

King City Capital Preventative Maintenance

On U.S. 101 in Monterey County from the Jolon Road undercrossing
1 mile north of King City to the north of Lagomarsino Avenue

05-MON-101-PM R41.9/49.8

EA 05-1K440 and Project ID Number 0518000208

State Clearinghouse Number 2022040410

Initial Study with Mitigated Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

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General Information About This Document

Document prepared by: Scott Ostrau, Associate Environmental Planner

The Initial Study circulated to the public for 30 days between April 19, 2022, and May 18, 2022. Comments received during this period are included in Appendix B.

Elsewhere, language has been added throughout the document to indicate where a change has been made since the circulation of the draft environmental document.

Minor editorial changes and clarifications have not been so indicated.

For individuals with sensory disabilities, this document can be made 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: Jason Wilkinson, District 5 Environmental Division, 50 Higuera Street, San Luis Obispo, California 93401; phone 805-540-9165 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

Restore highway pavement, replace three drainage culverts, improve interchange lighting, and reconstruct weigh-in-motion and traffic census stations on U.S. 101 from Jolon Road to Lagomarsino Avenue in Monterey County

**INITIAL STUDY
with Mitigated Negative Declaration**

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

THE STATE OF CALIFORNIA
Department of Transportation
and
Responsible Agency: California Transportation Commission



For John Luchetta

John Luchetta
Office Chief, Central Coast Environmental Office
California Department of Transportation
CEQA Lead Agency

6/20/22

Date

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: 2022040410

District-County-Route-Post Mile: 05-MON-101-PM R41.9/49.8

EA/Project Number: EA 05-1K440 and Project ID Number 0518000208

Project Description

The California Department of Transportation (Caltrans) proposes to improve the highway pavement and make additional highway facility improvements on an 8-mile section of U.S. 101 near King City, between Jolon Road and Lagomarsino Avenue, in Monterey County. The project will implement preventative maintenance strategies to maintain the roadbed and improve ride quality as part of the 2020 State Highway Operation and Protection Program (SHOPP). The improvements include cold-planing the existing open-graded friction course pavement and placing a 0.15-foot rubberized hot mix asphalt overlay, replacing three failing drainage culverts, installing three new streetlights at the Jolon Road interchange southbound off-ramp end, and replacing a weigh-in-motion station in Greenfield and traffic census stations with updated equipment. Work will occur primarily within the right-of-way, with access outside of the right-of-way required in multiple locations for culvert work and access roads.

Determination

An Initial Study has been prepared by Caltrans, District 5.

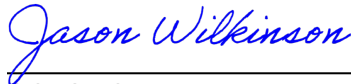
On the basis of this study, it is determined that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment for the following reasons:

The project will have no effect on agriculture and forest resources, cultural resources, air quality, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, wildfire, or utilities and service systems.

The project will have less than significant effects to aesthetics and greenhouse gas emissions.

The project will have no significantly adverse effect on biological resources because the following mitigation measures will reduce potential effects to less than significant:

- To compensate for impacts to jurisdictional waters, mitigation at a 1-to-1 ratio for temporary impacts and a 3-to-1 ratio for permanent impacts to riparian vegetation via restoration is proposed.
- Impacts to vegetation will be offset by replacement plantings within the project limits.



For John Luchetta

John Luchetta
Office Chief, Central Coast Environmental Office
California Department of Transportation

6/20/22

Date

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Chapter 1 **Proposed Project**

1.1 Introduction

The California Department of Transportation (Caltrans) has prepared this Initial Study with Mitigated Negative Declaration for the King City Capital Preventative Maintenance project located in Monterey County in California. Caltrans is the lead agency under both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Caltrans proposes to preserve the pavement on an 8-mile section of U.S. 101 near King City, between Jolon Road and Lagomarsino Avenue, in Monterey County. The project will implement preventative maintenance strategies to maintain the roadbed and improve ride quality as part of the 2020 State Highway Operation and Protection Program (SHOPP).

The scope of work includes cold-planing the existing open-graded friction course pavement and placing a 0.15-foot rubberized hot mix asphalt overlay, replacing or rehabilitating three drainage culverts, adding three new streetlights at the Jolon Road interchange, and replacing a weigh-in-motion station (in Greenfield) and traffic census stations. Secondary improvements include upgrading guardrail and guardrail end treatments, vegetation control, and doing minor concrete, shoulder backing, and pavement dig-outs.

The existing pavement was constructed in 1956. Since then, pavement rehabilitation improvement projects have been limited to repair with thin, new wear courses, most recently in 2011. The pavement wear course, if not replaced, will degrade to a point where water intrusion will result in failure of the underlying layers, leading to more costly reconstruction.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to comprehensively address roadway deficiencies on U.S. 101, between post miles R41.9 and 49.8 near King City in Monterey County. The goals of the project are to restore the ride quality and extend the service life of the existing pavement, improve maintenance worker safety, restore damaged culverts to maintain the purpose of the pipes and protect the associated embankment areas from potential slope failure, improve interchange lighting, improve traffic census station data collection, and bring crash safety devices up to current design standards.

1.2.2 Need

The project is needed due to pavement within the project limits showing distress and unacceptable ride quality. If left uncorrected, the pavement will continue to deteriorate, leading to more costly reconstruction.

Three culverts have been identified with varying degrees of damage: steel pipe corrosion with holes along the flowline, joint failure, steel bar reinforcement corrosion, and settlement cracks that are undermining supporting soils. If culvert deterioration is not corrected, future roadway failure is possible.

The traffic census stations are reaching the end of their service life and need to be replaced to collect reliable information.

The jointed concrete pavement at the weigh-in-motion station in Greenfield is cracked and settled. The ride quality into and out of the bearing plate is degraded. For the weigh-in-motion station to work properly, trucks must ride smoothly over the bearing plate. Reconstruction of the pavement is needed to restore the functional utility.

Existing roadside safety system devices within the project limits need to be upgraded to meet the Manual for Assessing Safety Hardware standards.

The addition of three streetlights at the Jolon Road interchange will improve intersection visibility.

1.3 Project Description

Caltrans proposes a capital preventative maintenance project to cold plane pavement and install 0.15-foot of rubberized hot mix asphalt overlay, replace three culverts, add three streetlights at the Jolon Road interchange, reconstruct the weigh-in-motion station pavement in Greenfield, and improve traffic census stations between post miles R41.9 and R49.8 (between the Jolon Road undercrossing and the Lagomarsino Avenue intersection) on U.S. 101 near King City in Monterey County.

See Figures 1-1 and 1-2 for the Project Vicinity Map and Project Location Map, respectively.

Figure 1-1 Project Vicinity Map

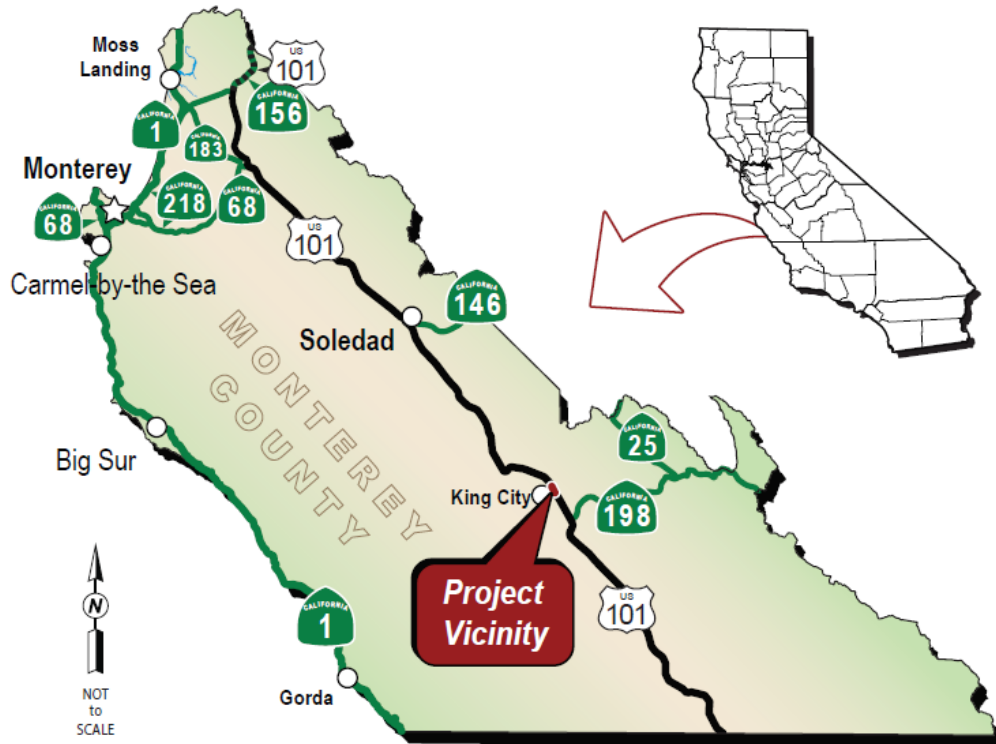
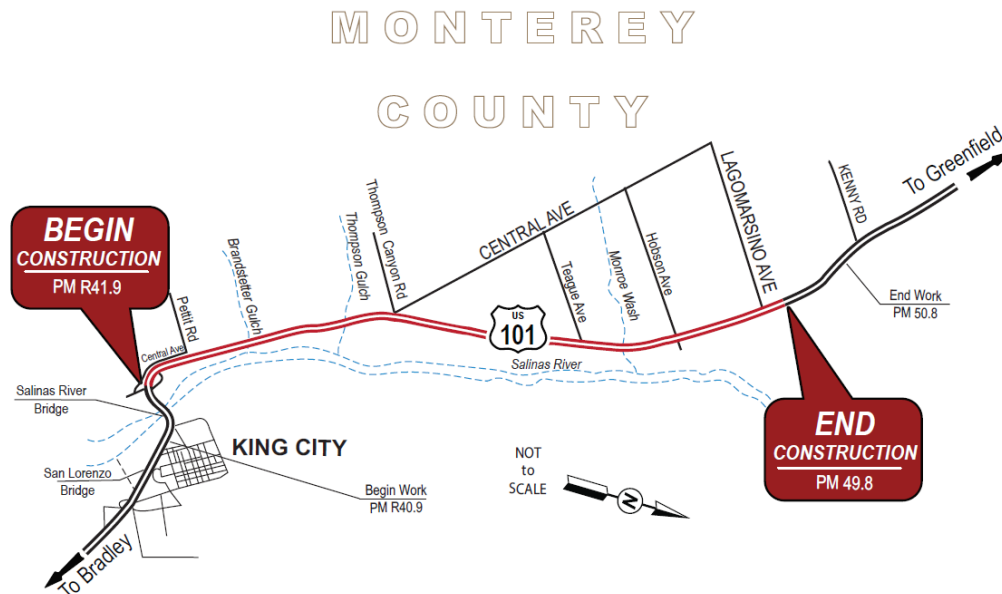


Figure 1-2 Project Location Map

Culvert work will occur at post miles 43.65, 45.17, and 47.68. Two linear ditches along the westerly right-of-way will be filled in and regraded. Rock slope protection or concrete ditch lining will likely be needed to reduce the potential for scour and sediment transport. The pavement at the weigh-in-motion station at post mile 48.0 in Greenfield will be reconstructed and lengthened to 300 feet.

Additional improvements include upgrading guardrail to meet safety standards as set forth in the Manual for Assessing Safety Hardware, vegetation control, and minor concrete, shoulder backing, and pavement dig-outs.

Work will occur mostly within the right-of-way, with temporary access outside of the right-of-way required in multiple locations for culvert work and access roads.

The following drainage improvements will be made:

- Post mile 43.65: A corrugated steel pipe under the northbound shoulder of U.S. 101 that discharges to the east needs to be replaced. The pipe is approximately 33 feet long. Corrosion is allowing water through the bottom of the pipe, resulting in embankment erosion and sediment transport. The eroded embankment will be rebuilt and the scour pool reinforced with rock slope protection. Open-cut construction techniques will be used.
- Post mile 45.17: The Thompson Canyon Gulch's 8-foot arch pipe culvert will be sliplined with a smaller pipe. The void between the pipes will be

packed with grout. A parallel pipe will be constructed using the jack and bore method. The existing headwalls will be reconstructed and integrated into the parallel pipe culvert headwall.

- Post mile 47.68: The Teague Avenue intersection side street culvert that is east of the highway will be replaced. The headwall will be reconstructed or replaced with a flared end section. An oak tree stands very close to the culvert and headwall. Root damage and trimming of the tree will be needed to reconstruct the culvert and headwalls (or flared end section).
- Two linear ditches along the westerly right-of-way will be filled in and regraded. Rock slope protection or concrete ditch lining will likely be needed to reduce the potential for scour and sediment transport.
- A pocket inlet will be subject to light grading.

Pavement at the Greenfield weigh-in-motion station at post mile 48.0 will be reconstructed and lengthened to 300 feet. The northbound and southbound roadbeds will be reprofiled to create a smooth ride into and out of the bearing plate scale. This will require light grading in the median and outer embankment.

Guardrails at various locations will be reconstructed with the Manual for Assessing Safety Hardware-approved Midwest Guardrail System. At the end treatments, grading to build up the hinge point will be needed. Beyond the hinge point, the grading will feather out in typically 10 feet or less. A concrete barrier slab will be considered along the northbound roadbed near Thompson Canyon Gulch, from post miles 45.15 to 45.26. Whether a concrete barrier slab or guardrail is chosen at this location, trees less than 4 feet from the edge of the shoulder will be removed. More details on tree removal are discussed in Section 2.1.4.

The pavement improvements will occur between post miles 43.2 and 49.8. Shoulder backing will be placed where soil next to the edge of the pavement is low.

Three streetlights will be installed at the southbound Jolon Road ramp end. Traffic census stations will be added to the Jolon Road ramps.

1.4 Project Alternatives

Two alternatives are being considered for this project: the Build Alternative and the No-Build (No-Action) Alternative.

1.4.1 Build Alternatives

The Build Alternative will preserve and extend the life of the existing pavement and roadway and integrate asset management components that have been identified as feasible, practical, and cost-effective along U.S. 101 from post miles R41.9 to 49.8, north of King City in Monterey County.

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under “Standard Measures and Best Management Practices Included in All Build Alternatives.”

1.4.2 No-Build (No-Action) Alternative

Under the No-Build Alternative, the pavement distress will continue to increase over time and will require more costly major pavement rehabilitation work in the future.

1.5 Identification of a Preferred Alternative

The Build Alternative, as described in Section 1.4.1, has been identified as the preferred alternative. The Build Alternative includes all project elements described in the project description.

1.6 Standard Measures and Best Management Practices Included in All Build Alternatives

- Each internal combustion engine used for any purpose on the job or related to the job will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine will be operated on the job site without an appropriate muffler.
- Notify the public in advance of the construction schedule when construction noise and upcoming activities likely to produce an adverse noise environment are expected. This notice will be given two weeks in advance. Notice of the dates and duration of proposed construction activities should be published in local news media. The District 5 Public Information Office will post notice of the proposed construction and potential community impacts after receiving notice from the resident engineer.
- Shield especially loud pieces of stationary construction equipment.

- Locate portable generators, air compressors, etc., away from sensitive receptors. Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.
- Place heavily trafficked areas such as the maintenance yard, equipment, tool, and other construction-oriented operations in locations that will be least disruptive to surrounding sensitive noise receptors.
- During project activities, all trash that may attract predators or scavengers will be properly contained, removed from the worksite, and disposed of at the end of each workweek. Following construction, all trash and debris will be removed from work areas.
- Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Internal combustion engines used for any purpose on or related to the job will be equipped with a muffler or baffle of a type recommended by the manufacturer.
- Consult a district noise specialist if complaints are received during the construction process.
- Construction equipment will be free of excessive dirt that may contain weed seed before entering the construction site. If necessary, wash stations, either onsite or offsite, will be established for construction equipment under guidance of Caltrans to avoid/minimize the spread of invasive plants and/or seeds within the construction area.
- Water quality-related Best Management Practices include job site management and preparation of a water pollution control plan.
- Temporary Best Management Practices may include hydraulic mulch, check dams, drainage inlet protection, fiber rolls, concrete washout, and Environmentally Sensitive Area fencing.
- NS-13 Material and Equipment Use Over Water.
- NS-15 Structure Demolition/Removal Over Adjacent Water.
- WM-4 Spill Prevention.
- All project-related hazardous material spills within the project site will be cleaned up immediately. Readily accessible spill prevention and cleanup materials will be kept by the contractor onsite at all times during construction.

- All herbicides, fuels, lubricants, and equipment will be stored, poured, or refilled at least 60 feet from riparian habitats or water bodies in a location where a spill will not drain directly toward aquatic habitat. Before the start of work, Caltrans will ensure that a plan is in place for a prompt and effective response to accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.
- WM-5 Solid Waste Management.
- WM-6 Hazardous Waste Management.

1.7 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, has been prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—that is, species protected by the Federal Endangered Species Act).

1.8 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Section 404 Nationwide permit	To be obtained before construction
Regional Water Quality Control Board	Section 401 permit	To be obtained before construction
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	To be obtained before construction

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact 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 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 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.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report, and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated March 2021, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact

Question—Would the project:	CEQA Significance Determinations for Aesthetics
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, will the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact
d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	No Impact

Affected Environment

The project lies in the southern Salinas Valley along U.S. 101, the main north-south transportation corridor along the Central Coast. U.S. 101, throughout the project limits, is a four-lane divided highway with an unpaved median. The Salinas Valley is defined by the broad valley floor with the Coastal Range mountains to the west and the Gabilan Mountains to the east. Land use is mostly agriculture with low-growing crops, vineyards, and processing facilities. The Salinas River runs parallel to the highway on the east side with dense riparian vegetation. Low rolling hills are covered with scattered oaks. The existing visual character of the project area is based mainly on its distant views of the hills to the east and west, agricultural character, and gentle topography with scattered oak tree-covered hills. The developed community of King City and the highway itself contribute to the overall character of the site and its surroundings.

Environmental Consequences

Potential visual changes will occur as a result of the project based on the new guardrail, additional paving, drainage structures, and the reduction of roadside native vegetation. These changes will result in a somewhat more engineered appearance of the highway facility.

Although potential visual changes will occur, the same type of elements proposed with this project are seen elsewhere along the highway and are not by themselves inconsistent with the rural roadway character of the region or throughout the state. As a result, the proposed guardrail, additional paving, and drainage structures will be subordinate to the overall experience of traveling along the highway.

Three new lights will be installed at the Jolon Road southbound ramp end. Lighting is not uncommon at rural intersections and will not be an unexpected visual element at this location. No sensitive receptors such as residences are near this area, and new lighting will be directed downward to minimize light going into the surrounding area. As a result, lighting proposed by the project will not adversely affect nighttime views from public areas such as roads or recreation areas.

It is expected that following project construction and revegetation, the project will be generally unnoticed by the casual observer on U.S. 101 and other public viewpoints in the area. If noticed, the project will not appear out-of-place with the setting. In addition, scenic vistas, including views of the hills, will remain intact as seen from U.S. 101.

Avoidance, Minimization, and/or Mitigation Measures

With the implementation of the following project features, the project will be consistent with the aesthetic and visual resource protection goals along U.S. 101, and potential visual effects will be further reduced:

- Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be used.
- Revegetate disturbed areas to the greatest extent possible, considering safety and horticultural appropriateness.
- Following construction, regrade and recontour all new construction access roads, staging areas, and other temporary uses, as necessary to match the surrounding pre-project topography.
- All tree pruning will be conducted under the direct supervision of an International Society of Arboriculture-Certified Arborist and will minimize tree disfiguration and promote the healthy regrowth of trees.
- Replacement planting will include aesthetic considerations and inherent biological goals. Revegetation will include native trees and plants, as determined by a Caltrans Biologist and Caltrans District 5 Landscape Architect. Planting should be maintained until established.
- All streetlights will be directed downward and will include cut-off lens fixtures such that no point source lighting is visible from nearby parcels.

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

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning, 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))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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?	No Impact

2.1.3 Air Quality

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.

Considering the information in the Air Quality Technical Memorandum dated August 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
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?	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

2.1.4 Biological Resources

Considering the information in the Natural Environment Study dated June 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	Less Than Significant Impact
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 U.S. Fish and Wildlife Service?	Less Than Significant Impact With Mitigation Incorporated
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?	Less Than Significant Impact With Mitigation Incorporated

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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?	No Impact

Affected Environment

The Biological Study Area is the area studied for biological resources. It includes the area that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities, as well as some adjoining habitats, to ensure an adequate area has been studied. The Biological Study Area includes an 8-mile stretch of highway where cold plane and overlay work will occur and the buffer areas that correspond to locations of the culvert replacements and drainage improvements. The Biological Study Area limits encompass the project location and associated staging/access areas. In areas where only pavement preservation work is proposed, the Biological Study Area is limited to the Area of Potential Impact, where work is confined to the existing pavement and immediate shoulder. However, to ensure evaluation of all potential effects on biological resources, the Biological Study Area was expanded beyond the construction footprint with a buffer of 50 feet at culvert and drainage improvement sites to include nearby habitats. The Biological Study Area occurs along U.S. 101, in Monterey County, from the Jolon Road undercrossing to the Lagomarsino Avenue intersection.

The Biological Study Area is in the Salinas River Valley between King City and Greenfield in Monterey County. Surrounding land use is dominated by agricultural development. U.S. 101 passes over the Salinas River at the southernmost portion of the Biological Study Area and remains to the east of the Biological Study Area for the remainder of the project. The project elevation is approximately 350 feet above sea level. The approximately 162-acre Biological Study Area contains both natural plant communities and agricultural areas. This region features a “Mediterranean climate” with hot, dry summers and mild to cool wet winters. Most rainfall occurs during the winter months (the wettest month is February), with an average rainfall at the nearby

King City weather station averaging approximately 11.02 inches of precipitation per year over the past 90 years.

All waters within the Biological Study Area occur within the Salinas River watershed. Several small drainages occur within canyons running east from the Santa Lucia Mountains toward the Salinas River. Drainages within the Biological Study Area are ephemeral or intermittent. Hydrology within and around the Biological Study Area is highly altered by agricultural uses. Irrigation runoff during the dry season contributes to summer flows in streams that will normally be seasonally dry.

Regional Plant Species of Concern

The California Natural Diversity Database (2021) documents 11 special-status plant taxa (federally listed, state listed, and/or California Native Plant Society California Rare Plant Rank 1B, 2, or 4) as occurring within the search area. The official federal species list for the vicinity of the project area received from the U.S. Fish and Wildlife Service included one additional federally listed species (U.S. Fish and Wildlife Service 2021). See Table 1. Several other plant species were added to Table 1 based on results of a California Native Plant Society Rare Plant Inventory search of the same quadrangles listed. Plant species with a California Rare Plant Rank List 4 are not included in Table 1.

Table 1 shows the names and legal status of each of the special-status plant taxa considered and a general description of the habitat requirements for each. Also included is a determination of whether suitable habitat is present (HP) or absent (A), whether the taxon is present (P), and/or whether the Biological Study Area is located within a federally designated critical habitat unit (CH). The rationale section summarizes the potential for each taxon to occur in the Biological Study Area or be affected by the project.

Where suitable habitat is absent, it is assumed that the species does not occur within the Biological Study Area. Where suitable habitat is present, but species were not detected during appropriately timed floristic surveys, it is assumed that the species does not occur within the Biological Study Area.

Regional Animal Species of Concern

The California Natural Diversity Database (2021) documents 23 special-status animal taxa (federally listed, state-listed, California Fully Protected, Special Species of Concern, and/or protected by the Migratory Bird Treaty Act and California Fish and Game Code) as occurring within the search area. The official federal species list for the vicinity of the project area received from the U.S. Fish and Wildlife Service included three additional federally listed species (U.S. Fish and Wildlife Service 2021). See Table 2.

Table 2 shows the names and legal status of each of these special-status animal taxa and a general description of the habitat requirements for each.

Also included is a determination of whether suitable habitat is present (HP) or absent (A), whether the taxon is present (P), and/or whether the Biological Study Area is located within a federally designated critical habitat unit (CH). The rationale section summarizes the potential for each taxon to occur in the Biological Study Area or be affected by the project.

Regional Habitats of Concern

The California Natural Diversity Database (2021) documents one regional habitat of concern that is considered sensitive as occurring within the search area. Valley oak woodland is documented in Reliz Canyon west of the Biological Study Area. Valley oak (*Quercus lobata*) trees were not detected within the Biological Study Area, and this sensitive natural community does not occur within the Biological Study Area.

Environmental Consequences

Permanent impacts to natural communities and habitats will occur from replacing three drainage culverts, improving drainage at two linear ditches, and adding three new streetlights at the Jolon Road interchange southbound off-ramp end. At post mile 45.17, seven coast live oak trees within 4 feet of existing guardrail may need to be removed. Other tree removal is anticipated for culvert replacement but has not yet been quantified. Temporary impacts will occur from equipment access, clearing vegetation, staging, stockpiling, and temporary dewatering/diversion, if needed. Potential permanent and temporary impacts are summarized in Table 3.

Impacts will result from the use of construction equipment and associated worker foot traffic. Trucks, bulldozers, backhoes, compactors, asphalt concrete rollers, clamshells, excavators, compressors, pavers, water trucks, sweepers, and any other equipment necessary for construction will be used. Staging may occur in closed lanes behind a temporary concrete protective barrier or along ruderal/disturbed edges of U.S. 101.

Table 1. Regional Plant Species of Concern

Scientific Name	Common Name	Federal/State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
<i>Arenaria paludicola</i>	marsh sandwort	Federally Endangered/State Endangered/CA Rare Plant Rank 1B.1	Perennial stoloniferous herb. Marshes and swamps (freshwater or brackish); sandy areas and openings. Flowers May to August. 10 to 560 feet.	A	Suitable marsh and swamp habitat is not present within the Biological Study Area. The project will have no effect on marsh sandwort, and no take of the species will occur.
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey spineflower	Federally Threatened /CH, CA Rare Plant Rank 1B.2	Annual herb. Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes or more inland within chaparral or other habitats. Flowers April to August. 0 to 1,476 feet.	A	Suitable sandy soils in coastal dunes or chaparral are not present within the Biological Study Area. The project will have no effect on the Monterey spineflower.
<i>Clarkia jolonensis</i>	Jolon clarkia	CA Rare Plant Rank 1B.2	Annual herb. Cismontane woodland, chaparral, coastal scrub, riparian woodland. Flowers April to June. 66 to 2,165 feet.	HP	Suitable habitat is present within the Biological Study Area. Jolon clarkia was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Collinsia multicolor</i>	San Francisco collinsia	CA Rare Plant Rank 1B.2	Annual herb. Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus, sometimes on serpentine. Flowers February to May. 98 to 820 feet.	HP	Marginally suitable coastal scrub habitat is present. San Francisco Collinsia was not detected within the Biological Study Area during appropriately timed botanical surveys.

Scientific Name	Common Name	Federal/State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
<i>Delphinium recurvatum</i>	recurved larkspur	CA Rare Plant Rank 1B.2	Perennial herb. Chenopod scrub, valley and foothill grassland, cismontane woodland. On alkaline soils, often in valley saltbush or valley chenopod scrub. Flowers March to June. 10 to 2,592 feet.	A	Suitable alkaline soils are not present within the Biological Study Area.
<i>Delphinium umbraculorum</i>	umbrella larkspur	CA Rare Plant Rank 1B.3	Perennial herb. Cismontane woodland, chaparral. Mesic sites. Flowers April to June. 1,312 to 5,249 feet.	HP	Suitable habitat is present within the Biological Study Area. Umbrella larkspur was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Eriogonum butterworthianum</i>	Butterworth's buckwheat	SR/CA Rare Plant Rank 1B.3	Perennial herb. Chaparral, valley, and foothill grassland. Dry sandstone outcrops and crevices. Flowers June to July. 1,099 to 2,346 feet.	HP	Though no chaparral is present, marginally suitable habitat may be present in grasslands in the Biological Study Area. However, Butterworth's buckwheat was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Eriogonum heermannii</i> var. <i>occidentale</i>	Western Heermann's buckwheat	CA Rare Plant Rank 1B.2	Perennial deciduous shrub. Cismontane woodland. Openings. Often on serpentine alluvium floodplains or on roadsides, rarely on clay or shale slopes. Flowers July to October. 344 to 2,641 feet.	HP	Marginally suitable habitat is present within the Biological Study Area. Western Heermann's buckwheat was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Layia heterotricha</i>	pale-yellow layia	CA Rare Plant Rank 1B.1	Annual herb. Cismontane woodland, coastal scrub, pinyon-juniper woodland, and valley and foothill grassland. Alkaline or clay soils; open areas. Flowers March to June. 984 to 5,594 feet.	HP	Suitable habitat is present within the Biological Study Area. Pale-yellow layia was not detected within the Biological Study Area during appropriately timed botanical surveys.

Scientific Name	Common Name	Federal/State/CA Native Plant Society and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
<i>Malacothamnus aboriginum</i>	Indian Valley bush-mallow	CA Rare Plant Rank 1B.2	Perennial deciduous shrub. Cismontane woodland, chaparral. Granitic outcrops and sandy bare soil, and in disturbed soils or burned areas. Flowers April to October. 492 to 5,577 feet.	HP	Suitable habitat is present within the Biological Study Area. Indian Valley bush-mallow was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Malacothamnus davidsonii</i>	Davidson's bush-mallow	CA Rare Plant Rank 1B.2	Perennial deciduous shrub. Coastal scrub, riparian woodland, chaparral, cismontane woodland. Sandy washes. Flowers June to January. 607 to 2,805 feet.	HP	Suitable habitat is present within the Biological Study Area. Davidson's bush-mallow was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Plagiobothrys uncinatus</i>	hooked popcornflower	California Rare Plant Rank 1B.2	Annual herb. Chaparral, cismontane woodland, and valley and foothill grassland. Sandstone outcrops and canyon sides, often in burned or disturbed areas. Flowers April to May. 984 to 2,493 feet.	HP	Suitable habitat is present within the Biological Study Area. Hooked popcornflower was not detected within the Biological Study Area during appropriately timed botanical surveys.
<i>Sidalcea hickmanii</i> ssp. <i>hickmanii</i>	Hickman's checkerbloom	California Rare Plant Rank 1B.3	Perennial herb. Chaparral, coastal bluff scrub, cismontane woodland. Grassy openings in chaparral and on dry ridges. Flowers May to July. 1,099 to 3,937 feet.	HP	Suitable habitat is present within the Biological Study Area. Hickman's checkerbloom was not detected within the Biological Study Area during appropriately timed botanical surveys.

Status Codes used in Table 1 are as follows:

Federal: FE = Federal Endangered, FT = Federal Threatened, FC = Federal Candidate Species, CH = Critical Habitat designated

State: SE = State Endangered, ST = State Threatened, SR = State Rare, SC = State Candidate Species

California Native Plant Society: List 1B = rare, threatened, or endangered in California and elsewhere; List 2 = rare, threatened, or endangered in California, but more common elsewhere; List 4 = limited distribution (Watch List). Not included in the table.

Threat Code: **1** = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat); **2** = Fairly endangered in California (20 to 80 percent occurrences threatened); **3** = Not very endangered in California (less than 20 percent of occurrences threatened or no current threats known).

Habitat: Presence/Absence—Absent [A] means no further work needed. Present [P] means general habitat is present in the Biological Study Area, and species may be present.

Table 2. Regional Animal Species of Concern

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
AMPHIBIANS: <i>Rana boylei</i>	Foothill yellow-legged frog	SE/SSC, SA	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Partly shaded streams and riffles. Needs some cobble-sized substrate for egg-laying.	A	Suitable rocky streams and deep shaded waters are not present within the Biological Study Area. No take of this species will occur.
AMPHIBIANS: <i>Rana draytonii</i>	California red-legged frog	FT/CH, SSC, SA	Need underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding. Optimally: aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails.	HP	Marginally suitable habitat is present within the Biological Study Area. The California red-legged frog was not detected during 2020 general wildlife surveys. The project <i>may affect and is likely to adversely affect</i> the California red-legged frog. Avoidance and minimization measures are recommended.
AMPHIBIANS: <i>Spea hammondi</i>	western spadefoot	SSC, SA	Occurs in grassland habitats but can be found in valley-foothill hardwood woodlands. Breeds in temporary pools that hold water for at least 30 days. Needs at least 30 days to attain metamorphosis.	HP	Marginally suitable habitat is present within the Biological Study Area. The western spadefoot was not detected during 2020 surveys but has the potential to occur. Avoidance and minimization measures are recommended.
AMPHIBIANS: <i>Taricha torosa</i>	Coast Range newt	SSC	Coastal drainages from Mendocino County to San Diego County. Occurs in grassland habitats but can be found in valley-foothill hardwood woodlands. Reproduction is aquatic.	HP	Marginally suitable habitat is present within the Biological Study Area. The Coast Range newt was not detected during 2020 surveys but has the potential to occur. Avoidance and minimization measures are recommended.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
BIRDS: <i>Agelaius tricolor</i>	tricolored blackbird	MBTA/ST/SSC, SA	Highly colonial species, most numerous in the Central Valley. Largely endemic to California. Breeds in large freshwater marshes. Requires open water, protected nesting substrate of cattails or bulrushes, and a foraging area with insect prey within a few miles of the colony.	A	Suitable freshwater marsh habitat is not present within the Biological Study Area. No take of this species will occur.
BIRDS: <i>Aquila chrysaetos</i>	golden eagle	BGEPA, MBTA/--/FP, WL, SA	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of the range; also, large trees in open areas.	HP	Suitable habitat is in the Salinas River floodplain, but no potential eagle nest sites were found near the Biological Study Area. Though the Biological Study Area could provide foraging habitat for the golden eagle, it is determined that the project will have no effect on this species.
BIRDS: <i>Athene cunicularia</i>	burrowing owl	MBTA/--/SSC, SA	Open, dry annual or perennial grasslands, deserts, and scrublands with low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel, for nests, though adaptable to human-provided material that can serve as substitutes. Nests are typically less than 3 feet deep. Preferred nesting sites have loose soil, some elevation to avoid floods, outlooks, and a high density of burrows.	A	Suitable nesting habitat is not present within the Biological Study Area.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
BIRDS: <i>Empidonax traillii</i> <i>extimus</i>	southwestern willow flycatcher	FE, MBTA/SE/CH, SA	Breeds in marshes and riparian areas while wintering in shrubby clearings and early successional growth. Nests are near water and low, especially in the crotch of trees or bushes. Habitat patches of 0.25 acre and 30-foot minimum width.	A	Suitable habitat occurs along the Salinas River outside of the project's Area of Potential Impact. Suitable nesting habitat is not present in the Biological Study Area. Effects determination is the project will have no effect on the southwestern willow flycatcher or its critical habitat. No take of this species will occur.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
BIRDS: <i>Gymnogyps californianus</i>	California condor	FE, MBTA/SE/CH, FP, SA	Requires vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Nests in deep canyons on rock walls with clefts. Forages up to 100 miles from nesting sites.	A	Suitable nesting habitat is not present within the Biological Study Area. Effects determination is the project will have no effect on the California condor or its critical habitat. No take of this species will occur.
BIRDS: <i>Riparia riparia</i>	bank swallow	MBTA/ST/SA	A colonial nester. Nests in riparian and other lowland habitats west of the desert but also near ocean coasts and reservoirs. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, and oceans to dig nesting holes. Breeding sites are occupied from March to mid-July.	HP	Suitable vertical banks/cliff habitat is present next to the Area of Potential Impact near the potential private access road at post mile 45.17. No bank swallows were seen during surveys. Avoidance measures are recommended.
BIRDS: <i>Vireo bellii pusillus</i>	least Bell's vireo	FE, MBTA/SE/CH, SA	A summer resident of Monterey County and Central and Southern California coasts in low riparian areas in the vicinity of water or in dry river bottoms below 2,000 feet. Nests are placed along the margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite, redwoods, or Douglas firs. Builds its nests with lichens and mosses (CDFW 2009).	A	Suitable habitat occurs along the Salinas River outside of the project's Area of Potential Impact. No off-pavement work is proposed where the Area of Potential Impact passes over the Salinas River. This species is not expected within the Biological Study Area and was not detected during surveys. Effects determination is the project will have no effect on the least Bell's vireo or its critical habitat, and no take will occur.
FISH: <i>Lavinia exilicauda harengus</i>	Pajaro/Salinas hitch	SSC	Known from Sacramento-San Joaquin, Clear Lake, Russian River, and Pajaro-Salinas River drainages. Spawning takes place mainly in riffles of streams, tributaries to lakes, rivers, and sloughs after flows increase in response to spring rains. Found in low-gradient sites with permanent water and large pools in summer. Spawning requirements need further documentation.	A	Suitable habitat is not present in the intermittent and ephemeral streams and drainages within the Biological Study Area.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
FISH: <i>Oncorhynchus mykiss irideus</i>	steelhead-South-Central California Coast DPS	FT/CH, SA	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River. Needs adequate streamflow for return passage to streams and rivers to spawn. Requires cool, clean water.	A	Though Thompson Canyon Gulch Creek is a tributary to the Salinas River, the portion between the Salinas River and the subject culvert is ditched, devoid of vegetation, and appears to be regraded frequently by agricultural landowners. Suitable habitat for steelhead is not present in the degraded and highly modified drainages of the Biological Study Area. The project will have no effect on the South-Central California Coast steelhead.
INVERTEBRATES: <i>Bombus occidentalis</i>	western bumble bee	SC/SA	Once common and widespread, this species has declined precipitously from Central California to Southern B.C., perhaps from disease. Presently, more commonly found in isolated pockets east of the Cascades, such as the Rocky Mountains. Generalist foragers; not dependent on a single plant type.	HP	Though marginally suitable foraging habitat may be present for this species, presence will be transient. Impacts to this species' food plants will be minimal and temporary in nature. The project will have no take of the western bumble bee.
INVERTEBRATES: <i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT/CH, SA	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	A	Suitable vernal pool habitat is not present within the Biological Study Area.
MAMMALS: <i>Antrozous pallidus</i>	pallid bat	SSC, SA	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	HP	Suitable roosting habitat is present in the Thompson Canyon Gulch arch culvert. No bats were seen within the culvert during 2020 surveys. Avoidance and minimization measures are recommended.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
MAMMALS: <i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC, SA	In a wide variety of habitats throughout California. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites are limited . Extremely sensitive to human disturbance.	HP	Suitable roosting habitat is in the Thompson Canyon Gulch arch culvert. No bats were seen in the culvert during 2020 surveys. Avoidance and minimization measures are recommended.
MAMMALS: <i>Neotoma macrotis luciana</i>	Monterey dusky-footed woodrat	SSC, SA	Forest habitats of moderate canopy and moderate to dense understory; also, in chaparral habitats. Shaded areas; can build stick homes up to 5 feet high and 8 feet in diameter on the ground or in trees.	HP	Suitable habitat is present within coast live oak woodland and coastal scrub habitats of the Biological Study Area. Avoidance and minimization measures are recommended.
MAMMALS: <i>Perognathus inornatus psammophilus</i>	Salinas pocket mouse	SSC	Annual grassland and desert shrub communities in the Salinas Valley.	HP	Marginally suitable habitat is present in grasslands and scrub habitat within the Biological Study Area. Avoidance and minimization measures are recommended.
MAMMALS: <i>Taxidea taxus</i>	American badger	SSC, SA	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	HP	Marginally suitable habitat is present within the Biological Study Area. Avoidance and minimization measures are recommended.
MAMMALS: <i>Vulpes macrotis mutica</i>	San Joaquin kit fox	FE/ST	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing and a suitable prey base.	HP	Though the Biological Study Area supports a prey base and is contiguous to the extensive suitable habitat to the east, it provides only marginal habitat for this species. With avoidance and minimization measures used and given the years of negative surveys for kit fox in Salinas Valley, the effects determination is the project <i>may affect but is not likely to adversely affect</i> the San Joaquin kit fox. No take of the species will occur.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
REPTILES: <i>Anniella pulchra</i>	northern California legless lizard	SSC	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees, bushes in sunny areas, and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often found under surface objects such as rocks, boards, driftwood, and logs.	HP	Suitable habitat is present in soils under leaf litter in oak woodlands within the Biological Study Area. Northern California legless lizards were not detected within the Biological Study Area; however, avoidance and minimization measures are recommended during tree removal activities.
REPTILES: <i>Emys marmorata</i>	western pond turtle	SSC, SA	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation with rocky or muddy bottoms. Prefers pools to shallow waters in streams usually below 6,000 feet in elevation. Needs basking sites and suitable upland habitats like sandy banks or grassy open fields up to 1,640 feet from water for egg-laying.	HP	Marginally suitable habitat may be present in Thompson Canyon Gulch Creek. Avoidance and minimization measures are recommended.
REPTILES: <i>Masticophis flagellum ruddocki</i>	San Joaquin coachwhip	SSC	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	HP	Marginally suitable habitat is present in coastal scrub habitat. Avoidance and minimization measures are recommended.
REPTILES: <i>Phrynosoma blainvillii</i>	coast horned lizard	SSC, SA	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects.	HP	Marginally suitable habitat is present in coastal scrub habitat and nearby open areas. Avoidance and minimization measures are recommended.

Scientific Name	Common Name	Federal/State/CDFW and Other Status Codes	General Habitat Description	Habitat Present or Absent in Biological Study Area?	Rationale
REPTILES: <i>Thamnophis hammondi</i>	two-striped garter snake	SSC	Two-striped garter snakes are known from the foothill streams east of King City; however, no California Natural Diversity Database records occur within the six-quadrant search area for this project.	HP	Though unlikely, given the lack of recent historic sightings in the Salinas River Valley, it is possible that two-striped garter snakes could be found in Thompson Canyon Gulch Creek when water is present.

The following codes are used in Table 2:

Status Codes:

Federal:

FE = Federal Endangered **FT** = Federal Threatened **FC** = Federal Candidate **FD** = Federal Delisted

MBTA = Protected by Federal Migratory Bird Treaty Act

State:

SE = State Endangered **ST** = State Threatened **SC** = State Candidate **SD** = State Delisted

FP = Fully Protected

CEQA = Protected under CEQA (no other legal protection)

California Department of Fish and Wildlife:

SSC = California Species of Special Concern

WL = CDFW Watch List species

SA = Included on California Natural Diversity Database Special Animals List (also protected under CEQA)

FGC Section 3503 = Protected by California Fish and Game Code Section 3503

Habitat Present/Absent

Absent [A]-no habitat present and no further work needed.

Habitat Present [HP]-habitat is or may be present.

Present [P]-the species is present.

Critical Habitat [CH] – the project footprint is located within a designated critical habitat unit but does not necessarily mean that appropriate habitat is present.

Table 3. Summary of Anticipated Impacts

Natural Community/Habitat	Permanent Impacts Acre(s)	Permanent Impacts Square Feet	Temporary Impacts Acre(s)	Temporary Impacts Square Feet
Non-native Annual Grassland	0	0	1.300	56,645
Ruderal/Disturbed	0.752	32,747	32.541	1,417,487
Coastal Scrub	0.009	391	0.519	22,599
Coast Live Oak Woodland	0	0	0.726	31,609
Coast Live Oak Woodland Riparian—Riparian associated with stream/other waters. Extends above the Ordinary High-Water Mark to the top of the bank or outer edge of riparian vegetation, whichever is greater. Regulated by the Regional Water Quality Control Board and California Department of Fish and Wildlife.	0.01	440	0.093	4,071
Fremont Cottonwood/Black Elderberry Riparian—Riparian associated with stream/other waters. Extends above the Ordinary High-Water Mark to the top of the bank or outer edge of riparian vegetation, whichever is greater. Regulated by the Regional Water Quality Control Board and California Department of Fish and Wildlife.	0.009	371	0.177	7,714
Willow Riparian—Riparian associated with stream/other waters. Extends above the Ordinary High-Water Mark to the top of the bank or outer edge of riparian vegetation, whichever is greater. Regulated by the Regional Water Quality Control Board and California Department of Fish and Wildlife.	0	0	0.227	9,883
Stream/Other Waters—U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdictional areas.	0.083	3,609	0.258	11,267

Impacts to jurisdictional streambeds (waters of the U.S. and state) and riparian areas will occur for this project. Areas of temporary impact will be restored at a 1-to-1 ratio (acreage), while compensatory mitigation for permanent impacts to jurisdictional areas is proposed at a 3-to-1 ratio (acreage). A total of approximately 3,609 square feet (0.083 acre) of U.S. Army Corps of Engineers/Regional Water Quality Control Board jurisdictional

other waters of the U.S. and California Department of Fish and Wildlife streambed may be permanently impacted. A total of approximately 811 square feet (0.019 acre) of Regional Water Quality Control Board/California Department of Fish and Wildlife jurisdictional riparian habitat may be permanently impacted. This includes 440 square feet (0.01 acre) of Coast live oak woodland riparian habitat and 371 square feet (0.009 acre) of Fremont cottonwood/black elderberry riparian habitat.

Temporary impacts to jurisdictional features will occur due to temporary access, staging areas, channel regrading and realignment, and temporary stream diversion/dewatering if needed. A total of approximately 11,267 square feet (0.258 acre) of U.S. Army Corps of Engineers/Regional Water Quality Control Board jurisdictional other waters of the U.S. and California Department of Fish and Wildlife streambed may be temporarily impacted. A total of approximately 21,668 square feet (0.497 acre) of Regional Water Quality Control Board/California Department of Fish and Wildlife jurisdictional riparian habitat may be temporarily impacted. This includes 4,071 square feet (0.093 acre) of Coast Live Oak Woodland Riparian habitat, 7,714 square feet (0.177 acre) of Fremont Cottonwood/Black Elderberry Riparian habitat, and 9,883 square feet (0.227 acre) of Willow Riparian habitat.

Wildlife movement may temporarily be impacted during the replacement of the Thompson Canyon Gulch culvert. However, no long-term wildlife connectivity impacts are anticipated.

No special-status plant species or special-status natural communities occur within the Biological Study Area.

Suitable habitat may be present within the Biological Study Area for the following amphibian and reptile Species of Special Concern: California red-legged frog, western spadefoot, coast horned lizard, San Joaquin coachwhip, Northern California legless lizard, two-striped garter snake, Coast Range newt, and western pond turtle. Also, suitable habitat may be present within the Biological Study Area for the American badger, San Joaquin kit fox, Salinas pocket mouse, Monterey dusky-footed woodrat, pallid bat, and Townsend's big-eared bat.

The Federal Endangered Species Act Section 7 effects determination is that the project may affect and is likely to adversely affect the California red-legged frog. The project is anticipated to qualify for programmatic concurrence for the California red-legged frog for the purposes of U.S. Fish and Wildlife Service formal consultation (U.S. Fish and Wildlife Service 2011).

Caltrans proposes to implement the standard avoidance and minimization measures for the San Joaquin kit fox to ensure that the project will not impact the species. The Federal Endangered Species Act Section 7 effects determination is that the project may affect but is not likely to adversely affect

the San Joaquin kit fox and that the project will not result in take of the San Joaquin kit fox.

Because of a lack of suitable habitat, the Federal Endangered Species Act Section 7 effects determination is that the project will have no effect on the following federally listed animal taxa: vernal pool fairy shrimp (*Branchinecta lynchi*), California condor (*Gymnogyps californianus*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and South-Central California Coast steelhead (*Oncorhynchus mykiss irideus*). There will be no impacts to federally designated critical habitats for any of these federally listed animal taxa.

Because of a lack of suitable habitat and/or no observations during appropriately timed floristic surveys, the Federal Endangered Species Act Section 7 effects determination is that the project will have no effect on the marsh sandwort (*Arenaria paludicola*) and Monterey spineflower (*Chorizanthe pungens* var. *pungens*). There will be no impacts to federally designated critical habitats for any of these federally listed plant taxa.

Avoidance, Minimization, and/or Mitigation Measures

This section lists the avoidance, minimization, and/or mitigation measures as of June 2022. These recommendations are pending final comments and concurrence by the regulatory agencies who have yet to review this project through the Federal Endangered Species Act Section 7 process and the National Environmental Policy Act/California Environmental Quality Act review and permit processes. As project development proceeds, these agreements will become refined and possibly revised.

The following avoidance and minimization measures will be implemented to reduce the potential impacts to jurisdictional areas and riparian habitats resulting from the project:

- Prior to construction, Caltrans shall obtain a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. All permit terms and conditions will be incorporated into construction plans and implemented.
- Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around jurisdictional features and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.
- Construction activities in jurisdictional waters and temporary stream diversion, if needed, shall be timed to occur between June 1 and October

31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at a seasonal minimum. Deviations from this work window will only be made with permission from the relevant regulatory agencies.

- During construction, all project-related hazardous materials spills within the project site shall be cleaned up immediately. Readily accessible spill prevention and cleanup materials shall always be kept by the contractor onsite during construction.
- During construction, erosion control measures shall be implemented. Silt fencing, fiber rolls, and barriers shall be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum, erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.
- Stream contours shall be restored as close as possible to their original condition.
- Areas of temporary impact will be restored at a 1-to-1 ratio (acreage), while compensatory mitigation for permanent impacts to jurisdictional areas is proposed at a 3-to-1 ratio (acreage).

The following are measures for minimizing the spread of invasive species within the project area:

- During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.
- Only clean fill shall be imported. When practicable, invasive exotic plants in the project site shall be removed and properly disposed of. Any plant species rated as “High” on the Cal-IPC Invasive Plant Inventory that are removed from the construction site shall be taken to a landfill to prevent the spread of invasive species.
- Project plans will avoid the use of plant species that the Cal-IPC, California Department of Agriculture, California Department of Fish and Wildlife, or other resource organizations consider to be invasive or potentially invasive.
- Construction equipment shall be inspected as “weed-free” by Caltrans before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans in order to avoid/minimize the spread of invasive plants and/or seeds within the construction area.

The following are measures for the California red-legged frog:

- A U.S. Fish and Wildlife Service-approved biologist shall survey the project site no more than 48 hours before the onset of work activities. If found, the U.S. Fish and Wildlife Service-approved biologist shall relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and will not be affected by the activities associated with the project. The relocation site shall be in the same drainage to the extent practicable.
- Before any activities begin on a project, a U.S. Fish and Wildlife Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current project, and the boundaries within which the project may be accomplished.
- All refueling, maintenance, and staging of non-stationary equipment and vehicles shall occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill will drain directly toward aquatic habitat. If stationary equipment must be refueled within 60 feet of riparian habitat or water bodies, secondary containment best management practices shall be implemented. The Caltrans biologist shall ensure contamination of habitat does not occur during such operations.
- Habitat contours shall be returned to a natural configuration at the end of the project activities. This measure shall be implemented in all areas disturbed by activities associated with culvert repair/replacement and drainage improvements unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or modification of original contours will benefit the California red-legged frog.
- The number of access routes, size of staging areas, and the total area of activity shall be limited to the minimum necessary to achieve the project. Environmentally Sensitive Areas shall be established to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.
- Caltrans shall attempt to schedule work for times of the year when impacts to the California red-legged frog will be minimal. For example, work that will affect large pools that may support breeding will be avoided, to the maximum degree practicable, during the breeding season (November through May).
- To control sedimentation during and after project completion, Caltrans shall implement best management practices outlined in any authorizations

or permits issued under the authorities of the Clean Water Act received for the project.

- If a worksite is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or barriers to flow shall be removed in a manner that will allow flow to resume with the least disturbance to the substrate. Alteration of the streambed shall be minimized to the maximum extent possible; any imported material shall be removed from the streambed upon completion of the project.
- Unless approved by the U.S. Fish and Wildlife Service, water shall not be impounded in a manner that may attract California red-legged frogs.
- Project sites shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials shall be used to the extent practicable.
- Caltrans shall not use herbicides as the primary method to control invasive, exotic plants.
- Upon completion of the project, Caltrans shall ensure that a Project Completion Report is completed and provided to the U.S. Fish and Wildlife Service, following the template provided with the Programmatic Biological Opinion.

The following are measures for amphibians and reptile species of special concern. The following avoidance and minimization measures are recommended for the western spadefoot, coast horned lizard, Northern California legless lizard, San Joaquin coachwhip, two-striped garter snake, Coast Range newt, and western pond turtle:

- Prior to construction, a qualified biologist shall survey the Area of Potential Impact and, if present, capture and relocate any western spadefoots, coast horned lizards, San Joaquin coachwhips, Northern California legless lizards, two-striped garter snakes, Coast Range newts, or western pond turtles to the nearest suitable habitat outside of the Area of Potential Impact. Observations of Species of Special Concern or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.
- Prior to construction, Caltrans shall acquire a Streambed Alteration Agreement from the California Department of Fish and Wildlife pursuant to

California Fish and Game Code Section 1600 and shall incorporate any additional measures relating to these species.

The following additional avoidance and minimization measures specific to the Northern California legless lizard are recommended:

- A qualified biologist shall conduct preconstruction surveys for legless lizards within five calendar days before initial ground disturbance proposed within coast live oak woodlands and/or prior to tree removal. Where feasible, this survey shall include systematic subsurface searching (raking suitable habitat) because legless lizards are a burrowing species.
- If any legless lizards are discovered during preconstruction surveys, they will be relocated to a nearby area with suitable habitat similar to where they were discovered (as stated above for other Species of Special Concern reptiles and amphibians). Also, if the lizard is discovered during preconstruction surveys, a qualified biologist will be present during oak tree removal to safely relocate any legless lizards that could be uncovered during tree removal.

The following are measures for the San Joaquin kit fox:

- Project employees will be directed to exercise caution when commuting within habitats of listed species. A 20-mile-per-hour speed limit will be observed in all project areas, except on county roads and state and federal highways. Cross-country travel by vehicles will be prohibited outside of the project area unless authorized by the U.S. Fish and Wildlife Service. Project employees will be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.
- Prior to any ground disturbance, the contractor, all employees of the contractor, subcontractors, and subcontractors' employees will attend an employee education program conducted by a Caltrans or U.S. Fish and Wildlife Service-approved biologist. The program will consist of a brief presentation by persons knowledgeable in San Joaquin kit fox biology, legislative protection, and measures to avoid impacts to the species during project implementation.
- A litter control program will be initiated at each project site. No pets or firearms (except for law enforcement officers and security personnel) will be allowed onsite.
- Excavations deeper than 2 feet will be covered with plywood or similar material at the end of each workday, or escape ramps will be put in place to prevent any entrapment. Each excavation will be inspected thoroughly before being filled.

- All construction pipes, culverts, or similar structures with a diameter of 3 inches or greater stored on the construction site overnight will be thoroughly inspected for San Joaquin kit foxes prior to being buried, capped, or otherwise used or moved. If a San Joaquin kit fox is discovered inside a pipe, the pipe should not be moved until the U.S. Fish and Wildlife Service has been consulted. If the San Joaquin kit fox is in direct harm's way, the pipe may be moved to a safe location one time under the direct supervision of a qualified biologist.
- Prior to any ground disturbance in suitable habitat, a preconstruction survey will be conducted for the San Joaquin kit fox. The preconstruction survey will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance or construction activities. The survey will identify any potential kit fox dens. The status of all potential dens will be determined and mapped. Potential dens will be monitored with tracking medium for three days to determine the current use. If no kit fox activity is observed during this period, then the den will be excavated by hand or carefully with equipment provided by the contractor under the direction of the biologist to preclude subsequent use. If kit fox activity is observed at a den, Caltrans will contact the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife for further coordination.
- Written results of the preconstruction survey will be submitted to the U.S. Fish and Wildlife Service within five days after survey completion and prior to the start of ground disturbance. If a natal or pupping den is discovered within the project area or within 500 feet of the project boundary, the U.S. Fish and Wildlife Service will be notified immediately. If the preconstruction survey reveals an active natal den or new information, Caltrans will notify the U.S. Fish and Wildlife Service immediately for further consultation. Any detections of the San Joaquin kit fox will also necessitate consultation with the California Department of Fish and Wildlife, and, if project activities result in take of the species, take authorization will be required pursuant to Section 2081(b) of the California Fish and Game Code.
- The avoidance and minimization measures proposed for the San Joaquin kit fox will sufficiently serve to avoid and minimize impacts to the American badger and Salinas pocket mouse.

The following are measures for the Monterey dusky-footed woodrat:

- Prior to implementation of proposed project activities, a preconstruction visual survey will be conducted within suitable woodrat habitat in the Area of Potential Impact to determine the presence or absence of woodrat nests.

- If woodrat nests are located during this survey, avoid them and establish an Environmentally Sensitive Area with a 25-foot buffer around each.
- To the extent feasible, project activities requiring grading or vegetation removal within the 25-foot protective buffer should only occur during the non-breeding season (October 1 to December 31) to avoid noise impacts to any breeding woodrats that may occupy the nest from January through September.
- If project activities cannot avoid impacting or removing the nest, then it should be dismantled by hand prior to grading or vegetation removal activities. The dismantling shall occur during the non-breeding season (October 1 to December 31) and shall be conducted so that the nest material is removed, starting on the side where most impacts will occur, and ending on the side where the most habitat will be undisturbed, which will allow for any woodrats in the nest to escape into nearby undisturbed habitat.
- If young are encountered during nest dismantling, the dismantling activity should be stopped and the material replaced back on the nest, and the nest should be left alone and rechecked in two to three weeks to see if the young are out of the nest or capable of being out on their own (as determined by a qualified biologist); once the young can fend for themselves, the nest dismantling can continue.

The following are measures for nesting birds:

- Prior to construction, vegetation removal shall be scheduled to occur from September 2 to January 31, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 1), a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than 10 calendar days prior to construction. If an active nest is found, Caltrans shall implement an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area or monitoring strategy shall be implemented until a qualified biologist has determined that juveniles have fledged or nesting activity has otherwise ceased.
- During construction, active bird nests shall not be disturbed, and eggs or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

- Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed around the dripline of trees to be protected within project limits.
- All clearing/grubbing and vegetation removal shall be monitored and documented by a qualified biologist regardless of the time of year.

The following are measures for roosting bats:

- Tree removal shall be scheduled to occur from September 2 to January 31, outside of the typical bat maternity roosting season if possible, to avoid potential impacts to roosting bats. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat (including the culvert at post mile 45.17) during the bat maternity roosting season (February 1 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat use (i.e., no roosting, night roost, day roost, maternity roost) and determine if passive bat exclusion will be necessary and feasible. If an active day roost is found, a qualified Caltrans biologist shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has ceased, or exclusionary methods have successfully evicted roosting bats.
- If bats are found by a qualified biologist to be maternity roosting, active bat maternity roosts shall not be disturbed or destroyed at any time.
- Readily visible exclusion zones shall be established in areas where roosts must be avoided using Environmentally Sensitive Area fencing. The size/radius of the exclusion zone(s) shall be determined by a qualified biologist.

2.1.5 Cultural Resources

Considering the information in the Cultural Resources Screened Undertaking Memo dated June 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

2.1.6 Energy

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

Considering the information in the Paleontological Technical Memo dated September 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
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.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
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?	No Impact
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?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

2.1.8 Greenhouse Gas Emissions

Considering the information in the Greenhouse Gas Technical Memo dated August 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

2.1.9 Hazards and Hazardous Materials

Considering the information in the Hazardous Waste Technical Memo dated September 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
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?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	No Impact
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, will it create a significant hazard to the public or the environment?	No Impact
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, will the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

Considering the information in the Water Quality Assessment Memo dated September 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact
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 will:	No Impact
(i) result in substantial erosion or siltation onsite or offsite;	
(ii) substantially increase the rate or amount of surface runoff in a manner which will result in flooding onsite or offsite;	No Impact
(iii) create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

2.1.11 Land Use and Planning

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	No Impact

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
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?	No Impact

2.1.12 Mineral Resources

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	No Impact
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?	No Impact

2.1.13 Noise

Considering the information in the Noise Technical Memo dated August 2020, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
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?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
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 2 miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?	No Impact

2.1.14 Population and Housing

Question—Would the project:	CEQA Significance Determinations for Population and Housing
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.1.15 Public Services

Question:	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?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

Question—Would the project:	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 will occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

2.1.17 Transportation

Question—Would the project:	CEQA Significance Determinations for Transportation
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

2.1.18 Tribal Cultural Resources

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

Question:	CEQA Significance Determinations for Tribal Cultural Resources
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

2.1.19 Utilities and Service Systems

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
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?	No Impact
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?	No Impact

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.1.20 Wildfire

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

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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?	No Impact
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?	No Impact
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?	No Impact

2.1.21 Mandatory Findings of Significance

Question:	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
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Less Than Significant Impact With Mitigation Incorporated
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

Detailed discussions regarding the existing environment, species, and habitat that could be affected by the project, and expected project measures, are found in Section 2.1.4 of this document.

The project will result in a combination of direct and indirect effects on biological resources as a result of temporary and permanent project-related impacts. The project could affect several species that have the potential to be found within the project area. The project could also affect potential species habitats within the project area. However, the project will incorporate avoidance, minimization, and/or mitigation measures that will reduce or offset any potential project-related impacts to biological resources.

The King City Capital Preventative Maintenance project, when considered in a cumulative effects context, is not anticipated to substantially contribute to adverse cumulative impacts to jurisdictional streams or riparian habitat in the Resource Study Area because the project will fully mitigate for impacts to these jurisdictional features.

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Govin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

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Making Conservation
a California Way of Life.

September 2021

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."*

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner.

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/civil-rights/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 Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

A blue ink signature of Toks Omishakin, written in a cursive style.

Toks Omishakin
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment."

Appendix B Comment Letters and Responses

This appendix contains the comments received during the public circulation and comment period from April 19, 2022, to May 18, 2022, retyped for readability. The comment letters are stated verbatim as submitted, with acronyms, abbreviations, and any original grammatical or typographical errors included. A Caltrans response follows each comment presented. Copies of the original comment letters and documents can be found in Volume 2 of this document.

Comment from California Department of Fish and Wildlife

Comment 1:

CDFW offers the following comments to assist Caltrans in adequately identifying and sufficiently reducing to less-than-significant the potentially significant, direct and indirect Project-related impacts to fish and wildlife (biological) resources.

San Joaquin Kit Fox: Currently, the proposed IS/MND indicates that the Project-related impacts to Biological Resources will be less-than-significant with implementation of specific avoidance and minimization efforts. In particular, Caltrans concludes there will be less-than-significant impacts to the State threatened San Joaquin kit fox (*Vulpes macrotis mutica*, SJKF).

However; as currently drafted, it is unclear whether the measures proposed in the IS/MND sufficiently reduce to less-than-significant the potential Project-related impacts to SJKF. Therefore, CDFW does not agree with these conclusions and will herein suggest measures to survey for and avoid Project-related impacts to the species, thereby reducing to less-than-significant the Project-related impacts. CDFW also recommends that Caltrans identify a path forward in the event that avoidance of SJKF is not feasible.

The Project activities will involve varying degrees of disturbance and the staging and laydown of equipment and materials along the Project. Some of the Project activities may constitute a novel disturbance sufficient to cause denning SJKF to abandon their dens causing increased susceptibility to predation and potentially resulting in abandoned pups during the pupping season. Caltrans currently proposes pre-activity clearance surveys of the Project footprint between 14 and 30 days of commencing project activities, consultation with the USFWS if a natal den is discovered within a 200-foot buffer, daily inspection of deep trenches and steep-walled holes within the Project footprint, and the inspection of pipes greater than 4 inches in diameter prior to burying, capping, or moving in any way. These surveys may not be adequate to accurately detect SJKF and identify potential habitat features. Further, while Caltrans proposes consulting with USFWS in the event individual SJKF are detected during these surveys and/or inspections, CDFW is concerned that Caltrans does not propose consulting with CDFW. As stated above, SJKF is listed as threatened pursuant to CESA and any detections of SJKF during Project activities necessitates consultation with CDFW. Furthermore, any Project activities that result in take of SJKF will require take authorization pursuant to Section 2081(b) of California Fish and Game Code.

CDFW recommends these inspections should occur on pipes and materials 3 inches in diameter or greater. CDFW recommends a 500-foot no disturbance buffer around natal dens, a 100-foot no disturbance buffer around known dens, and a 50-foot no-disturbance buffer around potential or atypical dens. If

the aforementioned buffers are not feasible, consultation with CDFW is warranted to determine if the Project can avoid take of SJKF. If take cannot be avoided, take authorization through acquisition of an Incidental Take Permit, pursuant to Section 2081(b) of California Fish and Game Code, is necessary to comply with CESA.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. California Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

CDFW encourages Project implementation to occur during the bird non-nesting season; however, if Project activities must occur during the breeding season (i.e., February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant California Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted by the Project are detected. CDFW also recommends that surveys cover a sufficient area around the worksite to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends that a qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends that the work causing that change cease and CDFW be consulted for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area will be concealed from a nest site by topography. CDFW recommends that a

qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Response to Comment 1: Caltrans proposes to implement standard avoidance and minimization measures for the San Joaquin kit fox to ensure that the project will not impact the species. The Federal Endangered Species Act Section 7 effects determination is that the project may affect but is not likely to adversely affect the San Joaquin kit fox and that the project will not result in the take of the San Joaquin kit fox (Section 2.1.4).

Avoidance and minimization measures for the San Joaquin kit fox have been updated to reflect the recommendations from the California Department of Fish and Wildlife. Please see Section 2.1.4 of this document.

No changes were made to nesting bird avoidance and minimization measures at this time. During the 1600 permitting process, Caltrans will address nesting bird buffers and survey methods in more detail with the California Department of Fish and Wildlife. Please refer to Section 2.1.4 of this document.

List of Technical Studies Bound Separately (Volume 2)

Air Quality Report

Noise Study Report

Water Quality Report

Natural Environment Study

Location Hydraulic Study

Cultural Resources Screened Undertaking Memo

Hazardous Waste Reports

- Initial Site Assessment

Scenic Resource Evaluation/Visual Assessment

Initial Paleontology Study

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Jason Wilkinson
District 5 Environmental Division
California Department of Transportation
50 Higuera Street, San Luis Obispo, California 93401
Phone: 805-540-9165

Or send your request via email to: jason.wilkinson@dot.ca.gov

Please provide the following information in your request:

Project title: King City Capital Preventative Maintenance

General location information: U.S. 101 in Monterey County from the Jolon Road undercrossing 1 mile north of King City to the north of Lagomarsino Avenue

District number-county code-route-post mile: 05-MON-101-PM R41.9/49.8

Project ID number: EA 05-1K440 and Project ID 0518000208