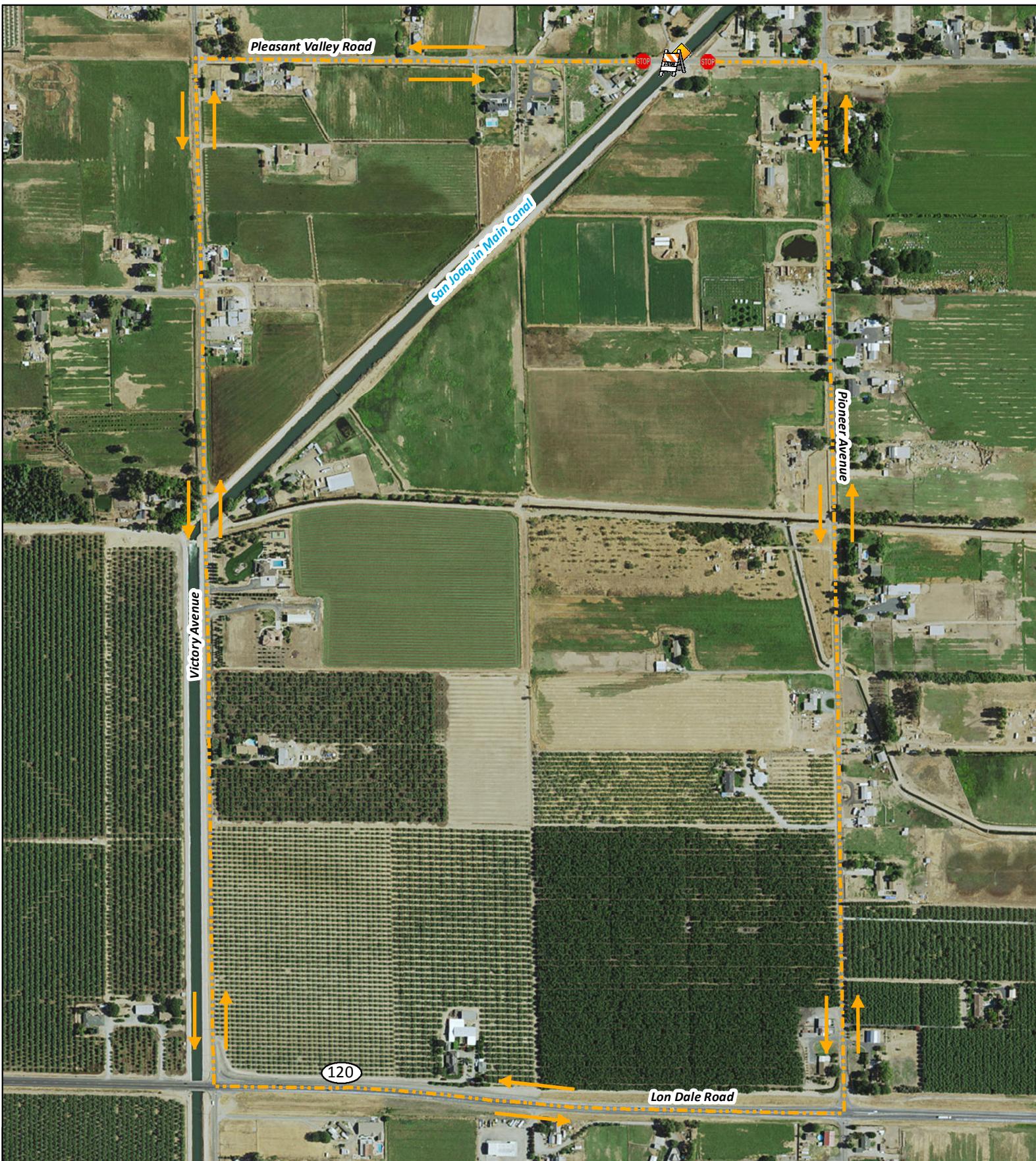
Construction of the new bridge would require additional right-of-way to realign the canal maintenance roads and private property driveways and to construct the storm water facilities needed to prevent road and bridge runoff from draining onto the adjacent private properties. In addition, temporary construction easements would be required.

### ***Utilities***

The Pleasant Valley Road Bridge is located near Section 310 of the SSJID Main Canal. Several utilities run through the Project site, including PG&E overhead power lines and AT&T telecommunication lines. The power lines cross Pleasant Valley Road at an angle at the bridge location. This crossing may need to be relocated to the east in order to construct the replacement bridge.

### ***Detour Route***

Pleasant Valley Road would be closed at the SSJID Canal to remove the existing bridge and construct the replacement bridge. A local street detour would be put in place to route local traffic around the Project site. A detour approximately 2.5 miles long would be established using the adjacent Victory Road, Lon Dale Road (SR 120) and Pioneer Road (**Figure 4**).



### Legend



Construction Zone

Detour Route



Road Closed



0 230 460 920 Feet

## **Construction Guidelines**

Construction would consist of the following activities:

- Tree removal, grubbing and clearing to accommodate the new bridge structure
- Excavating and drilling for the new bridge foundation piles and cap (maximum of 80 to 100 feet deep)
- Constructing the new bridge and approaches, including excavating for and placing asphalt concrete on each approach
- Grading work in the canal needed to remove a scour hole upstream of the bridge and sediment buildup downstream of the bridge

**Table 2** provides a description of the type of equipment likely to be used during the construction of the Project.

**Table 2. Construction Equipment**

Equipment	Construction Purpose
drill rig	construction of drilled pile foundations
backhoe	soil manipulation + pile cap excavation + drainage work
bobcat	fill distribution
bulldozer / loader	earthwork construction + clearing and grubbing
Crane	placement of precast girders
dump truck	fill material delivery
excavator	soil manipulation
front-end loader	dirt or gravel manipulation
grader	ground leveling
haul truck	earthwork construction + clearing and grubbing
roller / compactor	earthwork construction + asphalt concrete placement
truck with seed sprayer	landscaping
water truck	earthwork construction + dust control

## **Construction Schedule and Timing**

Construction is currently scheduled to start in 2018 and would take approximately 6 months to complete.

## **Surrounding Land Uses and Setting**

The Project is located in the northeastern portion of Stanislaus County, approximately 5 miles east of the town of Escalon. The general setting is rural residential and agricultural. The Project site is located on Pleasant Valley road over South San Joaquin Irrigation District (SSJID) Main Canal. The bridge crosses over the South San Joaquin Irrigation District Main Canal.

## **Permits and Approvals Needed**

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

**Table 3. Project Permits and Approvals**

Agency	Permit/Approval	Status
Caltrans/FHWA	Approval of Categorical Exclusion (CE)	Follows approval of technical studies
Central Valley Regional Water Quality Control Board	General construction activity stormwater discharge permit	File Notice of Intent and prepare Stormwater Pollution Prevention Plan (SWPP) required prior to construction

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

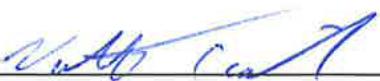
The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

### ***DETERMINATION: (To be completed by Lead Agency)***

On the basis of this initial study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

  
Signature

Nathaniel Tumminello, Project Manager

  
Date

  
Printed Name

For

# ENVIRONMENTAL CHECKLIST

## Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Aesthetics – Would the project:</b>				
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) Substantially degrade the existing visual character or quality of the site and its surroundings?	<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 daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Setting

Visual character is a description (not evaluation) of a site, and includes attributes such as form, line, color, texture. Visual quality is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape, and this analysis rates visual quality as high, moderate, or low. Visual sensitivity is the level of interest or concern that the public has for maintaining the visual quality of a particular aesthetic resource, and is a measure of how noticeable proposed changes might be in a particular scene and is based on the overall clarity, distance, and relative dominance of the proposed changes in the view, as well as the duration that a particular view could be seen.

The existing visual character of the Project site can be described as rural residential and agricultural. Land uses within the Project vicinity include agricultural and residential uses. Adjacent land uses include private residences, private agricultural fields, and the South San Joaquin Main Canal. The visual quality of the Project site is considered moderate, as it includes land uses associated with moderate visual appeal and is representative of the general visual character of the surrounding area.

Viewer groups include roadway users and residents within the vicinity of the Project site. Viewer sensitivity at the Project site is considered low for all viewer groups since aesthetic changes to the bridge as a result of the Project would be minimal.

## Discussion

- a) The Project site is located in a predominately rural residential and agricultural setting. The existing bridge crosses over the South San Joaquin Irrigation District Main Canal. The Project area is representative of the general visual character of rural Stanislaus County. Additionally, the bridge replacement Project would not change the current land uses in the area (agriculture). The replacement bridge would be constructed at the same location as the existing bridge and would

meet current applicable County, AASHTO, and Caltrans design criteria and standards. Thus, the Project would have **no impact** and no mitigation measures are required.

- b) A review of the current Caltrans Map of Designated Scenic Routes indicates that the only officially designated scenic highway located within Stanislaus County is Interstate 5 running north and south in the western portion of Stanislaus County, over 15 miles west of the Project site. The Project is not located near any officially designated or eligible scenic highways. Therefore, the Project would have **no impact** on scenic resources associated with a scenic highway or roadways and no mitigation measures are required.
- c) The visual character of the Project would be compatible with the existing visual character of the corridor. The Project would not affect the pattern elements (buildings, landscaping trees and vegetation) of the Project area. The Project would not interrupt land use diversity with addition of new land uses. The replacement bridge would be located on the same alignment as the existing bridge.

Viewer groups include motorists and adjacent residents. Viewer sensitivity to the proposed roadway changes is considered low because the bridge would have low visual dominance. Since the Project is a replacement of an existing bridge at the same alignment, there would be no permanent changes to existing views. The new bridge would include an installation of concrete channel lining in the vicinity of the replacement bridge extending 50 feet upstream, below, and 50 feet downstream of the replacement structure. Viewer groups do not have direct views of the canal bottom; therefore, these changes would not substantially degrade the existing visual character or quality of the site and its surroundings

Construction of the Project would result in temporary changes in local visual conditions, such as clearing and grading at the Project site. Any new cuts and fills would be contoured to smoothly transition into existing grades and to mimic adjacent landforms. Also, any area disturbed during construction would be revegetated with native and appropriate vegetation to minimize erosion and visual contrast with existing vegetation. Given the relatively short-term nature of these construction-related activities, construction-related visual impacts are considered **less than significant** and no mitigation measures are required.

- d) The Project site is located within a rural residential and agricultural setting where street lighting is not present. Roadway traffic and lighting from private properties are the sole sources of nighttime light at the Project site. The Project would not result in any changes that would introduce new sources of light and glare (i.e., billboards, street lamps, security lighting, etc.) to the vicinity of the Project site. Additionally, it is not the purpose of the Project to increase roadway capacity, so greater numbers of vehicles would not be introduced in this area as a result of construction of the Project. Consequently, the Project would have **no impact** and no mitigation measures are required.

## References

California Department of Transportation (Caltrans), 2011. Caltrans Map of Designated Scenic Routes. [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm). Accessed: January 2, 2018.

## Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Agricultural and Forest Resources</b> – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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 the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
<b>Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<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"/>

### **Setting**

The Project site does not include prime farmland, unique farmland, farmland of statewide importance, forest, or timberland based on review of database information available from California Department of Conservation website (CDC 2018). However, farmlands of local importance occur through the Project area. Farmland of statewide importance is located to the north and south of the Project site within the Project vicinity. There is no land zoned as forest or timberland within the Project vicinity.

### **Discussion**

- a) Agriculture is the leading industry in Stanislaus County, and Farmlands of Local Importance occur throughout the Project area. However, the Project would have no impact on or require any acquisitions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; therefore, there is **no impact** associated with the conversion or loss of those types of farmland resulting from the Project.

- b) The Project includes parcels enrolled as Prime Agricultural Land under the Williamson Act (Department of Conservation, 2011). Lands enrolled in the Williamson Act under the Prime Agricultural Land designation are lands which are enrolled under the California Land Conservation Act contract and meet any of the criteria for classification as Prime Agricultural Land, including:
1. Land which qualifies for rating as class I or class II in the Natural Resources Conservation Service land use capability classifications;
  2. Land which qualifies for rating 80 to 100 in the Storie Index Rating;
  3. Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture;
  4. Land planted with fruit or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars per acre;
  5. Land which has returned from the production of unprocessed agricultural plant production and has an annual gross value of not less than two hundred dollars per acre for three of the previous five years.

The parcel enrolled in the Williamson Act is zoned by Stanislaus County as General Agriculture and designated as farmland of local importance by the California Department of Conservation website (Stanislaus 2011; CDC 2018).

The proposed bridge replacement would result in the permanent acquisition of farmland enrolled in the Williamson Act but would result in the temporary acquisition of 0.07 acres of farmland of local importance enrolled in the Williamson Act (APN 002-015-003) for construction staging. According to The California Land Conservation Act of 1965 2016 Status Report, prime agricultural land constitutes 38.8 percent of the total Williamson Act enrollment for the County. Since the amount of enrolled farmland that would be utilized for construction staging would be minimal (limited to 0.07 acres) and would be returned to existing conditions following construction, the Project is not expected to substantially impair the ability to farm the land enrolled with the Williamson Act. Since farming practices of the enrolled parcels would not be substantially inhibited and acquisitions would be minimal (0.07 acres) and temporary (six months), the Project would have a **less-than-significant** impact with respect to zoning and Williamson Act contracts.

- c) Land uses surrounding the Project site are designated as agricultural. The Project site is not within an area zoned for forestland or timberland. There would be **no impact** and no mitigation measures are required.
- d) The Project is not located in the vicinity of any forest land. No forest conversion would occur as a result in the loss of forest land or conversion of forest land. There would be **no impact** and no mitigation measures are required.

- e) As discussed above in section a), no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are located within the Project site. The Project does not propose any new land uses and is consistent with the existing land uses at the site. The Project would impact two parcels considered Farmland of Local Importance (APN 002-0130-016 and APN 002-015-003). A total of 0.14 acres would be temporarily impacted for the staging of construction equipment and 0.04 acres would permanently be impacted to properly align private property driveways. Property owners have been notified of the Project. After completion of the NEPA clearance, all real property transactions shall comply with the property acquisition and relocation standards of the State of California, the Caltrans Relocation Assistance Program and the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and property owners shall be compensated in accordance with fair market values based on appraisals. The Project would result in **less-than-significant impacts** to the conversion of existing farmland and no mitigation measures are required.

## **References**

Caltrans, 2016, Community Impact Assessment Memo for the Pleasant Valley Road Bridge (38C-0154) Replacement Project; July, 2016.

California Department of Conservation, 2018. Farmland Mapping and Monitoring Program database [www.conservation.ca.gov/dlrp/fmmp](http://www.conservation.ca.gov/dlrp/fmmp) accessed April 5, 2018.

## Air Quality

<b>Issues (and Supporting Information Sources):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Air Quality</b> – Where 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.				
<b>Would the project:</b>				
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) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

The Project site is located in Stanislaus County within the San Joaquin Valley Air Pollution Control District (Valley Air District). The Valley Air District located in California's Central Valley. The purpose of the Valley Air District is to strategically develop plans to implement air pollution control measures in order to attain federal and state standards for ozone and fine particulate matter (PM). They have adopted an Ozone Attainment Demonstration Plan, PM<sub>10</sub> Attainment Demonstration Plan, and a PM<sub>2.5</sub> Attainment Demonstration Plan to meet requirements under the Clean Air Act. Additionally, they have also adopted an Air Quality Attainment Plan to meet California Clean Air Act requirements. Air quality is measured against both National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) to protect public health and the climate. "Attainment" status for a pollutant means that the Air District meets the standard set by the U.S. Environmental Protection Agency (federal) or California Environmental Protection Agency (state). The Valley Air District is currently in nonattainment for particulate matter (PM<sub>2.5</sub>) and ozone.

## Discussion

- a) The purpose of the Project is to replace the existing Pleasant Valley Bridge in order for the bridge to meet current structural and geometric standards while minimizing adverse impacts to the SSJID Main Canal and the surrounding area. The Project would not increase roadway capacity or service capabilities that would induce unplanned growth or remove an existing obstacle to growth. The Project is consistent with the Valley Air District's current Plan for the 2008 8-Hour Ozone Standard (2016), which takes into account vehicle-miles-travelled (VMT) in order to bring regional emissions into compliance with federal and state air quality standards.

The Project would not increase long-term traffic levels and there would be no operational impacts to air quality. Therefore, the Project would not conflict with the region's air quality management plans and would be considered a **less-than-significant impact** and no mitigation measures are required.

- b) Since the Project would not add lanes or increase capacity, it would only affect local air pollutants during construction (approximately six months). The Project would not affect long-term air pollutant emissions in the area or stationary air pollutant sources.

#### *Construction*

The primary concern to the district during construction would be PM10 emissions from dust-generating activities. During construction, the Project would minimize potential air pollutants through implementation of **Minimization Measure AIR-1**. With implementation of these required controls, PM10 impacts from construction of the Project would be **less-than-significant**.

#### *Operations*

The Project would not result in increased capacity or additional vehicle trips. The Project would not increase long-term traffic levels. There would be **no impact** to air quality under full operation of the Project and no mitigation measures are required.

- c) As discussed above under Item (b), the Project would result in minimal air pollutant emissions during the short-term duration of construction. In addition, the Project would not result in any operational activities or emissions. Therefore, with the implementation of **Minimization Measure AIR-1** the Project would not 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. Consequently, this impact would be **less-than-significant** and no mitigation measures would be required.
- d) Construction activities would occur over a brief duration within the estimated 6-month construction timeline. Residents located adjacent to the Project site and within the vicinity would be exposed to construction-related air contaminants only for the duration of construction. This brief exposure period would substantially limit exposure to hazardous emissions. This brief exposure period is less than the 2-year exposure period typically assumed for health risk analysis for small construction projects. With implementation of the minimization measures listed below, construction of the Project would not expose sensitive receptors to substantial pollutant concentrations. In addition, operation of the Project would not result in increased level of air pollutants. This impact would be **less-than-significant** with no mitigation measures required.
- e) Generally, the types of projects or activities that pose potential odor problems include refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations. The Project is a bridge replacement project that is located within a rural area and would not create objectionable odors affecting a substantial number of people. This impact would be **less-than-significant** and no mitigation measures are required.

## Avoidance and Minimization Measures

**Avoidance and Minimization Measure AIR-1:** Good housekeeping and/or work practices include but are not limited to the following will be implemented in order to minimize construction emissions:

- Application of water and/or approved chemicals to control emissions in the demolition of existing buildings or structures, construction operations, solid waste disposal operations, the grading of roads and/or the clearing of land.
- Application of asphalt, water and/or approved chemicals to road surfaces.
- Application of water and/or suitable chemicals to material stockpiles and other surfaces that may generate fugitive dust emissions.
- Paving and/or re-paving roads.
- Maintenance of roadways in a clean condition by washing with water or sweeping promptly.
- Covering or wetting material stockpiles and open-bodied trucks, trailers, or other vehicles transporting materials that may generate fugitive dust emissions when in motion.
- Installation and use of paved entry aprons or other effective cleaning techniques to remove dirt accumulating on a vehicle's wheels on haul or access roads to prevent tracking onto paved roadways.
- For process equipment, the installation and use of hoods, fans, and filters to enclose, collect, and clean the emissions prior to venting.
- Ceasing operations until fugitive emissions can be reduced and controlled.
- Using vegetation and other barriers to contain and to reduce fugitive emissions.
- Using vegetation for windbreaks.
- Instituting good housekeeping practices by regularly removing piles of material that have accumulated in work areas and/or are generated from equipment overflow.
- Maintaining reasonable vehicle speeds while driving on unpaved roads in order to minimize fugitive dust emissions.

## References

San Joaquin Valley Air Pollution Control District. *Air Quality Mitigation Strategies: Mitigation Measures*.

Accessed August, 2016 at

[http://www.valleyair.org/transportation/air\\_quality\\_mitigation\\_strategie.htm](http://www.valleyair.org/transportation/air_quality_mitigation_strategie.htm)

San Joaquin Valley Air Pollution Control District. *Particulate Matter Plans*. Accessed August, 2016 at

[http://www.valleyair.org/Air\\_Quality\\_Plans/PM\\_Plans.htm](http://www.valleyair.org/Air_Quality_Plans/PM_Plans.htm)

San Joaquin Valley Air Pollution Control District. *2016 Ozone Plan for 2008 8-Hour Ozone Standard*.

Accessed August, 2016 at [http://www.valleyair.org/Air\\_Quality\\_Plans/Ozone-Plan-2016.pdf](http://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.pdf)

## Biological Resources

<b>Issues (and Supporting Information Sources):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Biological Resources – 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

The Project is located in the northeastern part of Stanislaus County, along Pleasant Valley Road where it crosses the South San Joaquin (SSJ) Main Canal. The Project is located approximately 5 miles east of the City of Escalon. The road is used mostly by local residents. The United States Geological Survey (USGS) 7.5-minute series quadrangle map (Escalon, CA, 2012) indicates that the Project area is approximately 157 feet above mean sea level within Township 1S, Range 10E, and Section 31.

Regionally, the Project area is located in the Great Valley Ecological Section and within the Hardpan Terraces ecological subsection, an area consisting of very gently to gently sloping terraces and small areas of floodplain and alluvial fans along streams that cross from mountains to reach the Sacramento and San Joaquin Rivers. The subsection elevation range is from 100 to about 400 feet. Fluvial erosion is the main geomorphic processes. Streams in this subsection drain to the Sacramento or San Joaquin

Rivers or to closed basins in the San Joaquin Valley. All but the larger streams are generally dry during the summer. There are no lakes, but there is temporary ponding in vernal pools on Pleistocene terraces. The Hardpan Terraces is characterized by needlegrass grasslands, and northern hardpan vernal pools are common within the undeveloped grasslands. The annual average precipitation at the National Climatic Data Center Modesto City Co Airport weather station (045738) is 12.21 inches (WRCC, 2016). Precipitation occurs primarily from November through March.

### *Data Sources/Methodology*

An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, or their habitat, or sensitive habitats occurs in the Project's biological study area. Data on special-status species and habitats known in the area was obtained from state and federal agencies (CDFW, 2016; USFWS, 2016). Maps and aerial photographs of the Project area and surrounding areas were reviewed via Google Earth and historical aerial photographs. Field surveys were conducted on October 31<sup>st</sup>, 2016 to determine the habitats present.

### *Regional Species and Habitats of Concern*

Western pond turtle, burrowing owl, and Swainson's hawk are special-status species recorded within, and within the vicinity of, the Project area (Caltrans, 2016). There are no natural communities of special concern within the Project location. None of these species were observed during site surveys conducted for the Project.

### *Discussion*

- a) The Project is located in rural residential setting and while the SSJ Main Canal does have water present during certain times of the year (February 15<sup>th</sup> to October 15<sup>th</sup>), it is regulated based on irrigation demand and the lack of emergent vegetation within the channel makes it unsuitable aquatic habitat for special-status aquatic and semi-aquatic species and low quality aquatic habitat for common aquatic and semi-aquatic species. However, potential habitat for the following special status species is present within, or within the vicinity of, the Project area: western pond turtle, burrowing owl, and Swainson's hawk. In addition, habitat for bridge and tree nesting migratory bird species, which are protected under the Migratory Bird Treaty Act, was also found to be present within the Project area.

If western pond turtles are present within the work area during construction, the movement of equipment within uplands or within the canal itself and the construction of bridge structures could crush pond turtles or nests containing eggs or young.

The Project could potentially impact individual burrowing owls if they occupied the Project area prior to construction. Indirect impacts to nesting birds during construction could extend up to 500 feet from the limits of construction. Potential impacts could include abandonment of nest sites and the mortality of young. The Project could also result in a temporary loss of foraging opportunities for burrowing owl in and adjacent to the Project area during construction.

The Project could potentially impact individual Swainson's hawks if they began nesting within 0.50 miles of the Project area prior to construction. Potential impacts could include abandonment of nest sites and the mortality of young. The Project could also result in a temporary loss of foraging opportunities for Swainson's hawks in and adjacent to the Project area during construction.

These Project impacts can be avoided with surveys conducted by a qualified biologist prior to construction to assess presence/absence of these species. With the implementation of **Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4**, the Project would have a **less-than-significant impact** on special status species.

- b) The Pleasant Valley Road crosses over the SSJ Main Canal and the surrounding land use is rural residential and agricultural. There is no riparian habitat or other natural sensitive areas located in the proximity of the Project. This condition precludes the possibility of impacts, and **no impact** would occur.
- c) There are no potentially jurisdictional wetlands or waters of the U.S. in the Project area based on field surveys and information from USFWS National Wetlands Inventory database (USFWS, 2018). The SSJ Main Canal is not considered a waters of the U.S as it is a man-made irrigation canal that is not, nor was it ever a part of a natural waterway and does not have a direct hydrologic connection to a natural waterway. In addition, California Department of Fish and Wildlife does not typically take jurisdiction over man-made canals that are not, or were not part of a natural waterway at one point in time, as it does not provide value or function for fish and wildlife resources. This condition precludes the possibility of impacts, and **no impact** would occur.
- d) The SSJ Main Canal provides a very limited movement corridor through the heavily dominated agricultural areas of the Central Valley. There are a series of gate structures, located approximately 0.5 miles to 2 miles apart, along the entire length of the canal and flows are primarily determined by agricultural water demand. These features would likely discourage and inhibit the movement of special-status aquatic and semi-aquatic species, as well as many common aquatic and semi-aquatic wildlife species, dispersing back and forth between suitable habitats to the north and south of the Project area, as well as to the east and the west further upstream and downstream. Based on this, the SSJ Main Canal is unlikely to be utilized as a migration or dispersal corridor for special-status species. In addition, it is surrounded by human development and is free of emergent or aquatic vegetation thereby further discouraging the use as a movement corridor. The Project would not remove, degrade or otherwise interfere substantially with the structure or function of any wildlife movement corridors, though some temporary disruption of common wildlife movement may occur during the construction period. Therefore, there would be **less-than-significant impact** associated with the movement of species or use as a movement corridor.
- e) A total of four trees would be removed with the bridge project. A review of the Stanislaus County Code indicated that the County does not currently have a tree conservation ordinance (Stanislaus County, 2018). However, the Open Space and Conservation Element of the Stanislaus County General Plan (General Plan) calls for all discretionary projects with potential impacts to oak woodlands and native hardwood habitat to have an Oak Woodland Management Plan (2015). There are no oak woodlands or native hardwood habitats on the Project site, but one of the four trees that would be removed is an interior live oak (*Quercus wislizeni*). The Open Space and Conservation Element also provide policy guidance to address the conservation and long-range management and preservation of open-space lands and support plant and animal species, including wetland resources and special-status species. With the implementation of **Mitigation**

**Measures BIO-3, BIO-4;** there would be a **less-than-significant impact** that conflict with local policies or ordinances.

- f) The Project site is not within any known habitat conservation plan or natural community conservation plan. Stanislaus County does not currently have a habitat conservation plan or similar county-wide habitat conservation plan in place; therefore, there would be **no impact**.

### ***Mitigation Measures***

***Mitigation Measure BIO-1: Conduct Preconstruction surveys for Western pond turtles and relocate them if necessary.***

If dewatering is necessary, the construction area shall be dewatered prior to construction activities. DFW shall be notified prior to dewatering activities. No more than two weeks prior to the commencement of ground-disturbing activities, the County shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the Project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles. The results of these surveys will be documented in a technical memorandum that will be submitted to DFW (if turtles are documented).

***Mitigation Measure BIO-2: Conduct a Preconstruction Raptor Survey and Nesting Migratory Bird and Establish No-disturbance Buffers, if Necessary***

#### **Burrowing Owls**

Surveys shall be conducted by a qualified biologist to determine presence/absence of burrowing owls and/or occupied burrows in and within 500 feet of the BSA according to the DFW's Staff Report on Burrowing Owls (DFW 2012). A winter survey will be conducted between December 1 and January 31 and a nesting survey will be conducted between April 15 and July 15. Preconstruction surveys will also be conducted within 30 days prior to construction to ensure that no additional burrowing owls have established territories since the initial surveys. If no burrowing owls are found during any of the surveys, no further mitigation will be necessary. If burrowing owls are found, then the following measures shall be implemented prior to the commencement of construction:

- During the non-breeding season (September 1 through January 31) burrowing owls occupying the Project area should be evicted by passive relocation as described in DFW's Staff Report on Burrowing Owls (March 2012).
- During the breeding season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a 250 ft protective buffer unless a qualified biologist approved by DFW verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.

**Swainson's Hawk**

Prior to construction, surveys will be conducted by a qualified biologist to determine presence/absence of nesting Swainson's hawk in and within 0.50 miles of the Project area according to the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). If no Swainson's hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson's hawk nests are found, DFW will be consulted regarding measures to reduce the likelihood of forced fledging of young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a no-work zone around the nest until the young have fledged as determined by a qualified biologist.

**Bridge and Tree Migratory Nesting Bird Species**

The removal of trees will be conducted to avoid the migratory bird nesting season (February 1–August 31). In addition, to ensure there are no effects on nesting birds, a qualified biologist will conduct preconstruction tree surveys of the trees to be removed, and within 500 feet of the Project construction area. Survey work will be done no more than 2 days prior to initiation of tree removal to minimize the potential that nests are initiated after the survey and prior to removal. If any occupied nests are detected the tree will be flagged, a minimum buffer of 100 feet between the nest and construction zone will be established, and that area will be avoided until the qualified biologist has determined the nest is no longer occupied/active. Once the biologist has determined that young have fledged and the nest is no longer active, the flagged tree can be removed.

The preconstruction tree surveys will include evaluation of other trees in the construction zone and within 500 feet of the construction zone to determine if nests are in nearby trees that would not need to be removed. If nesting migratory birds are discovered in the construction area, then construction in the immediate vicinity of those trees should be delayed to avoid the nesting season (February 1–August 31). If construction activities cannot avoid the nesting season, then any trees with nests should be flagged, a minimum 100-foot buffer established between the nest and construction zone, and avoidance of the area until a qualified biologist has determined the young have fledged and the nest is no longer occupied. Once the nest is no longer active, construction in the immediate vicinity of that tree can be resumed.

If no active nests are identified during the preconstruction survey, no further mitigation is necessary. If construction activities (i.e. vegetation and tree removal) are scheduled to begin during the non-breeding season (September–January), preconstruction surveys would not be necessary.

***Mitigation Measure BIO-3: Return Temporarily Disturbed Areas to Pre-Project Conditions***

All temporarily disturbed areas will be returned to pre-Project conditions upon completion of construction. These areas will be properly protected from washout and erosion using appropriate erosion control devices including coir netting, hydroseeding, and revegetation.

***Mitigation Measure BIO-4: Replace Removed Trees with Native Species***

The tree replacement proposed as part of the Project would result in planting species that are better suited to the urban corridor as far as size (i.e., appropriate for planting relative to overhead and buried utility lines and near buildings) and resistance to disease (i.e., elm disease). In addition, as recommended by the County's Code, planting in correctly spaced and designed tree planters with

automatic irrigation would improve the survivability of the trees thereby providing an improved environmental and urban landscape condition in the corridor.

## **References**

Caltrans, 2016. Natural Environmental Study for the Pleasant Valley Road Bridge (38C-0154) Replacement Project; November 2016.

Stanislaus Count, 2015. Stanislaus County General Plan. Available at: <http://www.stancounty.com/planning/pl/general-plan.shtml>. Accessed: April 11, 2018.

Stanislaus County, 2018. Stanislaus County Zoning Code. Available at: <https://qcode.us/codes/stanislauscounty/>. Accessed: April 11, 2018.

California Department of Fish and Wildlife (CDFW), 2016. California Natural Diversity Database. Accessed on August 23, 2016.

United States Fish and Wildlife Service (USFWS), 2016. Information for Planning and Conservation (Ipac) database. Accessed on August 23, 2016.

United States Fish and Wildlife Service, 2017. National Wetlands Inventory. Available at: <https://www.fws.gov/wetlands/data/mapper.html>. Accessed on: April 11, 2018.

## Cultural Resources

<b>Issues (and Supporting Information Sources):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Cultural Resources – Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Setting

PAR Environmental Services, Inc. (PAR) conducted a cultural resources investigation for the Project which included a records search at the California Historical Resources Information System (CHRIS), background research, Native American consultation, and pedestrian surveys. Additionally, geotechnical core samples were examined for cultural materials. No cultural materials were identified.

Surveys of the Project site were conducted on April 27, 2016 by PAR staff Andrea E. Maniery (Associate Archaeologist II) and Sarah Heffner (Senior Historical Archaeologist), and on May 25, 2016 by Cindy Baker (Senior Architectural Historian). The surveys included the inspection of four private residences within the APE, the Pleasant Valley Road Bridge, an unnamed irrigation district, and the South San Joaquin Irrigation District (SSJID) Main Canal.

The four private residences within the APE did not meet the criteria for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR), as they lack sufficient historical significance and integrity. These four residences did not meet criteria to be considered historical resources for the purposes of CEQA. The Pleasant Valley Road Bridge has been previously evaluated by Caltrans and found ineligible for inclusion in the NRHP (Category 5). Today the bridge is not associated with the SSJID as it was built by the County in 1964 and is a replacement of the original bridge constructed by the SSJID in 1913. The unnamed irrigation ditch is also an exempt property under Attachment 4 of the Section 106 PA as Property Type 1 secondary agricultural ditch.

An approximately 360-foot-long segment of the SSJID Main Canal is within the APE. While a second segment of this canal at River Road near Riverbank, California, was determined to be ineligible for inclusion in the NRHP in 2001, the canal system as a whole is assumed eligible under Criterion A for the purposes of this Project. A third segment near Escalon was also evaluated in 2001 as possibly eligible for the NRHP as a contributor to the potential canal system district, should it be evaluated as a whole in the future. The segment of the canal within the Project area is considered to be a contributing element to the system, for the purposes of this Project, under Criterion A for its association with water development in central Sacramento Valley.

In order to establish public outreach and to inquire about the local history of the Project area, relevant preservation groups were contacted regarding the Project. The Oakdale Museum, McHenry Museum & Stanislaus County Historical Society were contacted for input on the Project. Letters were mailed on May 16, 2016, with follow up phone calls. Barbara Torres and Clarice Partridge at the Oakdale Museum conducted research in their archives and reported there were no known historic buildings in that area. They were also called on May 26 with follow-up questions. They also referred Glenn and Laura Burghardt, historians living in the Valley Home area. The Burghardts were contacted for input on the Project. Glenn Burghardt was reached by phone on May 18, 2016 and provided information about the Project vicinity, including the properties within the Project area. None of the respondents expressed concerns on potential impacts to any of the resources in the Project area. They do not consider the residential properties, canal or the bridge to be important historic resources. The Stanislaus County Historical Society board of directors and Laura Mesa, McHenry Museum staff, were also contacted by mail and later by phone. No concerns were expressed.

### ***Discussion***

- a) The Pleasant Valley Road Bridge has been previously determined not eligible for listing on the NRHP. Based on the current evaluation, it remains not eligible for listing on the CRHR, nor is it considered an historical resource for the purposes of CEQA. The properties at 4318 Pleasant Valley Road, 4349 Pleasant Valley Road, 11501 Pioneer Avenue and 11419 Pioneer Avenue do not meet the criteria for listing in the NRHP, as they lack sufficient historic significance and integrity. They do not appear to meet the criteria for listing in the CRHR and are not considered historical resources for the purposes of CEQA.

The SSJID System and Main Canal have previously been determined as eligible for listing on the NRHP. Based on current evaluation, they are also eligible for listing on the CRHR and are considered historical resources for purposes of CEQA. As an intact element constructed during the period of significance for both the Main Canal and the SSJID system in general, the segment of the Main Canal in the Project area is considered a contributing element to the SSJID.

The Project consists of replacing the existing Pleasant Valley Road Bridge in place. Construction of the Project would have unavoidable impact to the SSJID System and Main Canal as the existing and proposed bridge abutments and piers are located within the canal. Caltrans District 10 archeologists has determined that a Finding of No Adverse Effect is appropriate for this Project as the Project would not influence the eligibility of the resource for listing on the NRHP. The Project would also have a **less-than-significant impact** on the integrity of the resource according to CEQA as the Project would construct the new bridge along the same alignment as the existing bridge, resulting in minimal impacts to the resource.

- b) Background research and field surveys did not reveal any archaeological resources in the Project area. Although no cultural resources (as defined by CEQA) have been documented on the Project site, a potential exists for unrecorded cultural resources. No subsurface testing has been conducted at the Project site and cultural resources may be buried under deposition and not be observable on the surface. Therefore, the potential exists for buried cultural resources to be unearthed or otherwise discovered at the Project site during ground-disturbing and construction activities. Compliance with California Public Resources Code Sections 5097.5, 5097.9 et seq. and

inclusion of **Mitigation Measure CUL-1** would ensure any potential impacts on buried or previously undiscovered historical resources are **less than significant**

- c) Paleontological resources are the fossilized evidence of organisms preserved in the geologic (rock) record. The potential paleontological importance of the Project site can be assessed by identifying the rock units within the Project site and if any of the units are over 10,000 years old. An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets at least one of the following criteria:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage,
- a skeletal element different from, or a specimen more complete than, those now available for its species,
- a complete specimen; or
- at least 10,000 years or older.

A search of the University of California Museum of Paleontology (UCMP) collections database identified 1657 fossil occurrences in the County (Museum of Paleontology, 2017). The fossils located in the County are from the Miocene and Pliocene epoch (approximately 23 to 5.3 million years ago) and include fossilized plants, primarily in the class of *Magnoliopsida*, located in the Oakdale and Turlock Lake area. No vertebrate fossils have been documented in the County. Jennings et. al (1977) mapped 100 percent of the Project area within Pliocene to Holocene-age alluvium and marine deposits (5.3 million to present).

As a result, the Project has a moderate potential to affect important or unique paleontological resources. Implantation of **Mitigation Measure CUL-1** would result in a **less-than-significant impact** on paleontological resources.

- d) Based on the prehistoric and historic uses of the area and the current disturbed nature of the Project area, human remains are not expected to be exposed by Project related ground-disturbing activities. In the event that human remains are discovered during construction activities, implementation of **Mitigation Measure CUL-2** would reduce the impact to **less than significant**.

### ***Mitigation Measures***

**Mitigation Measure CUL-1: Discovery of Cultural or Paleontological Resources during Ground-Disturbing Activities.** If cultural or paleontological resources are discovered during ground-disturbing activities, all activity in the vicinity shall cease until the discovery is evaluated by an archaeologist or paleontologist working under the direction of a Principal Investigator who meets the requirements of the Secretary of the Interior's Qualification Standards. If the archaeologist/paleontologist determines that the resources may be significant, no further work in the vicinity of the resources shall take place until appropriate treatment is determined and implemented.

The need for archaeological and Native American monitoring during the remainder of the Project will be re-evaluated by the archaeologist as part of the treatment determination. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.

In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, the Project proponent will determine whether avoidance is necessary and feasible in

light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.

**Mitigation Measure CUL-2: Halt Work if Human Skeletal Remains are Identified during Construction.** If human skeletal remains are uncovered during Project construction, work must immediately halt and the Stanislaus County Coroner must be contacted to evaluate the remains; the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines must be followed. If the County Coroner determines that the remains are Native American, coroner will contact the Native American Heritage Commission (NAHC), in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC will notify and appoint a Most Likely Descendent (MLD). The MLD will work with a qualified archaeologist and County to decide the proper treatment of the human remains and any associated funerary objects.

### ***References***

- Caltrans, 2017a. Historical Property Survey Report for the Pleasant Valley Road Over South San Joaquin Main Canal Bridge (38C-0154) Replacement Project; August 2017.
- Caltrans, 2017b. Historical Resources Evaluation Report for the Pleasant Valley Road Over South San Joaquin Main Canal Bridge (38C-0154) Replacement Project; August 2017.
- Jennings, C.W., Strand, R.G., and Rogers, T.H., 1977, Geologic map of California: California Division of Mines and Geology, scale 1:750,000.

## Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Geology, Soils and Seismicity –Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial 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 where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Setting***

The Project is located in the San Joaquin Valley which is within the Great Central Valley geomorphic province. This geomorphic province is generally seismically inactive, with most active faults to the east in the Coast Ranges or to the west in the Sierra Nevada Mountains. Faults with the potential to cause earthquakes are mapped in the County, but are located along the western boundary approximately 35 miles west of the Project site. However, the Project area could experience ground shaking from regionally active faults. The nearest mapped fault is the Negro Jack Point fault line which is located approximately 20 miles east of the Project site.

The Soil Survey Geographic Database (SSURGO) was accessed to determine the soil types in the Project site. Four soil types, Columbia, Cogna, Pentz, and Pardee, are on the Project area. These soils are very deep, poorly to well-drained sandy and gravelly loams.

## Discussion

a.i-a.iv) The area surrounding the Project site is composed of rural residential and agricultural lands. According to the United States Geological Survey (USGS) Earthquake Hazards Program (2006), the nearest fault is the Negro Jack Point fault line located approximately 20 miles east of the Project site. According to the Department of Conservation, the Project site is not located within a regulatory Alquist-Priolo Earthquake Fault Zone.

Liquefaction of granular soils can be caused by strong vibratory motion due to earthquakes. Soils that are highly susceptible to liquefaction are medium- to fine-grained, loose, granular and saturated at depths of less than 50 feet below the ground surface. Liquefaction of soils causes surface distress, loss of bearing capacity, and settlement of structures that are founded on the soils. According to the United States Department of Agriculture (USDA) Soil Conservation Service, there are four soil types in the Project area. **Table 4** summarizes the characteristics of the soils.

**Table 4. Soil Types**

Soil	Hydrologic Group	Drainage Class	Hydric Status
Columbia	B	Somewhat poorly drained	Partially hydric
Cogna	B	Well drained	Partially hydric
Pentz	D	Well drained	Partially hydric
Pardee	D	Well drained	Unknown

These soils are poorly to well-drained sandy and gravelly loams. The soils do not present the characteristics that would make them highly susceptible to liquefaction as they are not fine-grained, loose soils that are saturated at shallow depths. Thus, the Project site has very low liquefaction susceptibility.

According to the Department of Conservation CGS Information Warehouse, landslides do not occur near the Project. The probability of landslides occurring on the Project site is very low due to the relatively flat topography of the Project vicinity.

The Project is a bridge replacement and would not expose additional people or structures to substantial adverse effects. The new bridge would comply with the 2016 California Building Code, which would minimize the potential effects of ground shaking. This impact would be considered **less-than-significant**.

- b) The Project involves removing the existing bridge and constructing a new bridge over the South San Joaquin Irrigation District Main Canal. Construction activities would involve earth moving activities. Construction activities involving soil disturbance, excavation, cutting/filling, demolition, paving, and grading activities have the potential for surface water runoff to carry sediment. Potential erosion impacts from construction activities would be **less-than-significant**.
- c) According to the Department of Conservation CGS Information Warehouse, very few landslides occur in the vicinity of the Project. The probability of landslides occurring on the Project site is very low due to the relatively flat topography of the Project vicinity. The Project site does not have loose sandy soil, nor does it contain soils that would be susceptible to lateral spreading, liquefaction, or collapse. With adherence to all applicable codes and regulations, including the

2016 California Building Code, the Project's impacts associated with on-or off-site landslide would be minimized. The impact would be considered to be **less than-significant**.

- d) Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). The extent of shrinking and swelling is influenced by the environment, including the extent of wet or dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls. The Project site consists of the four soil types discussed in **Table 4**, all of which do not consist of predominantly clay textures. The proposed bridge replacement Project would not expose life or properties to adverse effects associated with expansive soil. The impact would be considered to be **less-than-significant**.
- e) The Project does not involve the connection to septic tanks as part of the Project; therefore, there would be **no impact**.

## **References**

Department of Conservation. CGS Information Warehouse: Landslides. Accessed January 2018 at <http://maps.conservation.ca.gov/cgs/informationwarehouse/>

State of California. Alquist-Priolo Earthquake Fault Zoning Map; 2007.

<http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>. Accessed January, 2018.

United States Department of Agriculture (USDA) Soil Conservation Service. 2017. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed January, 2018.

U.S. Geological Survey and California Geological Survey, 2006. Quaternary fault and fold database for the United States. <http://earthquakes.usgs.gov/regional/qfaults/>. Accessed January, 2018.

## Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Greenhouse Gas Emissions –Would the project:</b>				
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"/>

### ***Setting***

California's primary legislation for reducing greenhouse gas emission is the California Global Warming Solutions Act (Assembly Bill [AB] 32). Stanislaus County adopted their Climate Action Plan in December 2013.

### ***Discussion***

- a, b) The County is currently designated as a nonattainment area for PM2.5 and ozone. The purpose of the Project is to replace the existing bridge along Pleasant Valley Road as it has reached the end of its design life and has multiple structural deficiencies. The replacement bridge would be of the same size and scale as the existing structure, and would be placed along the same alignment. As the Project would not include additional through lanes, the Project would not increase roadway facilities or service capabilities that would induce unplanned growth or remove an existing obstacle to growth. Consequently, the proposed construction Project is considered small, short-term in nature and would not generate substantial air quality (including greenhouse gas emission) pollutant concentrations as discussed under the Air Quality section. Since the purpose of the Project is to reduce long-term traffic congestion, there would be no operational impacts associated with greenhouse gas emissions. Impacts would be considered **less-than-significant**.

## Energy

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Energy –Would the project:</b>				
a) Result in a substantial increase in overall or per capita energy consumption?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in wasteful or unnecessary consumption of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new sources of energy supplies or additional energy infrastructure capacity the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Conflict with applicable energy efficiency policies or standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Setting

Transportation-related activities account for approximately half of all the petroleum products consumed in California (Department of Energy, Petroleum Profile, 2000). While state and federal policies, such as the California Low-Emission Vehicle Program and the Federal Energy Policy Act of 1992, are increasing the use of alternative-fuel and low-emission vehicles, the consumption of non-renewable resources, such as fossil-fuels, remains high and points to the need to conserve such energy resources. Both the National Environmental Policy Act (NEPA) [Section 102(2)] and the California Environmental Quality Act (CEQA) Guidelines (Appendix F) require the identification of potentially substantial (significant) energy impacts.

## Discussion

- a-d) The Project would result in temporary use of energy as fuels for construction equipment. Construction activities are estimated to last approximately six months. The Project is required to provide safe vehicle access to the bridge and provide a new structure that would meet current design standards. The Project is not associated with the development of land uses (i.e., residential, commercial, etc.) that would increase the demand for local or regional sources of energy. The use of energy for the construction of the Project is minimal and would not require the construction of new sources of energy or energy infrastructure for implementation of the Project. The Project would also not conflict with any energy efficiency policies or standards. The impact to energy resources would be considered **less-than-significant**.

## Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Hazards and Hazardous Materials –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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### ***Setting***

An Initial Site Assessment (ISA) was prepared for the Project and completed in October 2016. The ISA was performed in general conformance with the scope and limitations of ASTM Practice E 1527-05. No Recognized Environmental Conditions, as defined in ASTM Practice E 1527-05, were observed during a site visit on March 10, 2016 or by the Environmental Database Resources record search in connection with the Project site.

### *Asbestos and Lead*

Potential asbestos containing materials (ACMs) were not observed on the Project site during the reconnaissance survey; however, the existing bridge does have areas on the bridge rails that are potentially painted with lead based paint (LBP). In addition, presence of potential ACMs or LBP within the existing bridge structure is unknown. ACMs have been documented in the rail shim sheet packing, bearing pads, support piers, and expansion joint material of bridges. The Caltrans Historic Bridge Inventory indicates that the Pleasant Valley Road Bridge was built in 1964. Therefore, based on the age of the structure, the existing bridge may contain ACMs. The Pleasant Valley Road Bridge is not painted (i.e., it is a concrete bridge) however it does have painted wooden bridge rails indicating the potential for lead based paint (LBP).

### **Discussion**

- a) Construction of the Project would potentially require the use of various types and quantities of hazardous materials. Hazardous materials that are typically used during construction include, but are not limited to, hydraulic oil, diesel fuel, grease, lubricants, solvents, and adhesives. Although equipment used during construction activities could contain various hazardous materials, these materials would be used in accordance with the manufacturers specifications and all applicable regulations. Operation of the Project would not involve the routine storage or use of hazardous materials. Impacts resulting from the transport, use or disposal of hazardous materials during construction and operation of the Project would be **less-than-significant**.
- b) As stated above, if implemented, the Project has the potential to use a variety of hazardous materials. These materials would be stored, handled, and transported per federal, state, and local regulatory requirements. Additionally, an ISA was prepared to support this environmental document. Avoidance, minimization, and/or mitigation measures are proposed as part of the Project for potential ACMs and LBP that may be present at the Project site.

**Asbestos:** New uses of Asbestos Containing Materials (ACMs) were banned by the Environmental Protection Agency (EPA) in 1989. Revisions to regulations issued by Occupational Safety and Health Act (OSHA) on June 30, 1995 require that all thermal systems insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered Presumed Asbestos Containing Materials (PAC) and treated accordingly. In order to rebut the designation as PAC, OSHA requires that these materials be surveyed, sampled, and assessed in accordance with 40 CFR 763 (Asbestos Hazard Emergency Response Act [AHERA]). ACMs have also been documented in the rail shim sheet packing, bearing pads, support piers, and expansion joint material of bridges. The Caltrans Historic Bridge Inventory indicates that the Pleasant Valley Road Bridge was built in 1964. Therefore, based on the age of the structure, the existing bridge may contain ACMs. Demolition and bridge removal, could expose the contractor and nearby residents to inhalable asbestos and is considered a significant impact requiring mitigation.

**Lead:** Lead has been used in commercial, residential, roadway, and ceramic paint; in electric batteries and other devices; as a gasoline additive; for weighting; in gunshot; and other purposes. It is recognized as toxic to human health and the environment and is widely regulated in the United States. Structures constructed prior to 1978 are presumed to contain lead-based paint unless proven otherwise, although buildings constructed after 1978 may also contain lead-

based paints. Due to the age of the existing structure, painted areas on the existing bridge structure may also be of concern due to the possible use of lead-based paint. Additionally, pavement striping and thermoplastic paint used on roadways often contain lead.

During construction, any existing hazardous materials that may be encountered would pose a hazard for construction workers and the environment and is considered a significant impact. Construction workers typically are at the greatest risk for exposure to contaminated soil. Accidents or spills during transport of hazardous materials or wastes could have the potential to expose the public and the environment to these substances.

Implementation of **Mitigation Measures HAZ-1, HAZ-2, and HAZ-3** would be required to ensure there would not be 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 and reduce the impact to a **less-than-significant** level.

- c) There are no schools within one-quarter mile radius of the Project site. Therefore, there would be **no impact**.
- d) A computerized environmental information database search was performed for the Project site by EDR on May 5, 2016 (EDR, 2016). The databases searched included federal, state, local, and tribal databases as defined by ASTM E 1527-05, plus proprietary databases maintained by EDR. All available listings/databases were searched for sites located within a one-mile radius of the Project site. The search radius distances are based on the minimum distances established by ASTM and commonly used for environmental site assessments Explanations of the federal and state listings/databases are provided in the portion of the EDR report entitled "Description of Databases Searched".

The report indicated that the land use within the Project area has historically been used for rural residential and agricultural uses. No recognized environmental conditions (RECs) were discovered as a result of the database search. After careful review of all readily available information on potentially hazardous sites pursuant to Government Code Section 65962.5 in the Project area, it can be concluded that no known sites in the Project vicinity pose a significant danger to the Project. There are no known sites in proximity to the Project and therefore contamination of soil and groundwater from RECs is not expected. The Project is a bridge replacement project and construction activities would predominately remain within the existing right-of-way along Pleasant Valley Road. No grading or excavating would occur near any underground storage sites. There would be a **less-than-significant** impact to the public or the environment from known sites being disturbed by the Project.

- e) The nearest airport to the Project site is the Oakdale Airport located approximately 7 miles southeast of the Project site. Oakdale Airport is a County-owned, public facility located three miles southeast of the central business district of Oakdale. The Project site is not located within an adopted airport land use plan. There would be **no impact**.
- f) The Project site is not located within the vicinity of a private airstrip. There would be **no impact**.

- g) The Project would require removal of the existing bridge and construction of a new bridge. Pleasant Valley Road would be closed during construction of the Project. A local street detour would be put in place to route local traffic around the Project site. A detour approximately 2.5 miles long would be established using the adjacent Victory Road, Lon Dale Road (SR 120) and Pioneer Road. Due to the closure of Pleasant Valley Road during construction, access to the Project vicinity would only be accessible to local residents and emergency vehicles. The Project may temporarily interfere with emergency access or response in the vicinity of the Project site. With implementation of **Mitigation Measure TRAF-1**, discussed later in the Transportation and Traffic section of this document, this impact would be **less-than-significant**.
- h) The area surrounding the Project site contains agricultural grazing land with scattered rural residences that are susceptible to fire damage. The Project is a bridge replacement that would not expose additional people or structures to the threat of fire. There would a **less-than-significant impact** associated with wildland fire threat.

### ***Mitigation Measures***

**Mitigation Measure HAZ-1: ACM.** For ACMs, the contractor will conduct National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance testing as part of the Project startup. During construction, building materials associated with ACMs will be abated by a California Licensed abatement contractor and disposed of as a hazardous waste.

**Mitigation Measure HAZ-2: LBP.** During construction, building materials associated with the pavement striping yellow paint and painted areas on the existing bridge structure will be abated by a California Licensed abatement contractor and disposed of as a hazardous waste.

**Mitigation Measure HAZ-3: Development of a Health and Safety Plan (HASP).** A HASP shall be developed for the Project. The HASP shall describe appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances shall be tested, handled and disposed of in accordance with appropriate federal, state and local regulations.

**Mitigation Measure TRAF-1:** Please refer to the Transportation and Traffic section.

### ***References***

Caltrans 2015. Pleasant Valley Road Bridge Replacement Project Initial Site Assessment. October 2016.

## Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Hydrology and Water Quality – Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Setting

The Project site is located in the central portion of the Great Valley, an area with very gently to gently sloping floodplains and alluvial fans along and between streams that cross from mountains of the Sierra to reach the San Joaquin River. The Project site is located on the agriculturally-dominated floor of the Central Valley, approximately 5 miles east of the City of Escalon. The topography of the area is generally flat. Elevations within the Project site range from 155 to 162 feet above mean seal level. The closest water body that could be impacted by construction is the SSJ Main Canal.

The SSJ Main Canal is within the Middle San Joaquin-Lower Merced-Lower Stanislaus watershed. The Middle San Joaquin-Lower Merced-Lower Stanislaus watershed covers approximately 1,837 square miles including Merced County and portions of Calaveras, Mariposa, San Joaquin, Stanislaus, and Tuolumne Counties. The Middle San Joaquin-Lower Merced-Lower Stanislaus watershed is a subarea of the Lower San Joaquin River (LSJR) watershed which is divided into seven major subareas and nine minor subareas. The LSJR eventually drains into the San Francisco Bay-Delta.

The SSJ Main Canal, which flows generally in a westerly direction, terminates within the City of Ripon. It is a man-made, earth-lined irrigation canal where the flows are controlled by gates and irrigation demand thereby providing marginal habitat value to common aquatic and semi-aquatic species. The banks are earth and vegetated with typical non-native annual grassland species similar to those within the agriculture and ruderal habitats, described above. The irrigation season for the SSJ Main Canal is from February 15th to October 15th of each year however there could be a week or two variance on each end of the season depending on irrigation demands and weather. The canal can go dry in the off irrigation season months (October 15th to February 15th), but there could be up to as much as 500 cfs flow from local storm water drainage.

## Discussion

- a) Construction activities involving soil disturbance, excavation, cutting/filling, demolition, paving, and grading activities have the potential for surface water runoff to carry sediment and pollutants into storm water drainage systems and local waterways. Construction materials such as asphalt, concrete, and equipment fluids could be exposed to precipitation and subsequent runoff. Chemicals such as gasoline, diesel fuel, oil, grease, heavy metals, paints, solvents, and other substances could be used during construction. If precautions are not taken to contain contaminants, construction activities could contribute to the degradation of water quality in the area.

Construction of the entire Project is anticipated to take approximately six months. The Project is subject to Construction General Permit (Order No. 2009-0009-DWQ [as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ]) requirements, which requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The Project would comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit including preparing and implementing a SWPPP that identifies Project specific Best Management Practices (BMPs) to protect water quality during Project construction. These BMPs must meet the technical standards established by the permit related to conventional (e.g., sediment) and non-conventional (e.g., toxics) pollutants and must be designed and implemented to ensure the Project does not cause or contribute to a violation of water quality standards. The Caltrans Storm Water Quality Handbook has published a set of BMPs, which the

Project must utilize in drafting the SWPPP<sup>1</sup>. Through compliance with the NPDES program requirements and implementation of a SWPPP, water quality standards would not be violated during Project construction. Implementation of these measures would reduce this impact to **less than significant**.

- b) The Project site is not actively used for groundwater recharge. The Project would not construct a significant amount of new impervious surfaces that would impede surface water drainage into the soil. This impact would be **less than significant**.
- c) Implementation of the proposed bridge replacement would not substantially modify the existing drainage pattern of the site. Within the Project site, the terrain is relatively flat and existing drainage patterns are not well defined. The Project incorporates a combination of shallow roadside ditches and improvements to infiltrations rates along Pleasant Valley Road to address existing drainage deficiencies. Vehicles traveling on Pleasant Valley Road and urban land uses would remain the primary sources of water pollutants at the Project site. The Project would not change the number of vehicles traveling on Pleasant Valley Road or other nearby land uses in the watershed. The potential impact of increasing surface water runoff would be **less than significant**.
- d) The Project is replacing an existing bridge with one of similar size and scale. Flooding is evident along the adjacent private properties, especially at the northeast corner of the bridge. The existing road profile through the Project site and canal levees are higher than the grades of the surrounding properties. As a result, the existing roadway storm runoff is draining directly onto the adjacent private properties and ponding. Construction activities could potentially expose soils and result in substantial erosion. However, as mentioned above, the Project is subject to acquire a Construction General Permit and implement a SWPPP. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The purpose of the SWPPP is to identify the sources of sediment and other pollutants that could affect the quality of storm water discharges and to ensure the implementation of BMPs. BMPs are used to reduce or eliminate sediment and other pollutants being discharged into waterways from construction activities. Implementation of these measures would reduce this impact to **less-than-significant**.
- e) Large pieces of construction equipment may compress soil within the Project work area, which could lead to a reduction in permeability and an increase in site runoff. However, this would not result in substantial alteration of site runoff or discharge, particularly due to the short construction period of six months. The Project would not result in substantial additional surface water runoff. The potential impact would be **less-than-significant**.
- f) Implementation of the proposed bridge replacement would not substantially modify the character of the Project site in terms of sources of water pollutants. Implementation of BMPs as required under the Construction General Permit would reduce impact to **less-than-significant**.

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<sup>1</sup> California Department of Transportation (Caltrans). 2003. Storm Water Quality Handbooks: Construction Site Best Management Practices (BMPs) Manual.

- g) The Project does not include housing, and therefore would not expose people or structures to flooding risk. This condition precludes the possibility of placement of housing within a 100-year flood hazard area. **No impacts** would occur.
- h) The proposed bridge would not impede or redirect flood flows. According to the California Department of Water Resources Flood Management, the Project is located outside of a 100-year flood hazard area. This condition precludes the possibility of placing structures within a 100-year flood hazard area that may impede flood flows. **No impact** would occur.
- i) The Project is not located within an area protected by a levee. This condition precludes the possibility of inundation of flooding as a result of levee or dam failure. **No impacts** would occur.
- j) According to the Department of Conservation California Geologic Survey Information Warehouse: Tsunami, the Project is not located within a tsunami evacuation zone. The Project site is not located near any large inland bodies of water; this condition precludes the possibility of a sieche. There are no active volcanic features or steep slopes in the Project vicinity; this condition precludes the possibility of mudflows. The Project would not influence the potential for inundation by seiche, tsunami, or mudflow and would result in **no impact**.

## **References**

Caltrans. 2016. Water Quality Technical Memorandum for the Pleasant Valley Road Bridge Replacement Project.

California Department of Water Resources. 2016. Flood Management: Stanislaus County.  
[http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fes/awareness\\_floodplain\\_maps/stanislaus/](http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fes/awareness_floodplain_maps/stanislaus/). Accessed January 2018.

Department of Conservation CGS Information Warehouse: Tsunami.  
<http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed January 2018.

## Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Land Use and Land Use Planning – Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Setting***

The Project is located in unincorporated Stanislaus County, and is under the jurisdiction of the General Plan and the Stanislaus County Zoning Code. Regional plans developed and administered by the Stanislaus County of Governments (StanCOG) are also applicable to the Project site. The Project is not within the jurisdiction of any specific plans within the County, and there are no local coastal programs, habitat conservation plans, or natural community conservation plans that have jurisdiction over the Project vicinity. There are no land use master plans that have jurisdiction and are applicable to the Project site.

### ***Discussion***

- a) The Project would consist of the replacement of the existing bridge along Pleasant Valley Road over the South San Joaquin Main Canal. The Project would be consistent with existing land uses and would not divide an established community. There would **no impact**.
- b) The new bridge would not interfere with the activity associated with the surrounding residential and agricultural land uses. The Project does not propose any new land uses for the Project site and would result operation pf the new bridge would resemble existing conditions. Additionally, the Project would not conflict with any applicable land use plan, policy, or regulations. **No impact** would occur.
- c) The Project site is not within the jurisdiction of an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, Project implementation would not conflict with the provisions of an approved local, regional, or state habitat conservation plan. **No impact** would occur.

### ***References***

Stanislaus County. 2015. Stanislaus County General Plan.

Stanislaus County. 2017. Stanislaus County Zoning Code.

## Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Mineral Resources – Would the project:</b>				
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"/>

### ***Setting***

According to the California Department of Conservation, there are areas within Stanislaus County that contain known significant mineral deposits (MRZ-2a). These deposits are mostly composed of aggregate minerals which are commonly used resources for development and concrete production. The Project site is not located in an area of Stanislaus County that has been determined to contain or potentially contain significant mineral deposits.

### ***Discussion***

- a) The Project is a bridge replacement project that would remove the existing bridge along Pleasant Valley Road and construct a new bridge along the same alignment. Construction activities would be temporary and operation of the Project would not conflict with or limit access to mineral resources. There would be **no impact**.
- b) The Project area is located in a rural residential agricultural area. The Project is not located near a mineral resource recovery site delineated on any local general plan, specific plan or other land use plan. There would be **no impact**.

### ***References***

California Department of Conservation. 2015. Mineral Land Classification. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>. Accessed: January 3, 2018.

## Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Noise – Would the project:</b>				
a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, 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"/>

## Setting

Noise is defined as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. A frequency weighting measure that simulates human perception is commonly used to describe noise environments and to assess impacts on noise-sensitive areas. It has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. The decibel notation used for sound levels describes a logarithmic relationship of acoustical energy, for example, a doubling of acoustical energy results in an increase of three dB, which is considered barely perceptible. A 10-fold increase in acoustical energy equals a ten dB change, which is subjectively like a doubling of loudness. **Table 5, Typical Noise Levels**, identifies decibel levels for common sounds heard in the environment.

**Table 5. Typical Noise Levels**

Common Outdoor Activity	Noise Level (dBA)	Common Indoor Activity
Jet flyover at 1,000 feet	110	Rock band
Gas lawnmower at 3 feet	100	
Diesel truck at 50 feet at 50 mph	90	Food blender at 3 feet
Noisy urban area, daytime	80	Garbage disposal at 3 feet
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	Large business office
Quiet urban daytime	50	Dishwasher next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
Quiet rural nighttime	30	Library
	20	Bedroom at night, concert hall (background)
	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

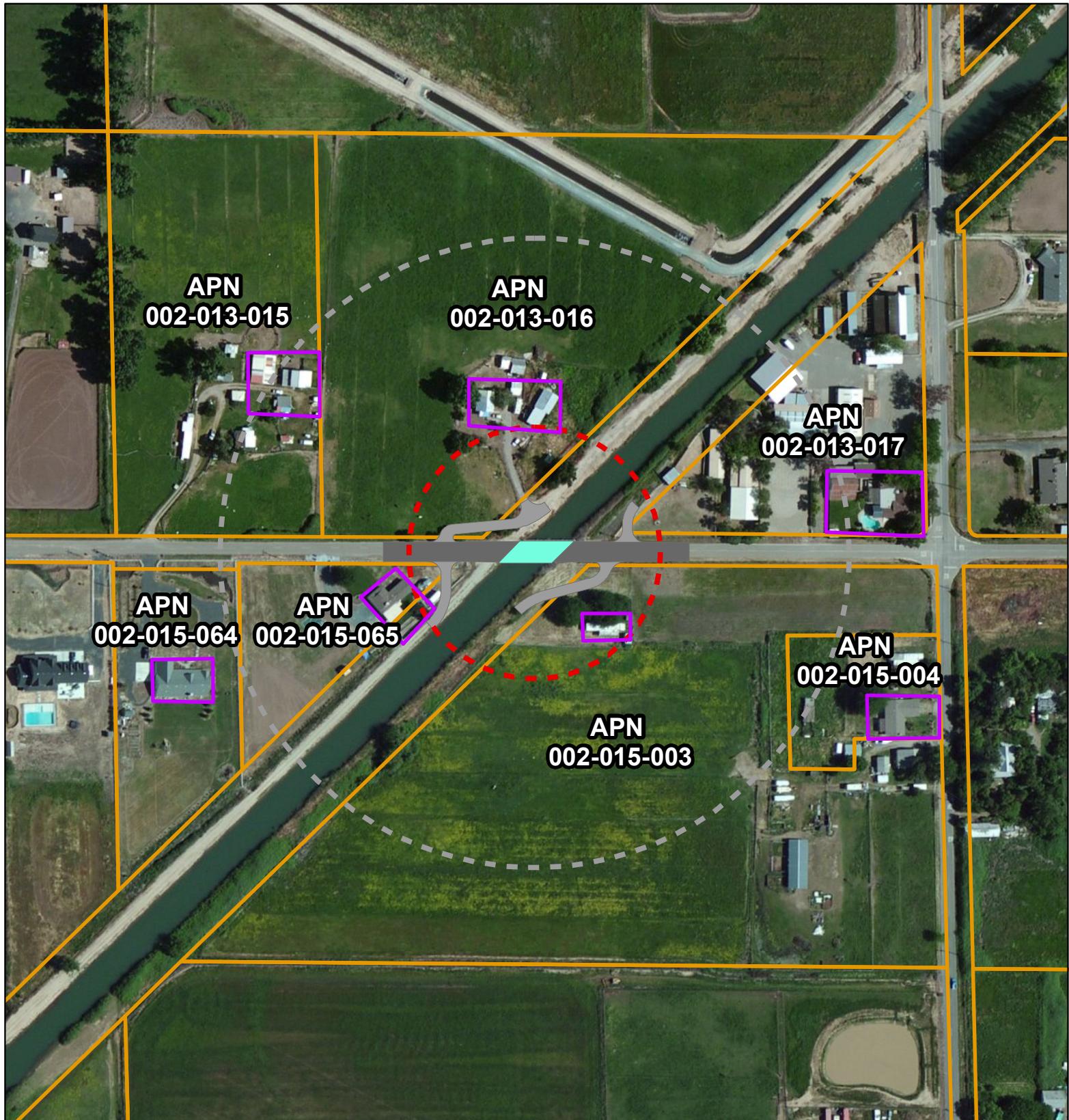
Source: Caltrans Technical Noise Supplement, 2013

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are equivalent A-weighted sound level over a given time period (Leq); average day-night 24-hour average sound level (Ldn) with a nighttime increase of 10 dBA to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL), also a 24-hour average that includes both an evening and a nighttime weighting. Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45 - 60 dBA range, and high above 60 dBA. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise with respect to public health because of sleep interference.

Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, hotels, schools, rest homes, horses, and hospitals are generally more sensitive to noise than commercial and industrial land uses.

Land use within and adjacent to the Project corridor is predominately rural-agricultural. Three sensitive receptors (residential homes and horses) that could be affected by construction noise from the Project are located within 250 feet from the Project. Another four sensitive receptors (residential homes) are located approximately 450-550 feet away from the construction area (**Figure 5**). The bridge is adjacent to rural residences and horses. Because horses have binaural hearing (can hear sounds concurrently), they can also be considered more sensitive to various types of noise sources, in particular construction noise.

Section 14-8.02, Noise Control, of the Caltrans standard specifications provides information that can be considered in determining whether construction would result in adverse noise impacts. The specification states that construction noise shall not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. If adverse construction noise impacts are anticipated, project plans and specifications must identify abatement measures that would minimize or eliminate adverse construction noise impacts on the community.



500 ft Buffer

200 ft Buffer

Sensitive Receptors

Proposed Bridge

Parcel Boundary



0 75 150 300 Feet

## **Discussion**

- a) **Construction Noise Effects.** Noise within Stanislaus County is regulated by Chapter 10.46 of the Municipal Code. The Ordinance states that "It is unlawful for any person at any location within the unincorporated area of the County to create any noise or to allow the creation of any noise which causes the exterior noise level when measured at any property situated in either the incorporated or unincorporated area of the County to exceed the noise level standards." However, the County Code Standards are not applicable to noise from activities on or in publicly owned property and facilities, or by public employees while in the authorized discharge of their responsibilities.

Noise at the construction site would be intermittent and its intensity would vary. The degree of construction noise impacts may vary for different areas of the Project study area and also vary depending on the construction activities.

Roadway and/or bridge construction is accomplished in several different phases. General construction phases for typical roadway/highway projects and their estimated overall noise levels are summarized in **Table 6** below.

**Table 6. Typical Construction Phases and Noise Levels**

Construction Phase	Noise Level <sup>a</sup> (dBA, Leq)
Ground Clearing	84
Excavation	88/78
Foundations	88
Erection	79/78
Finishing	84

**Source:** U.S. EPA, 1971.

During Project construction, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction and some of the sensitive receptors in residential developments surrounding the Project study area would be temporarily affected for about 6 months. The majority of construction noise would be from clearing of the Project study area, along with the placement of the new bridge abutments and structure. Pile driving, a source of disagreeable noise for long durations, is not proposed as part of the Project.

**Table 7** summarizes noise levels produced by construction equipment that is commonly used on bridge replacement projects and is representative of the equipment necessary for Project construction. Construction equipment is expected to generate noise levels ranging from 80 to 89 dB at a distance of 50 feet and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

**Table 7. Typical Construction Equipment Noise Levels**

Construction Equipment	Noise Level <sup>a</sup> (dBA, Leq at 50 feet)
Scrapers	89
Bulldozers	85
Heavy trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

**Source:** Federal Transit Administration 1995.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02, applicable local noise standards and control measures discussed below. Construction noise would be short-term and intermittent. Construction operations are anticipated during daylight hours only (Monday to Friday, 7:00 AM to 8:00 PM). This impact would be **less-than-significant** with implementation of the **Mitigation Measure NO-1**.

**Operational Noise Effects.** The Project would have no long-term effects on noise levels, since the Project would not increase capacity along the roadway. Once construction is completed, noise levels would return to pre-project ambient levels. .

- b) Equipment associated with high vibration levels (pile drivers) would not be used for the Project. There are several different methods that are used to quantify vibration. The threshold of perception for humans is around 65 VdB, and human response to vibration is not usually significant unless the vibration exceeds 70 VdB. Rapid transit or light rail systems typically generate vibration levels of 70 VdB or more near their tracks. On the other hand, buses and trucks rarely create vibration that exceeds 70 VdB unless there are bumps in the road (FTA, 2006).

Construction of the Project would use bulldozers and other heavy tracked construction equipment, which may generate a groundborne vibration level of 90 VdB at 50 feet from source. Project equipment would be located closely to the residential properties directly adjacent to the Project site and may cause annoyance to nearby sensitive receptors. The majority of construction noise would be from clearing of the Project work site along with the placement of the new bridge abutments and structure. Construction of the Project is expected to last six months. With the implementation of **Mitigation Measure NO-1**, the Project would have a **less-than-significant impact**.

- c) The Project would have no long-term effects on noise levels. Noise levels would return to levels similar to the existing noise environment upon completion of the Project. There would be **no impact** to long-term noise levels.
- d) During construction, the Project would temporarily increase ambient noise levels in the Project vicinity. See the discussion regarding construction noise under a) above. This impact would be **less-than-significant** with implementation of **Mitigation Measure NO-1**.

- e) There are no airports within two miles of the Project based on review of Google Maps imagery. There would be **no impact** from airports upon people residing or working in the vicinity of the Project.
- f) There are no private airstrips within two miles of the Project based on review of Google Maps imagery. There would be **no impact** from airstrips upon people residing or working in the vicinity of the Project.

### ***Mitigation Measures***

#### **Mitigation Measure No-1: Implement County Noise Ordinance Noise Control Measures.**

During construction, the noise level may be temporarily elevated for up to 6 months. To minimize the impact, all construction in or adjacent to residential areas shall follow the following procedures for noise control: Construction operations shall be limited to Monday through Friday, 7:00 AM to 8:00 PM. The following control measures shall be implemented in order to minimize noise and vibration disturbances at sensitive receptors during periods of construction

- Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Utilize construction methods or equipment that will provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.
- Turn off idling equipment.

### ***References***

- Bolt, Beranek, and Newman, 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*.
- Caltrans, 2016. *Noise Technical Noise Memorandum for the Pleasant Valley Road over South San Joaquin Irrigation District Replacement Project (Bridge No. 38C-0154)*.
- Cunniff, Patrick F., 1977. *Environmental Noise Pollution*.
- Federal Transit Administration (FTA), 2006. *Transit Noise and Vibration Impact Assessment*.
- Stanislaus County Municipal Code. 2016. Code of Ordinances*.
- U.S. Environmental Protection Agency (EPA), 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*.

## Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Population and Housing – Would the project:</b>				
a) Induce substantial 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Setting***

According to the 2010 Census and the 2010 American Community Survey, Stanislaus County has a population of 514,451 individuals and a total of 179,503 housing units. The Project site is located within census tract number 1.01, which has a population of 4,866 people and a total of 1,860 housing units (U.S. Census Bureau 2010).

### ***Discussion***

- a) The Project would provide temporary employment for several people for construction and demolition activities. The Project would not result in the permanent creation of new jobs that would induce substantial population growth. Additionally, the bridge would remain a two-lane road and would not encourage population growth within the surrounding communities adjacent to the Project site. This impact would be **less-than-significant**.
- b,c) The Project would be constructed in place of an existing bridge and would not displace any housing or people. Consequently, replacement housing would not be required. There would be **no impact**.

### ***References***

United States Census Bureau. 2010. American Fact Finder.

[https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml). Accessed: January 3, 2018.

## Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Public Services – Would the project:</b>				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Setting***

Stanislaus County is currently divided into 4 county service areas (CSAs), 19 fire protection districts, and the Stanislaus County Sheriff Department covers the Cities of Hughson, Patterson, Riverbank, Waterford, and all unincorporated areas within the county. The Project site is served by the Turlock Rural Fire Protection District, and is in the vicinity of the Trulock Fire Protection District. The Project site and vicinity is served by the Stanislaus County Sheriff's Department. The Valley Home Joint School District serves the Project site and vicinity for elementary and middle school, and the Oakdale Joint Unified School District serves the area for high school.

### ***Discussion***

- ai) Fire service is provided by Stanislaus Consolidated Fire Protection District. They provide response to fire, medical, and hazardous material emergencies in the Project area. The closest fire department is Oakdale Rural Fire Department Station 3 located on 13200 Valley Home Rd, Oakdale; 2.1 miles from the Project site.

Construction of the Project could result in accident or emergency incidents that would require emergency response, such as fire services; however, construction activities would be short-term and minimal. The Project is a bridge improvement project that would not create additional demands on the local fire district during operations. There would be a **less-than-significant impact**.

Emergency access to the vicinity of the Project site may be temporarily inhibited during construction of the Project. Implementation of **Mitigation Measure TRAF-1** would ensure that traffic disruption impacts would be minimized to a **less-than-significant** level.

- a(ii) The Stanislaus County Sheriff Department provides law enforcement services to the Project site and unincorporated areas of Stanislaus County. The nearest Stanislaus County Sheriff Department is located on 6727 3rd St, Riverbank, approximately 6.3 miles southwest of the Project site.

Construction of the Project may result in accident or emergency incidents that would require police services; however, construction activities would be short-term in length and provide minimal additional demand on law enforcement services. The Project is a bridge improvement project that would not create additional demands on the local police district during operations. There would be a **less-than-significant impact**.

Emergency access to the vicinity of the Project site may be temporarily inhibited during construction of the Project. Implementation of **Mitigation Measure TRAF-1** would ensure that traffic disruption impacts would be minimized to a **less-than-significant** level.

- a(iii) There are three schools that serve the Project site. The Valley Home Joint School District has two schools located about 1.5 miles northeast of the Project site. There is a K-3 campus located at 4600 Texas Avenue, Valley Home, CA and a campus for 4<sup>th</sup>-8<sup>th</sup> grade is located at 13231 Pioneer Avenue, Valley Home, CA. The Oakdale Joint Unified School District provides the Project site and vicinity with high school level education at Oakdale High School, located at 739 West G St. Oakdale, approximately 6.2 miles southeast of the Project. The Project is a bridge and roadway improvement project and would not generate any additional demand for schools. Construction of the Project would require closure of the Pleasant Valley Road Bridge for approximately six months. During construction, traffic can use nearby local streets to bypass the Project area. After construction, access and safety of the Pleasant Valley Road Bridge would be improved. This temporary impact to the access of schools would be **less-than-significant**.
- a(iv) The nearest park is Woodward Reservoir Regional Park which is located about 3.5 miles northeast of the Project site. Oakdale Recreation Area is located approximately 4.4 miles southeast of the Project site. No construction or staging would be conducted on any park land. Therefore, the proposed bridge and roadway improvements would not result in long-term impacts to parks. The Project would result in **no impact**.
- a(v) The Project would have **no impact** on any other public services.

### ***Mitigation Measures***

**Mitigation Measure TRAF-1:** Please refer to the Transportation and Traffic section.

### ***References***

- Oakdale Joint Unified School District. 2017. Schools of Attendance.  
<http://www.schoolworksgis.com/SL/Oakdale/schoollocator.html>. Accessed January 2018.
- Stanislaus Consolidated Fire Protection District. 2017. County/ Fire District Map.  
<http://www.scfpd.us/items/COUNTY%20MAP%20ADOBE.pdf>. Accessed December 2017.
- Stanislaus County Sheriff's Department. 2017. <https://www.scsdonline.com/contact-numbers/contacts.html>. Accessed December 2017.
- Valley Home Joint Unified School District. 2018. The 4th-8th grade campus and the Valley Home Joint School District Offices. <http://www.vhjsd.org/find%20us/>. Accessed January 2018.

## Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Recreation – 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 facilities 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 that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

There are no parks located within the vicinity of the Project site. The Project site is not located adjacent to any parks or recreation facilities, and the nearest recreation resource is Woodward Reservoir Regional Park located approximately 3.5 miles northeast of the Project. The Woodward Reservoir Regional Park and all parks located in unincorporated areas of Stanislaus County are operated by Stanislaus County Parks and Recreation.

### Discussion

- a) The Project is a bridge replacement project; it would not contribute to an increase in the local population, nor would it increase demand on existing neighborhood parks. There are no existing neighborhood or regional parks in the vicinity of the Project, and the nearest recreation facility is the Woodward Reservoir Regional Park, which is located approximately 3.5 miles northeast of the Project. No additional regional parks would be created as a result of the Project. The Project would have **no impact** on the use of existing neighborhood and regional parks.
- b) The general setting of the Project is rural residential and agricultural. No recreational facilities are adjacent to the Project or within the Project vicinity. The nearest recreational facility is the Woodward Reservoir Regional Park, which is located approximately 3.5 miles northeast of the Project. No construction or staging would be conducted on recreational land. No adverse effects on recreational facilities are anticipated. The Project would have **no impact** on recreational facilities.

## Transportation and Traffic

<b>Issues (and Supporting Information Sources):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Transportation and Traffic – Would the project:</b>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the City congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a 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"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

#### Short-Term Traffic Impacts

Construction of the Project is currently scheduled to start in 2018 and take approximately 6 months to complete. Pleasant Valley Road would be closed at the South San Joaquin Irrigation District Main Canal to construct the bridge. Under this scenario, the County plans to install detour guidance signs to route local traffic around the Project site. The road is a minor local collector road which carries farm and vehicle traffic to the local farms and residences along Pleasant Valley Road. The general setting is agricultural land with scattered rural residences. There is no on-street parking available on Pleasant Valley Road. With no bridge on Pleasant Valley Road, a detour approximately 2.5 miles long would be established using the adjacent Victory Road, Lon Dale Road (SR 120) and Pioneer Road.

Vehicles travelling westbound would be diverted to southbound Pioneer Avenue and then westbound on Lon Dale Road while those travelling eastbound would be diverted to southbound Victory Avenue before going eastbound on Lon Dale Road to continue their trip. Vehicular access to driveways on Pleasant Valley Road may be restricted at times during construction but generally would remain open. Pedestrian access to residences and businesses would remain available at all times.

Detailed detour signage plans would be reviewed and approved by the County's traffic engineer and provided in the engineering plan set. Development of the detour would also include coordination with Caltrans and require a Caltrans Encroachment Permit to put signage along SR 120. County staff would provide Public Outreach brochures and meetings prior to construction to keep residents informed of the Project. Emergency vehicle access would be maintained at all times. Staging areas for contractor site access and lay down areas would occur in portions of the road closed to traffic/parking.

#### *Long-Term Impacts*

The Project is a bridge replacement project that would not increase, or decrease future traffic capacity, or create any long-term impact to traffic circulation in the area. Roadway users would continue to be able to travel on the new bridge by motor vehicle, bicycle, or on-foot after construction is complete.

#### ***Discussion***

- a,b) The purpose of the Project is to provide adequate and safe vehicle access and provide a structure that would meet current design standards for the traffic utilizing this bridge. The Project would not create additional lanes, so the Average Daily Traffic Volume is expected to be consistent with current traffic volumes.

Minor short-term traffic-related impacts are anticipated with the Project. The Pleasant Valley Road would be closed to through traffic, pedestrians, and bicycles during the 6-month Project construction. Local residents living along the closed segment would be granted access through the construction site. With no bridge on Pleasant Valley Road, traffic would be diverted to surrounding roadways, namely Victory Road, Lon Dale Road, and Pioneer Road. The Project is not anticipated to create any long term impacts to traffic circulation in the area, as the Project would not increase roadway capacity or change traffic patterns. The new bridge would continue to accommodate pedestrian and bicycle traffic. Providing safer vehicular, bicycle and pedestrian access through the replacement of the deficient bridge would offset temporary impacts related to construction activity.

The Project would not conflict with any plan or policy established for measuring the performance of the circulation system. Additionally, the Project would not result in impacts to level of service along Pleasant Valley Road. This would be a **less-than-significant impact**.

- c) The Project does not include structures or uses that would affect air traffic patterns, nor is an airport located in proximity to the Project site. Therefore, the Project would not result in substantial safety risks related to air traffic and would have **no impact**.
- d) One of the primary purposes of the Project is to improve safe access to the bridge for vehicles and pedestrians. Traffic hazards would not be increased as a result of the Project. This would be a **less-than-significant impact**.
- e) Traffic congestion and delays can occur during construction and can result in an adverse effect. These adverse effects can be avoided through standard construction period traffic management planning that includes timely notification of any road closures and detours to police and fire departments, and other emergency service providers. Implementation of **Mitigation Measure**

**TRAF-1** would ensure that traffic disruption impacts are minimized to a **less-than-significant** level.

- f) The purpose of the Project is to provide adequate and safe vehicle access and provide a structure that would meet current design standards for the traffic utilizing this bridge. The Project would not conflict with adopted policies, plans, or programs supporting alternative transportation. There would be **no impact**.

### ***Mitigation Measures***

**Mitigation Measure TRAF-1: Standard Traffic Management Plan.** The construction contractor for the Project shall implement a standard traffic management plan to minimize traffic disruption and ensure adequate access is maintained to surrounding properties. Temporary disruptions to access for residences in the area shall be minimized by coordinating construction activities to provide alternative access points and/or by coordinating construction schedule with property owners. Additionally, prior to the start of construction, the contractor shall coordinate with the police and fire departments and local public and private ambulance and paramedic providers in the area to prepare a Construction Period Emergency Access Plan. The Emergency Access Plan shall identify phases of the Project and construction scheduling and shall identify appropriate alternative emergency access routes.

## Tribal Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Tribal Cultural Resources – Would the project:</b>				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) 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 ©, of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### ***Setting***

Assembly Bill 52 (AB52) went into effect on July 1, 2015 and establishes a consultation process with all California Native American Tribes on the NAHC List for Federal and Non-Federal Tribes. Once the Tribe is notified of the Project, the Tribe has 30 days to request consultation. The consultation process ends when either the parties agree to mitigation measures or avoid a significant effect on Tribal Cultural resources or a party, acting in good faith and after reasonable effort concludes that mutual agreement cannot be reached. Stanislaus Country has taken the lead on AB52 Consultation.

### ***Discussion***

a-i, a-ii) The NAHC conducted a sacred land file search for the Project area and provided a list of Native American individuals and organizations that might have concerns with or interest in the Project. Letters were sent to the tribes and individuals listed by the NAHC on April 25, 2016 and included Tule River Indian Tribe, North Valley Yokuts Tribe, and the Southern Sierra Miwuk Nation. Follow up telephone calls were made on May 25, 2016. North Valley Yokuts Tribe did not respond and the Tule River Indian Tribe and Southern Sierra Miwuk Nation had no comments.

In addition, a cultural resources investigation was conducted for the Project by PAR and found no prehistoric, ethnographic, or historic-era resource of Native American origin in the Project area. Therefore, the Project would have a **less than significant impact** on tribal cultural resources.

## Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Utilities and Service Systems – Would the project:</b>				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

The Project vicinity is served by privately-owned septic systems for wastewater treatment; Stanislaus County does not provide wastewater treatment to unincorporated areas of the county. Stormwater drainage at the Project site and within the Project vicinity is collected in roadside ditches and agricultural drains. Potable water service within the Project vicinity is served by privately-owned wells; the Stanislaus County does not provide potable water services to unincorporated areas in the county. Solid waste services within the Project vicinity are provided by Gilton Solid Waste Management. Pacific Gas & Electric provides electricity and natural gas to the County. The Modesto Irrigation District also provides electricity to the Project vicinity. Telecommunications infrastructure is provided by AT&T at the Project site.

## Discussion

- a) The Project would not generate any wastewater. There would be **no impact**
- b) The Project would not require the construction of additional wastewater or water treatment facilities. There would be **no impact**.
- c) The Project does not require expansion of existing facilities; however, the Project includes the construction of roadside swales and improvements to infiltration rates along Pleasant Valley Road. The new roadside swales would be located within the existing right-of-way along Pleasant Valley Road and would collect storm water runoff from the new bridge. The construction of the new storm water drainage facilities would have **less-than-significant impacts** due to the minimal size of the facilities and the pre-disturbed nature of the area that they would be placed.
- d) The Project consists of demolition of an existing bridge and construction of a new bridge and would not require a water supply. The Project would require some non-potable water during construction for dust control. This would be a **less-than-significant impact**.
- e) The Project does not require wastewater treatment services. There would be **no impact** to wastewater treatment facilities.
- f) The Project would generate waste from temporary construction activities and demolition of the existing Pleasant Valley Road Bridge. Solid waste associated with construction activities would be handled by Fink Road Sanitary Landfill located on 4000 Fink Road in Crows Landing, California. This landfill has the capacity to accept waste generated by the Project. The Project would not result in long-term demands for solid waste disposal services. This would be a **less-than-significant impact**.
- g) The Project would comply with all federal, state, and local statutes and regulations related to solid waste. There would be **no impact**.

## Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>Mandatory Findings of Significance – Would the project:</b>				
a) Have the potential to 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, 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### ***Setting***

Per CEQA regulations and guidelines, the Lead Agency must summarize the finding of significance from earlier sections and must consider potential cumulatively considerable effects for environmental impact reports (EIRs) and in the discussion section below. Even though this environmental document is an IS/MND and not an EIR, the potential for cumulatively considerable effects are analyzed below.

### ***Discussion***

- a) Per the impact discussions in the Biological Resources and Cultural Resources sections, the potential of the Project to substantially degrade the environment would be **less-than-significant** with incorporated **mitigation measures**.
- b) The Project site is located within Stanislaus County. The purpose of the Project is to provide safe vehicle access and meet current design standards for the Pleasant Valley Road Bridge. The impacts of the Project are mitigated to a less-than-significant level, limited to the construction phase of the Project, and generally site specific. No other projects are proposed that would overlap or interact with the Project. The cumulative impact of the Project would be **less-than-significant**.
- c) The Project would not cause substantial adverse effects on human beings. Effects related to cultural resources, biological resources, hazardous materials, hydrology and water quality, geologic hazards, air quality, transportation and noise are discussed above, and would not result in any significant and unavoidable impacts. This impact would be considered **less-than-significant**.