Potato Slough Bridge Bearing Pads

Little Potato Slough Bridge on State Route 12

10-SJ-12-R4.4
10-1F760/1017000024

Initial Study
with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

March 2020
General Information About This Document

Please read this Initial Study. Additional copies of this document are available for review at the Caltrans district office at 1976 East Doctor Martin Luther King Junior Boulevard. Due to the current COVID 19 pandemic, please contact C. Scott Guidi at (209) 990-5719 or by e-mail: Scott Guidi@dot.ca.gov if you would prefer that a printed version or Compact Disc of this document be sent to your home address.

- If you have any concerns about the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:
  
  C. Scott Guidi  
  California Department of Transportation  
  1976 East Doctor Martin Luther King Junior Boulevard  
  Stockton, California, 95201

- Submit comments via email to: scott.g guidi@dot.ca.gov.

- Submit comments by the deadline: June 17, 2020.

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

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: C. Scott Guidi, 1976 East Doctor Martin Luther King Junior Boulevard; (209) 990-5719 or use California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.
Potato Slough Bridge Bearing Pads Replacement on State Route 12
at post mile R4.4 in the San Joaquin County

INITIAL STUDY
with Proposed Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation

3 - 11 - 2020
Date
DRAFT
Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description
The California Department of Transportation (Caltrans) proposes to replace failed elastomeric bearing pads and joint seal assemblies. Caltrans also proposes to remove a portion of structural concrete and to provide an access opening in the soffit and install temporary falsework on a pile foundation to temporarily support the bridge structure during the replacement of the bearing pads and joint seal assemblies for the Little Potato Slough Bridge (bridge number 29-0101), located just west of Lodi, California, within San Joaquin County.

Determination
This Proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans’ intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans’ decision on the project is final. This Proposed Mitigated Negative Declaration is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The project would have no effect on: aesthetics, agriculture and forest resources, air quality, cultural resources, energy, geology and soils, hazards and hazardous waste, land use and planning, mineral resources, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildlife.
- The project would have no significant effect on greenhouse gas emissions, hydrology and water quality, and noise.
- The project would have no significant effect on biological resources because the following mitigation measure would reduce potential effects to insignificance:
  - Biological resources would be mitigated through the purchase of off-site mitigation credits, on-site or off-site restoration, construction monitoring, and environmentally sensitive area exclusion measures.

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation

Date
Section 1  Project Description and Background

1.1  Project Title

Potato Slough Bridge Bearing Pads.

1.2  Project Location

The proposed project is on State Route 12, post mile R4.4 at the Little Potato Slough Bridge (bridge number 29-0101) in the San Joaquin County. It is roughly 5 miles west of Interstate 5, west of Lodi. The census-designated town of Terminous resides on the southeast side of the Little Potato Slough Bridge. It is a moveable bridge that spans across the Little Potato Slough in an east-west direction. The Little Potato Slough connects with the South Mokelumne River north of the bridge. The west side of the bridge is surrounded by agriculture, with some agricultural ditches underneath the edges of the bridge. To the northeast of the bridge are a few small businesses and farmland.

Figures 1 and 2 show where the proposed project area and the bridge location are within the San Joaquin County.

Figure 1. Project Vicinity Map
1.3 Description of Project

The California Department of Transportation (Caltrans) proposes to replace elastomeric bearing pads and joint seal assemblies on the Little Potato Slough Bridge (bridge number 29-0101), a moveable bridge in the San Joaquin County. Elastomeric bearing pads provide the safe transfer of loads in bearing at the bridge spans. These pads are made from rubber-like materials with strong fabrics to form a thick pad that acts as a cushion for hinges when the bridge is moving. The joint seal assemblies protect the gap above a hinge from weather and are composed of welded metal components that expand and contract with a bridge.

Based on the Bridge Inspection Reports, rehabilitating the Little Potato Slough Bridge is required to address the failed elastomeric bearing pads on both ends of the bridge—span 5 and span 20 (bent 21, hinge 20). Span 5 is near the west end of the bridge and span 20 is on the east end of the bridge. A span is the distance between two halfway supports for a bridge, and a bent is a type of pier used to provide support to vertical loads. Hinges are
numbered based on which span the hinge resides in. For example, hinge 20 is in span 20.

A portion of the structural concrete would be removed to provide access to the soffit where the temporary support columns would be installed. To access the areas where the elastomeric bearing pads and the joint seal assemblies are located, portions of the bridge near span 5 and span 20 would need to be raised. There would need to be four support columns—each with a concrete footing—because each hinge requires two separate footings: one directly under the hinge and another to push up the support span. These columns provide support while the bearing pads and joint seal assemblies are replaced. The support columns would have concrete footings with foundations stabilized by H-piles—structural beams that are driven into the ground to stabilize foundations in loose soils. For the Little Potato Slough Bridge project, the concrete footing would be placed roughly 2 feet below ground level; H-piles would be driven roughly 60 feet below the concrete footings. The support columns would be removed after construction is complete, but the concrete footings would remain in place to reduce ground disturbance and for future bridge maintenance needs.

Construction activities would occur mainly at night. There would be one-lane closures to minimize effects to travelers on State Route 12 and two weekend closures. There would also be two separate 55-hour detours required to complete work for the project. The detours would occur on the weekends; one detour would be required for each hinge. Signs along the route would indicate the detour route. For those traveling east on State Route 12 toward the Little Potato Slough Bridge, the expected detour would consist of taking State Route 160 northeast through Isleton and Walnut Grove to Thornton—where State Route 160 connects to Walnut Grove Road—to continue east to Interstate 5. Travelers would then proceed south on Interstate 5 to connect to State Route 12. Travelers heading west on State Route 12 would take the same detour in reverse. They would start going north on Interstate 5 to Thornton—where it would connect to State Route 160 via Walnut Grove Road—and then proceed west through Isleton to eventually connect back to State Route 12.

1.3.1 Build-Alternative
The proposed build-alternative would replace the failed elastomeric bearing pads and joint seal assemblies at the Little Potato Slough Bridge in San Joaquin County.

1.3.2 No-Build (No-Action) Alternative
If no action is taken and the project is not built, the Little Potato Slough Bridge would still require replacement of failed bearing pads and joint seal assemblies and would not satisfy requirements in the bridge inspection reports.
1.4 Surrounding Land Uses and Setting

The Little Potato Slough Bridge is in the San Joaquin County. The area surrounding the proposed project consists of single-residence homes, small businesses, a commercial recreational campground, and agriculture. Located in an overall unincorporated rural area, the closest large urban setting to the bridge is the City of Lodi. This area could potentially experience growth in the future, as the San Joaquin County General Plan estimated that the county would see an average 1.5 percent population growth annually between 2012 and 2035 (San Joaquin County General Plan).

1.5 Other Public Agencies Whose Approval is Required

Table 1 summarizes the status of required permits for the project by respective agencies:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit/Approval</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Department of Fish and</td>
<td>California Department of Fish and Wildlife Code</td>
<td>The application for the Section 1600 permit would be submitted during</td>
</tr>
<tr>
<td>Wildlife</td>
<td>Section 1600 permit</td>
<td>the project’s final design phase.</td>
</tr>
<tr>
<td>California Department of Fish and</td>
<td>California Endangered Species Act Section 2081:</td>
<td>The application for the Section 2081 permit would be submitted during</td>
</tr>
<tr>
<td>Wildlife</td>
<td>incidentaltake</td>
<td>the project’s final design phase.</td>
</tr>
<tr>
<td>Central Valley Regional Water</td>
<td>Clean Water Act Section 401 Water Quality Certification</td>
<td>The application for the Section 401 permit would be submitted during</td>
</tr>
<tr>
<td>Quality Control Board</td>
<td></td>
<td>the project’s final design phase.</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Clean Water Act Section 404 permit</td>
<td>The application for the Section 404 permit would be submitted during</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the project’s final design phase.</td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service</td>
<td>Endangered Species Act Section 7: Interagency</td>
<td>Informal consultation with the U.S. Fish and Wildlife Service began on</td>
</tr>
<tr>
<td></td>
<td>consultation</td>
<td>December 10, 2018, for a “may affect, not likely to adversely affect”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>determination. A letter of concurrence was received on February 25, 2019</td>
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</tbody>
</table>
Section 2  CEQA Environmental Checklist

2.1  CEQA Checklist

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

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

2.1.1  Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in the Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

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

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

a-d) No Impact. Work for the proposed project would not adversely affect any scenic resources (Scenic Resource Evaluation and Visual Impact Assessment memo 2019). The project is not in a scenic vista. The project would not substantially damage scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway. The project
would not damage the visual character or quality of public views of the site and its surroundings. Lastly, the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area (Scenic Resource Evaluation and Visual Impact Assessment memo 2019).

2.1.2 Agriculture and Forest Resources

CEQA Significance Determinations for Agriculture and Forest Resources

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. Some include the Forest and Range Assessment Project, the Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board.

Would the project:

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?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in the Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by the Government Code Section 51104(g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

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?
a-e) No impact. The area surrounding the Little Potato Slough Bridge is mainly zoned as general agriculture (San Joaquin County Geographic Information System District Viewer 2019). Because the proposed project would take place within an existing Caltrans right-of-way, the surrounding agricultural land would not be affected, nor would any type of farmland mentioned above be converted to non-agricultural use. There is no conflict with existing zoning for agricultural use, Williamson Act contracts, forest land, or timberland. There is no timberland zoned within this area as defined in the Public Resources Code Section 12220(g) and the Government Code Section 51104(g) (San Joaquin County Geographic Information System District Viewer 2019). Therefore, there would be no loss of forest land or conversion of forest land to non-forest use.

2.1.3 Air Quality

CEQA Significance Determinations for Air Quality

Refer to Appendix A for further information on the Best Management Practices and the Standard Specifications referenced in this section. Refer to the Air Quality technical study for more information.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

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

c) Expose sensitive receptors to substantial pollutant concentrations?

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

a-d) No impact. The proposed project is non-capacity increasing and is in a non-attainment area but is exempt from air conformity under the 40 Code of Federal Regulations Section 93.126, Table 2—Reconstruction Bridges (Air Study 2018). The project would not result in a considerable net increase of pollutants. Proposed project work would neither expose sensitive receptors to pollutant concentrations nor result in emissions affecting a substantial number of people. The short-term construction impacts would be avoided and minimized through implementation of Standard Specifications AR 1 and AR 2 referenced in Appendix A.
2.1.4 Biological Resources

CEQA Significance Determinations for Biological Resources

Refer to Appendix A for further information on the avoidance, minimization, and mitigation measures referenced in this section. Refer to the following biological technical studies for specific details on species, methodology, and survey information:

- Natural Environment Study
- Biological Assessment
- Botanical Survey
- Aquatic Resources Delineation

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

**Less Than Significant Impact with Mitigation Incorporated.** The proposed project would involve temporary and permanent impacts to habitat(s) that could be used by candidate, sensitive, or special status plant and animal species. The discussion of these species below is broken up by avoidance and minimization measures, which are described in detail in Appendix A.

*Delta tule pea and Suisun Marsh aster*

The Delta tule pea and the Suisun Marsh aster, both of which are California special status plant species, were seen during surveys within the study area. The Delta tule pea was seen along the eastern levee of the Little Potato Slough—south of the bridge—while the Suisun Marsh aster was seen along the eastern edge of the Little Potato Slough, which is north of the bridge. With the implementation of avoidance and minimization measures including biological training and monitoring, work area limits, restricted staging areas, qualified botanist surveys, and special plant buffers (BIO 7, BIO 8, BIO 11, BIO 13, BIO 15, and BIO 16), the impacts to the Delta tule pea and the Suisun Marsh aster would be minimized to the greatest extent feasible (Natural Environment Study 2018).

*Western pond turtle*

There is suitable habitat for the western pond turtle, and it has been documented as present within 5 miles of the project area several times, according to the California Natural Diversity Database. To reduce and avoid potential impacts to the western pond turtle to the greatest extent feasible, avoidance and minimization measures including worker training, flagging
work areas, restricted staging areas, restore contour and grade of disturbed areas, pre-construction surveys (BIO 7, BIO 8, BIO 11, BIO 13, and BIO 17) would be implemented (Natural Environment Study 2018).

**Giant garter snakes**

There is suitable habitat for giant garter snakes, and it has been documented as present within 5 miles of the project area several times, according to the California Natural Diversity Database. The giant garter snake is known to use burrows as far as 164 feet from aquatic habitat. Caltrans biologists determined that all undeveloped communities—all undeveloped land within 200 feet of an aquatic habitat—would be considered suitable habitat for giant garter snakes (Natural Environment Study 2018). The project has been designed to minimize potential impacts to habitats that could support giant garter snakes. This has been done by restricting project-related impacts to upland habitats within a Caltrans right-of-way. However, due to project restrictions, project work would occur within the active season for giant garter snakes.

No project-related activities would occur in the Little Potato Slough, the nearby South Mokelumne River, or the large agricultural ditches within the project area. The two-step construction staging approach would minimize direct effects on giant garter snakes. In addition, avoidance and minimization measures for worker training, flagging work areas, exclusion materials, restricted staging areas, beginning ground work window, giant garter snake surveys, traffic speed limits, and snake sighting procedures (BIO 7, BIO 8, BIO 10, BIO 11, BIO 13, BIO 18, BIO 19, BIO 20, and BIO 21) would be implemented to minimize and avoid impacts. Through consultations with the U.S. Fish and Wildlife Service, it was determined that avoidance and minimization measures including biological monitoring, pre-construction surveys, environmentally sensitive area fencing, erosion control, and designated staffing areas (BIO 1, BIO 2, BIO 3, BIO 4, and BIO 5) would also be implemented to minimize effects on giant garter snakes to the greatest extent feasible (Natural Environment Study 2018).

**Migratory birds**

There is suitable habitat within the project area for tricolored blackbirds, northern harriers, white-tailed kites, saltmarsh common yellowthroats, loggerhead shrikes, yellow-headed blackbirds, and other migratory birds and raptors within the project area. To avoid and minimize potential impacts to the greatest extent feasible for these species, avoidance and minimization measures including worker training, flagging work areas, restricted staging areas, restore contour and grade of disturbed areas, and avoiding nesting season (BIO 7, BIO 8, BIO 11, BIO 13, and BIO 22) would be implemented (Natural Environment Study 2018).
**Ridgway’s rail and California black rail**

The Ridgway’s rail and the California black rail could occur within the project area. To avoid and minimize potential impacts to these species, there would be no in-water work, and BIO 22 would be implemented (Natural Environment Study 2018).

**Swainson’s hawks**

There is suitable foraging habitat for Swainson’s hawks within the project area; an active Swainson’s hawk’s nest was seen during field surveys in 2018. If there is an active nest present during construction, the project may result in direct and indirect impacts on nesting Swainson’s hawks. The impacts to foraging habitat would be temporary and the habitat would be restored to pre-project conditions and contours. No direct or indirect impacts are expected to occur for the Swainson’s hawk. To avoid and minimize potential impacts, avoidance and minimization measures including worker training, flagging work areas, restricted staging areas, restore contour and grade of disturbed areas, raptor surveys, and nest avoidance buffers (BIO 7, BIO 8, BIO 11, BIO 13, BIO 23, and BIO 24) would be implemented. If there are impacts to Swainson’s hawks, a California Endangered Species Act Section 2081 incidental take permit would be acquired.

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 Wildlife or the U.S. Fish and Wildlife Service?

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

**b-c) Less Than Significant with Mitigation Incorporated.** The proposed project would result in temporary and permanent impacts to aquatic resources within the project area. Natural Community Impacts in Table 2 can be mitigated to a Less Than Significant Impact with the below compensatory mitigation incorporated.

**Table 2. Riparian Habitat and Jurisdictional Wetland Impacts**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Temporary Impact (acre)</th>
<th>Permanent Impact (acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbed Great Valley Mixed Riparian Forest (forested wetland)</td>
<td>0.130</td>
<td>0.004</td>
</tr>
</tbody>
</table>
Within the project area are approximately 12.2 acres of aquatic resources that are considered waters of the U.S. and are subject to the Clean Water Act regulations. The aquatic resources within the project area consist of 2.27 acres of ditches, 0.84 acres of forested wetland, 0.01 acres of freshwater seep, and 9.65 acres of slough/river. The potential impacts on these aquatic resources would require permits under Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers, a Section 401 of the Clean Water Act from the Regional Water Quality Control Board, and a Section 1600-1607 from the California Department of Fish and Wildlife would be required for potential project impacts (Natural Environment Study 2018). The wetland component of the aquatic resources is made up of Disturbed Great Valley Mixed Riparian Forest (forested wetland) and disturbed freshwater seep. The construction of the concrete support footing would cause 0.004 acres permanent and 0.130 acres temporary impacts to Disturbed Great Valley Mixed Riparian Forest (forested wetland) and 0.003 acre of permanent impacts to agricultural ditch. Removing vegetation, earthwork, staging, and moving construction personnel and equipment would cause 0.007 acres temporary impacts to agricultural ditches. For additional Discussion of the impacts to either riparian habitats, sensitive natural communities, state or federally protected wetlands, please refer to the Natural Environment Study dated 2018.

To avoid and minimize impacts to aquatic resources, avoidance and minimization measures including water diversion, worker training, flagging work areas, aquatic resources best management practices, (BIO 6, BIO 7, BIO 8, BIO 9, BIO 10, BIO 11, BIO 12 and BIO 13), as referenced in Appendix A, would be implemented. Temporary impacts on aquatic resources would be offset by implementing BIO 13. In addition to these measures, permanent impacts to Disturbed Great Valley Mixed Riparian Forest (forested wetland) and agricultural ditch would be offset by purchasing mitigation credits from an approved mitigation bank as referenced in BIO 14 (Compensatory Mitigation).

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

d-f) No Impact. The proposed project would not interfere with wildlife corridors and movements for native and migratory fish and wildlife species. The project would neither hinder the use of native wildlife nursery sites nor conflict with any local policies or ordinances that protect biological resources.
The project would not conflict with provisions of any local, regional, state or adopted habitat conservation plan or Natural Community Conservation Plan (Natural Environment Study 2018).

2.1.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

a-c) No Impact. There are no changes in the significance of a historical resource or of an archaeological resource pursuant to Section 15064.5. There is no history of human remains within the project area (Historic Property Survey Report).

2.1.6 Energy

CEQA Significance Determinations for Energy

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

a-b) No Impact. By implementing Caltrans’ Best Management Practices, the project would not have a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and there would be no conflict with state or local plans for renewable energy or energy efficiency (Climate Change and Greenhouse Gas Analysis 2020).

2.1.7 Geology and Soils

CEQA Significance Determinations for Geology and Soils

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

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

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

a-e) **No Impact.** According to the Alquist-Priolo earthquake fault zones, the project area falls partially into the far east corner of the landslide and liquefaction zones for the Bouldin Island (Bouldin Island Quadrangle Official Map 2018). The proposed project area is not within or near any earthquake fault zones. The H-pile foundation of the concrete footings provides stabilization to the support structure during project work and would eliminate the potential for expansive soils to cause issues. The scope of work eliminates the potential for construction work to result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. The project would not need septic tanks or wastewater systems as the project work would be limited to the Little Potato Slough Bridge.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**No Impact.** There is no paleontological sensitivity within the project area (Paleontological Identification Report 2017). No unique geologic feature would be destroyed.
2.1.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Refer to Appendix A for further information on the Best Management Practices and Standard Specifications referenced in this section. For more information, refer to the Climate Change/Greenhouse Gas study.

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

a-b) Less Than Significant Impact. Construction equipment emissions for carbon dioxide were estimated using Caltrans' Construction Emissions tool spreadsheet. The estimated total carbon dioxide construction emissions are 5 tons for the six-month construction period (Air Study 2018). The greenhouse gas emissions and climate change analysis memo indicate no significant issues for climate change or greenhouse gas. Best Management Practices GG 1, GG 2, and GG 3 would be implemented during construction to reduce greenhouse gas emissions and potential climate change impacts from the project (Climate Change/Greenhouse Gas memo 2020).

The Standard Specification AR 1 would be implemented to ensure that contractors comply with air pollution control rules, ordinances, regulations, and statutes that apply to work performed under contract, including those provided in the Government Code Section 11017 (Air Study 2018). The project would not conflict with any plan, policy or regulation related to reducing greenhouse gas emissions.

2.1.9 Hazards and Hazardous Materials

CEQA Significance Determinations for Hazards and Hazardous Materials

Refer to Appendix A for further information on the Best Management Practices and Standard Specifications referenced in this section.

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

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

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**a-g) No Impact.** Building the proposed project would not do any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to the Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.
- Be located within 2 miles of a public airport or public use airport.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Several surveys were conducted between 2011 and 2014 for aerially deposited lead, asbestos-containing materials, and lead paint. The survey
results indicate that there is little potential to encounter hazardous soils or materials during construction; the hazardous materials in the project area are below regulatory limits. There is potential for painted striping and pavement markers to contain lead, and should they require removal, a Caltrans Standard Special Provision would be placed in the construction contract. Standard Special Provisions HAZ 1 and HAZ 2 would be implemented to avoid any potentially hazardous waste.

2.1.10 Hydrology and Water Quality

CEQA Significance Determinations for Hydrology and Water Quality
Refer to Appendix A for further information on the Best Management Practices and Standard Specifications referenced in this section. For more details, refer to the Location Hydraulic and Water studies.

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact. The proposed project would have short term impacts to water quality of the Delta Waterways (central portion) estuary due to ground disturbing activities during construction, and the project is expected to disturb about 0.20 acres of soil. There is potential for disturbed soil to enter the estuary during construction, which could cause temporary impacts to surface water. With the implementation of Caltrans Standard Specification for Water Pollution WAT 1 and construction site best management practices, potential short-term impacts to water quality from soil disturbance would be avoided and minimized (Water Study 2019).

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

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

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

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site;

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

iv) Impede or redirect flood flows?
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**b-e) No Impact.** The proposed project would not substantially affect any groundwater resources or alter the project area’s drainage patterns. The project is within a 100-year floodplain—designated as zone AE—which indicates that the area has a 1 percent chance of flooding per year (Hydraulics Study 2018). There is no history of flooding at the Little Potato Slough Bridge. The project would not conflict with any water quality or sustainable groundwater plan (Water Study 2019).

**2.1.11 Land Use and Planning**

**CEQA Significance Determinations for Land Use and Planning**

Would the project:

a) Physically divide an established community?

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**a-b) No Impact.** The proposed project would take place within the existing Caltrans right-of-way, and would not divide an established community or conflict with any land use plan, policy, or regulation.

**2.1.12 Mineral Resources**

**CEQA Significance Determinations for Mineral Resources**

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

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?

**a-b) No Impact.** The proposed project is not near any existing mineral mines and there would be no impact to mineral resources (California Department of Conservation Division of Mine Reclamation).
2.1.13 Noise

CEQA Significance Determinations for Noise

Refer to Appendix A for further information on the Best Management Practices and Standard Specifications referenced in this section. For more information, refer to the Noise Study.

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. Terminous, a census-designated town in the San Joaquin County, is within the proposed project limits, and includes single-family homes, small business, and a commercial recreation camp on the south and north sides of State Route 12 and the Little Potato Slough Bridge. Homes are about 150 feet to 350 feet from the edge of the roadway on the east end of the bridge. Construction activities may occasionally cause noise levels to rise and dominate the area around the construction site and cause temporary disturbance, especially during night work. To avoid and minimize any potential noise disturbances, Caltrans’ Standard Special Provision NOS 1 would be implemented (Noise Study 2019).

b) Generation of excessive groundborne vibration or groundborne noise levels?

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

b-c) No Impact. No adverse noise impacts are expected for the proposed project as construction noise would be temporary (Noise Study 2019). The project, which is not near an airport or an airstrip, should not generate excessive groundborne vibrations or noise levels.

2.1.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**a-b). No Impact.** The proposed project would take place within an existing Caltrans right-of-way; work would be limited to providing replacement parts to the bridge and would not affect population growth in the area. There would be no displacement of people or housing.

### 2.1.15 Public Services

**CEQA Significance Determinations for Public Services**

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

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

**No impact.** The proposed project would not create a need for additional emergency, recreational, education, protection or other public services in the area. Public services’ response times or other performance objectives would not be affected except for temporary travel delays caused by traffic during construction work. Terminus Drive, which connects Johnson Way to Tower Park Way, underneath State Route 12, would remain open throughout construction to provide access for area residents. Construction activities would occur mainly at night. Temporary traffic delays may occur from the one-lane closures and two 55-hour detours.

In case of an emergency, Caltrans’ Code of Safe Practices advises employees to become familiar with their location and surroundings, and to have prepared action plan exits or escape routes in case of a fire or an earthquake.
2.1.16 Recreation

CEQA Significance Determinations for Recreation

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

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

a-b) No Impact. There are no public recreational facilities within the proposed project area and project work is limited to the Little Potato Slough Bridge. The project would not substantially affect regional parks or recreational facility usage nor cause expansion of these facilities. Refer to Section 4(f) Memorandum for more details.

2.1.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d) Result in inadequate emergency access?

a-d) No Impact. The proposed project would not conflict with any plan, ordinance, or policy for circulation systems (San Joaquin General Plan 2016). The project would not increase auto trips or vehicle miles traveled because the project work is to maintain the existing Little Potato Slough Bridge. This would also not increase hazards or change emergency access because the bridge itself is not changing.

2.1.18 Tribal Cultural Resources

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically
defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in the Public Resources Code Section 5020.1(k), or

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**a-b) No Impact.** There have been consultations with several Native American tribes on potential cultural resources within the project area. After consulting with tribes and examining historical records and site surveys, it was determined that there are no tribal cultural resources within the project area. For more details, refer to the cultural technical studies: the Archaeological Survey Report and the Historic Property Survey Report.

**2.1.19 Utilities and Service Systems**

**CEQA Significance Determinations for Utilities and Service Systems**

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?
a-e) **No Impact.** The proposed project would not relocate or construct any utility facilities, nor would it affect water supplies for the area, require the need for wastewater treatment, generate solid waste in excess of state or local standards, or be out of federal, state, or local management and reduction solid waste statute compliance. Work is limited to a Caltrans right-of-way.

### 2.1.20 Wildfire

**CEQA Significance Determinations for Wildfire**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

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

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

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

a-d) **No Impact.** The proposed project is not in an area of moderate risk or high risk for wildfire (California Department of Forestry and Fire Protection *Fire Hazard Severity Zone Maps*, San Joaquin County 2019). The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

### 2.1.21 Mandatory Findings of Significance

**CEQA Significance Determinations for Mandatory Findings of Significance**

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
**Less Than Significant Impact with Mitigation Incorporated.** The project would have temporary and permanent impacts on aquatic resources as discussed in Section 2.1.4 Biological Resources. These impacts would not be significant with standard project measures and the implementation of the avoidance, minimization and mitigation measures discussed in that section. The project is not expected to substantially damage the quality of the environment. The project is not expected to substantially reduce the habitat or affect populations of any fish or wildlife species or eliminate important examples of the major period of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

**No Impact.** When viewed in connection with effects of past projects and future projects, the effects of the current proposed project would not be considered cumulatively considerable.

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

**No Impact.** The proposed project would not generate environmental impacts, either directly or indirectly, which would cause substantial adverse effects on human beings.
Avoidance, Minimization, and Mitigation Measures

Air:

- AR 1
- AR 2

Biology:

BIO 1 through BIO 5 are referenced in the U.S. Fish and Wildlife Service letter of concurrence as conservation measures. BIO 6 through BIO 24 are referenced in the Natural Environmental Study as “AMMs.”

- BIO 1
  - A biologist approved by the U.S. Fish and Wildlife Service would monitor construction activities. Before ground disturbance, the approved biologist would instruct all on-site construction personnel about the giant garter snake and the importance of avoiding impacts to the species and its habitat.

- BIO 2
  - Pre-construction surveys for the giant garter snake would occur within 24 hours of ground disturbance activities.

- BIO 3
  - Temporary fencing would be installed at the edge of the construction area and next to giant garter snake habitats such as wetlands, irrigation ditches, marsh areas, or other potential habitats. A biologist approved by the U.S. Fish and Wildlife Service would evaluate the exclusion fencing on a weekly basis.

- BIO 4
  - No plastic, monofilament, jute netting, or similar erosion control matting that could entangle snakes would be placed on the site.

- BIO 5
  - Work areas, spoils, equipment storage, and other project activities would be restricted to designated staging areas.
• BIO 6
  o If water is present at the time of construction, water would be diverted around the work area and work would resume after the site is dry. Work within the dewatered areas would be timed with awareness of precipitation forecasts and likely increases in water flows and flood stages. Construction activities within aquatic resources would stop before storm events until all reasonable erosion control measures have been implemented. Revegetation, restoration, and erosion control work would not be limited to this time period.

• BIO 7
  o A qualified biologist would monitor construction activities that could potentially affect sensitive biological resources. A qualified biologist would be retained to conduct mandatory contractor/worker awareness training for construction personnel. The awareness training would be provided to all construction personnel to brief them on the identified location of sensitive biological resources. The awareness training would include how to identify species—visually and auditorily—that are most likely to be present, and the need to avoid impacts on biological resources such as plants, wildlife, and aquatic resources. The training would also include a briefing on the penalties for not complying with the biological mitigation requirements. If new construction personnel are added to the project, the contractor would ensure that they receive the mandatory training before starting work.

• BIO 8
  o The limits of all work areas—staging, construction, parking, and access routes—would be flagged by the contractor before starting ground disturbance activities. All activities would be limited to the marked areas. Protective silt or construction fencing would also be installed among environmentally sensitive habitats, aquatic resources and/or special status species habitats. Installing protective silt or construction fencing would prevent accidental disturbance to habitats outside authorized work areas, protect water quality in aquatic resources during construction, and act as an exclusion barrier to prevent terrestrial wildlife from entering the work areas. A qualified biologist would evaluate the exclusion fencing and/or work area flagging on a weekly basis for efficiency.

• BIO 9
  o Before starting construction activities within aquatic resources, construction Best Management Practices would be used on-site to prevent on-site and off-site aquatic resources from deteriorating. Methods would include using appropriate aquatic resource features and erosion control measures along the border of all work areas to prevent displacing fill material. All Best Management Practices would
be in place before starting any ground disturbance construction activities and would remain until construction activities are completed. All erosion control methods would be maintained until all on-site soils are stabilized.

- **BIO 10**
  - To prevent wildlife from becoming entangled or trapped in construction materials, plastic monofilament netting, erosion control matting, or similar material would not be used. Acceptable substitutes include coconut coir matting, tackifier hydroseeding compounds, or other appropriate materials that are approved by a Caltrans biologist.

- **BIO 11**
  - Construction operations, stockpiling construction materials, portable equipment, vehicles, and supplies would be restricted to designated construction staging areas; all operations would be limited to the minimal area necessary.

- **BIO 12**
  - Standard staging area practices for sediment-tracking reduction would be implemented where necessary and may include vehicle washing and street sweeping.

- **BIO 13**
  - All exposed and/or disturbed areas resulting from construction activities would be returned to their original contour and grade, and restored using locally native grass and forb seeds, plugs, or a mix of the two. Areas would be seeded with species appropriate to their topographical and hydrological character. Seeded areas would be covered with broadcast straw and/or jute netting.

- **BIO 14 (Compensatory Mitigation)**
  - Permanent impacts to aquatic resources would be replaced at a minimum 2 to 1 ratio—2 acres for every 1 acre of impact—or another approved ratio as determined by the U.S. Army Corps of Engineers. Impacts would be offset through the dedication of mitigation credits at a U.S. Army Corps of Engineers-approved mitigation bank or through the payment of in-lieu fees to an approved conservation bank.

- **BIO 15**
  - A qualified botanist would be retained to perform focused surveys to determine the presence or absence of special status species that could occur in and next to—within 100 feet, where appropriate—the impact area, including new construction access routes. These surveys would be conducted in accordance with current California Department of Fish and Wildlife protocols for surveying and evaluating impacts on special status plants. Surveys would be conducted at the proper time of the
year when rare or endangered species are both evident and identifiable. Field surveys would be scheduled to coincide with known flowering periods, and/or during appropriate developmental periods that are necessary to identify the plant species of concern.

- BIO 16
  - If any state listed or federally listed California Native Plant Society List 1, or California Native Plant Society List 2 plant species are found within 100 feet of the impact area during surveys, these plant species would be avoided to the greatest extent feasible and the following would be implanted.

Before approving grading plans or any ground-breaking activity within the study area, a mitigation plan would be submitted simultaneously to the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service (if appropriate) for review and comment. The plan would include mitigation measures for the population(s) directly or indirectly affected. Possible mitigation for impacts on special status plant species can include implementing a program to transfer, salvage, cultivate, or reestablish the species at suitable sites (if feasible), or by purchasing credits from an approved mitigation bank, if available. The actual level of mitigation may vary depending on the sensitivity of the species, its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival. The final mitigation strategy for directly affected plant species would be determined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service (if appropriate) through the mitigation plan approval process.

Any special status plant species that are identified next to the study area but are not to be disturbed by the project would be protected by barrier fencing to ensure that construction activities and material stockpiles do not affect special status plant species. These avoidance areas would be identified on project plans.

- BIO 17
  - A pre-construction survey for western pond turtles would be conducted within 24 hours of the start of construction activities that occur within 325 feet of suitable aquatic habitat. The survey area would include the disturbance area plus a 100-foot buffer. If young or adult turtles are found within the survey area, a qualified biologist would move them at least 500 feet away from construction work areas to a location with similar habitat. If a turtle nest is found within the survey area, construction activities would not take place within 100 feet of the nest until the turtles have hatched or the eggs have been moved to an appropriate location. Any egg relocation would be conducted by a qualified biologist in coordination with the California Department of Fish and Wildlife.
• BIO 18
  o Given the high-water table in the project impact area and lack of rodent burrows, giant garter snakes are unlikely to bromate—a period of inactivity interrupted by periods of activity—in upland areas for impact. Therefore, initial ground disturbance activity and the installation of exclusion fencing around the work areas would be conducted between November 1 and February 28. The remainder of the activities would occur between March 1 and October 31.

• BIO 19
  o Twenty-four hours before construction activities, all construction work areas—staging, construction sites, parking, and access routes—would be surveyed for giant garter snakes. Surveys of construction work areas would be repeated if there is a two-week lapse or more in construction activity.

• BIO 20
  o Vehicle traffic would be restricted to established roads and designated areas and would use previously disturbed areas to the greatest extent feasible. Construction-related traffic on dirt roads used to access construction work areas would see a 10-mile-per-hour speed limit to reduce the potential for direct impacts on basking giant garter snakes. Vehicle use areas would be included in pre-construction surveys.

• BIO 21
  o If a giant garter snake is encountered during construction, activities would stop until appropriate corrective measures have been completed or it has been determined that the giant garter snake would not be harmed. Any sightings and incidental take should be reported immediately to the U.S. Fish and Wildlife Service by calling 916-414-6600. Monitoring outside snake habitat would occur at appropriate project intervals to ensure that all avoidance and minimization measures are implemented. The amount and duration of monitoring would depend on the project specifics and should be discussed with a qualified biologist.

• BIO 22
  o Ground disturbance activities would start before the nesting season from February 1 to September 30.

• BIO 23
  o A qualified raptor biologist with Swainson's hawk survey experience would conduct surveys that maximize the potential to see adult Swainson's hawks and nest/chicks via visual and audible cues within a 500-foot radius of the project impact areas. The 500-foot radius would
be surveyed using the protocols outlined in the *Recommended Timing and Methodologies for Swainson’s Hawk Nesting Surveys in California’s Central Valley* (Swainson's Hawk Technical Advisory Committee 2000), or the most current California Department of Fish and Wildlife-approved survey. Surveys would be repeated if a nesting season passes before the start of project-related activities.

- **BIO 24**
  - If an active nest is identified within 500 feet of construction activities, no night work would occur in the 500-foot radius. A qualified raptor biologist would be on-site daily to monitor the behavior of any active nests within 500 feet of project activities. The qualified raptor biologist would have the authority to stop all project activities within the 500-foot radius should the birds display abnormal nesting behavior that could cause reproductive failure such as nest abandonment, resulting in loss of eggs or young. Other examples of abnormal nesting behavior include, but is not limited to, defensive vocalizations directed toward project personnel, standing up from a brooding position, and flying away from a nest. Project activities would not resume until the qualified raptor biologist has determined the behavior has normalized.

**Greenhouse Gas:**

- **GG 1**
  - Caltrans staff would enhance environmental training to include information regarding methods to reduce greenhouse gas emissions related to construction.

- **GG 2**
  - Caltrans would require contractors to use right-sized equipment for the job and maintain equipment engines.

- **GG 3**
  - Limit idling time to five minutes for delivery trucks, dump trucks, and other diesel-powered equipment.

**Hazardous Waste:**

- **HAZ 1**
  - Caltrans Standard Special Provision Section 7-1.02K(6)(j)(iii) pertaining to lead.

- **HAZ 2**
  - Caltrans Standard Special Provision Section 14-11.12 pertaining to lead would be required if the yellow thermoplastic/painted striping be ground off the pavement.
Noise:

- NOS 1
  - Caltrans Standard Special Provision Section 14-8.02 for Noise Control would be implemented. Noise levels generated during construction should not exceed 86 decibels at 50 feet from job site activities from 9:00 p.m. to 6:00 a.m. Equip internal combustion engines with the manufacturer-recommended muffler. Do not equip an internal combustion engine on the job site without the appropriate muffler.

Water:

- WAT 1
  - Caltrans Standard Specification Section 13-1 for Water Pollution would be implemented.
Appendix B  Title VI Policy Statement

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

“Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability.”
List of Technical Studies

Air Quality Memorandum (September 2018)

Biological Studies

· Natural Environment Study (December 2018)
· Botanical Report (September 2018)
· Aquatic Resource Delineation Report (May 2018)
· Letter of Concurrence (February 2019)

Cultural Studies

· Archaeological Survey Report (February 2020)
· Historic Property Survey Report (February 2020)
· Climate Change/Greenhouse Gas Memorandum (January 2020)
· Noise and Water Quality Memorandum (October 2019)
· Location Hydraulic Study (April 2018)

Historical Property Survey Report

· Historic Resource Evaluation Report
· Historic Architectural Survey Report
· Archaeological Survey Report

Hazardous Waste Reports

· Initial Site Assessment (November 2019)
· Scenic Resource Evaluation/Visual Assessment (December 2019)
· Section 4(f) Memorandum (December 2019)
· Initial Paleontology Study (March 2017)

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to the following email address: District10PublicAffairs@dot.ca.gov.

Please indicate the project name and project identifying code (under the project name on the cover of this document) and specify the technical report or document you would like a copy of. Provide your name and email address or U.S. postal service mailing address (street address, city, state and zip code).