

Blackwell's Corner Capital Preventative Maintenance

State Route 33 in Kern County near McKittrick Avenue, from the end of Cymric Wash Bridge to 1.1 mile south of the State Routes 33/46 junction

06-KER-33-40.4/59.0

Project ID 0619000010

State Clearinghouse Number: 2022010218

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: Gabriella Bedrossian, Associate Environmental Planner

The Initial Study circulated to the public for 30 days between January 14, 2022 and February 14, 2022. Comments received during this period are included in Appendix B, which has been added to the document. 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.

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State Clearinghouse Number: 2022010218
06-KER-33-40.4/59.0
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Resurface the existing lanes of State Route 33 in Kern County
near McKittrick Avenue, from the end of Cymric Wash Bridge
to 1.1 mile south of the State Routes 33/46 junction

**INITIAL STUDY
with Mitigated Negative Declaration**

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

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency: California Transportation Commission



Jennifer H. Taylor
Environmental Office Chief, District 6
California Department of Transportation
CEQA Lead Agency

04/25/2022

Date

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: 2022010218

District-County-Route-Post Mile: 06-KER-33-PM 40.4/59.0

EA/Project Number: 06-0Y130/0619000010

Project Description

The California Department of Transportation proposes to cold-plane 0.25 foot of existing asphalt concrete pavement and replace it with Type A Hot Mix Asphalt after sealing cracks and repairing failed localized areas, overlay the entire roadway with 0.10 foot of Rubberized Hot Mix Asphalt Type Gap-Graded Bonded Wearing Course, and construct shoulder backing. The project also proposes to upgrade Transportation Management Strategy elements and culverts within the project limits. The project also proposes to construct centerline rumble strips and replace or upgrade roadside signs where needed.

Determination

An Initial Study has been prepared by the California Department of Transportation, District 6. 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:

An incidental take permit is anticipated for the San Joaquin (Nelson's) antelope squirrel. Mitigation measures proposed for impacts to the San Joaquin antelope squirrel may include:

- Compensation for loss of habitat through purchase of credits from a mitigation bank, preservation of habitat, or enhancement or restoration of habitat as identified through coordination with the California Department of Fish and Wildlife.

Jennifer H Taylor

Jennifer H. Taylor
Environmental Office Chief, District 6
California Department of Transportation
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04/25/2022

Date

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Chapter 1 **Proposed Project**

1.1 Introduction

The project would preserve and resurface the existing lanes of State Route 33 in Kern County near McKittrick Avenue, from the end of Cymric Wash Bridge to 1.1 mile south of the junction of State Route 33 and State Route 46.

State Route 33 is functionally classified as a Minor Arterial in a rural area. It is considered a north-south alternative to Interstate 5 and State Route 99, and serves motorists going mostly to the nearby oil fields and agricultural land. It is a Goods Movement Route and Federal Surface Transportation Assistance Act Terminal Access Route. Within the project limits, State Route 33 is a designated Extra-Legal Load Network, which preserves travel corridors for 20-foot-high loads.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to preserve, repair, and extend the life of the existing pavement, and to improve ride quality.

1.2.2 Need

The existing pavement is subject to considerable distress and cracking due to heavy truck traffic and needs to be restored to a state of good repair to: extend its service life, improve safety for the traveling public by minimizing frequent maintenance lane closures, and minimize the exposure of maintenance personnel to high speed traffic. There is a need to replace roadside signs that are non-standard or in poor condition, and to restore or extend existing drainage systems throughout the project limits.

1.3 Project Description

The project would preserve and resurface the existing lanes of State Route 33 in Kern County near the town of McKittrick, from the end of Cymric Wash Bridge to 1.1 mile south of the State Route 33/46 junction. The project proposes to remove 0.25 foot of existing asphalt concrete pavement, repair failed localized areas, seal all cracks wider than 1/4 inch, replace the removed pavement with Type A Hot Mix Asphalt, overlay the entire section with 0.10 foot of Type G (gap-graded bonded wearing course rubberized asphalt concrete), and construct a tapered edge on both sides. The project

would also install three loop Vehicle Detection Systems and replace or install drainage culverts, construct centerline rumble strips, and replace or upgrade roadside signs where needed. Figure 1-1 shows the project vicinity map, and Figure 1-2 shows the project location map.

Figure 1-1 Project Vicinity Map

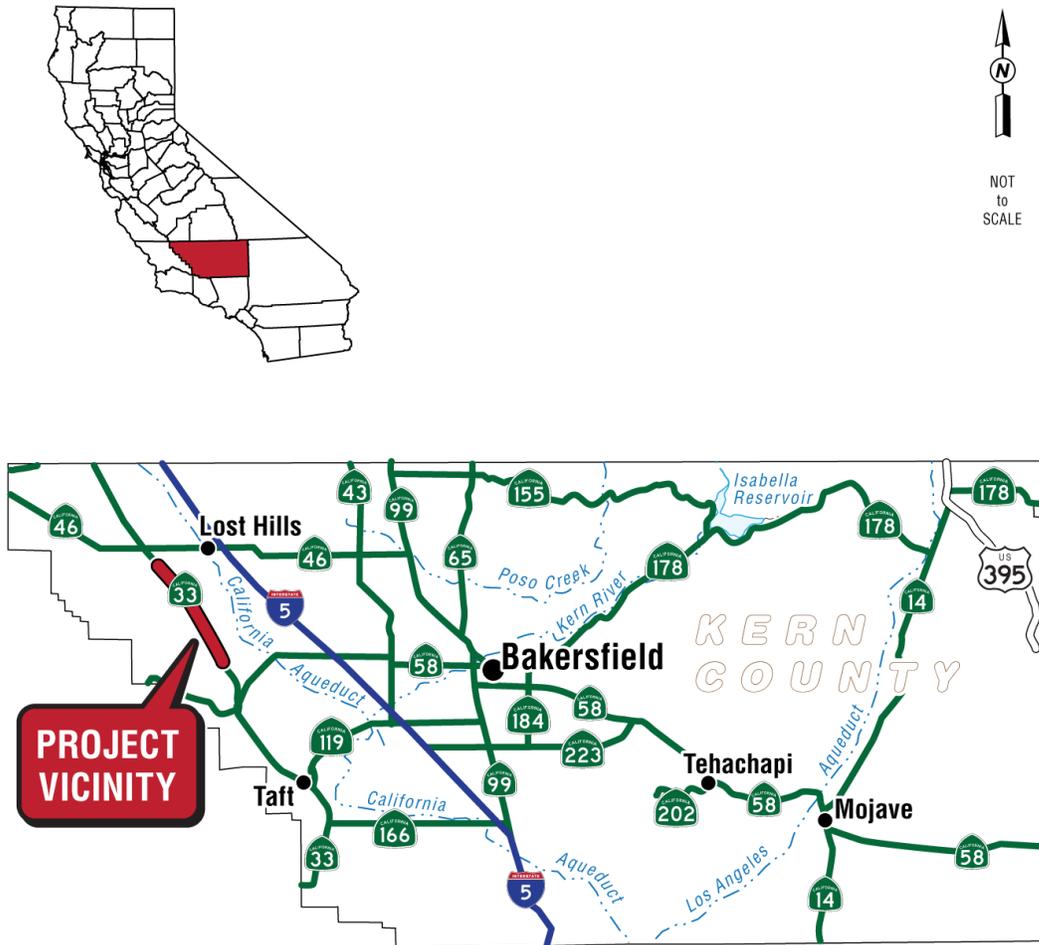


Figure 1-2 Project Location Map



1.4 Project Alternatives

Two alternatives are proposed for this project:

- Alternative 1: Build Alternative
- Alternative 2: No-Build Alternative

1.4.1 Build Alternative

Alternative 1

The project would preserve and resurface the existing pavement by removing 0.25 foot of existing asphalt concrete pavement, repairing failed localized areas, sealing all cracks wider than 1/4 inch, replacing removed pavement

with 0.25 foot of Type A Hot Mix Asphalt and overlaying the entire pavement with a 0.10-foot sacrificial layer of Rubberized Hot Mix Asphalt, Type G (gap-graded bonded wearing course rubberized asphalt concrete). A tapered edge would be constructed on both sides of the roadway.

[The following two paragraphs have been added since the draft environmental document was circulated.]

Sixteen culverts will be either replaced or repaired; fourteen of them will be replaced. Culvert 2 will receive barrel cleaning and be rehabilitated with cure-in-place pipe liner. The flared end sections will be replaced at Culvert 7, which is also referred to as the existing culvert end device.

Among the fourteen culverts that will be replaced, nine culverts (5, 6, 9, 10, 11, 12, 13, 14 and 15) will be replaced with reinforced concrete pipe. Five culverts (1, 3, 4, 8 and 16) will be replaced with a reinforced box culvert. Each proposed reinforced concrete pipe culvert will have a diameter of 18 or 24 inches, with flared end sections. The reinforced box culverts will have cross-sectional dimensions ranging from 4 feet by 4 feet to 12 feet by 6 feet, with wingwalls. The new box culverts will extend 20 feet at a minimum from the edge of the travel way to meet Clear Recovery Zone standard requirements for a conventional highway.

[The following paragraph has been revised since the draft environmental document was circulated.]

In addition, the project would replace or upgrade approximately 19 existing roadside signs that are non-standard or in poor condition, and construct 18.6 miles of centerline rumble strips. Placement of rock-slope protection is also proposed at the inlets and outlets of most culverts. Ditch grading will be part of the culvert work, where required.

Although individual Transportation System Management and Transportation Demand Management Alternatives are not proposed, the Build Alternative incorporates some such elements, including replacing existing hose traffic count stations with loop Vehicle Detection Systems stations in three locations: at post miles 40.94, 41.207, and 44.171.

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 Alternative 2: No-Build (No-Action) Alternative

The No-Build Alternative would leave State Route 33 as it is. The No-Build Alternative is not considered a viable alternative because it does not address the deficiencies of the roadway and does not meet the need or purpose of the project. The existing pavement would continue to deteriorate and not meet current standards.

[The following subsection on the preferred alternative has been added since the draft environmental document was circulated.]

1.5 Identification of a Preferred Alternative

Two alternatives are under consideration for this project: Alternative 1: Build Alternative and Alternative 2: No-Build Alternative. Alternative 1: Build Alternative has been selected as the preferred alternative. Alternative 1 addresses the deficiencies of the roadway and meets the purpose and need of the project.

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

The project may include, but is not limited to, the following Standard Special Provisions:

14-1.02 Environmentally Sensitive Area: Pertains to environmentally sensitive areas marked on the ground. Do not enter an environmentally sensitive area unless authorized. If breached, notify the resident engineer.

14-6.03 Species Protection: Pertains to protecting regulated species and their habitat that occur within or near the job site. Upon discovery of a regulated species, notify the resident engineer.

14-6.03B Bird Protection: Pertains to protecting migratory and nongame birds, their occupied nests, and their eggs. Upon discovery of an injured or dead bird or migratory or nongame bird nests that may be adversely affected by construction activities, immediately stop all work and notify the resident engineer. Exclusion devices, nesting-prevention measures, and removing constructed and unoccupied nests may be used.

14-7.03 Discovery of Unanticipated Paleontological Resources: If paleontological resources are discovered at the job site, do not disturb the resources and immediately stop all work within a 60-foot radius of the discovery, secure the area, and notify the resident engineer. Do not move paleontological resources or take them from the job site.

14-8.02 Noise Control: Pertains to controlling and monitoring noise resulting from work activities. Noise levels are not to exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

14-9.02 Air Pollution Control: Comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the construction contract.

14-11 Hazardous Waste and Contamination: Includes specifications relating to hazardous waste and contamination.

14-11.02 Discovery of Unanticipated Asbestos and Hazardous Substances: Upon discovery of unanticipated asbestos or a hazardous substance, immediately stop work and notify the resident engineer.

14-11.04 Dust Control: Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork operations in areas containing hazardous waste or contamination, provide a water truck or tank on the job site.

14-11.13C Safety and Health Protection Measures: Applies to worker protective measures for potential lead exposure.

14-11.14 Treated Wood Waste: Includes specifications for handling, storing, transporting, and disposing of treated wood waste.

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
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	The application for a 1602 permit is submitted during the Plans, Specifications and Estimates phase of the project.
California Department of Fish and Wildlife	Section 2081 Incidental Take Permit	The application for a 2081 incidental take permit is submitted during the Plans, Specifications and Estimates phase of the project.
Central Valley Regional Water Quality Control Board	Section 401 Certification for a Water Discharge Permit	The application for a 401 permit is submitted during the Plans, Specifications and Estimates phase of the project.
U.S. Fish and Wildlife Service	Letter of Concurrence	The letter of concurrence was received on May 18, 2022.

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 (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Draft Project Report dated June 24, 2019, 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, would the project conflict with applicable zoning and other regulations governing scenic quality?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

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.

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
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 Memo dated August 5, 2021, 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

Question—Would the project:	CEQA Significance Determinations for Air Quality
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 November 5, 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 With Mitigation Incorporated
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
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
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

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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 for this project is approximately 896.51 acres. Land cover in the biological study area consists of 804.25 acres of vegetation communities and 92.26 acres of road surfaces. The project is surrounded by annual grasslands, agricultural fields, bare ground, and saltbush scrub habitat with shoulders that contain habitat dominated by ruderal non-native grass and forb species, and scattered shrubs.

The project impact area for this project includes State Route 33 from post miles 40.4 to 59.0, with a 10-foot-wide buffer that extends out from the edge of pavement on both sides of State Route 33 to account for impacts due to pavement overlay work; the 16 culverts that are proposed for replacement, removal, or repair; and a 30-foot-wide buffer from the centerline of each culvert running along the entire length of the culvert, from inlet to outlet.

Habitat in the biological study area is subject to human-caused impacts such as those from vehicles driving or parking on roadway shoulders; mowing of vegetation in the right-of-way; Caltrans roadway maintenance of the shoulder areas, including grading and recontouring of slopes after rains; and impacts from noise and dust from vehicles that use State Route 33.

The biological study area consists of shrubland habitat dominated by allscale shrubs (*Atriplex polycarpa*). Allscale must have 2 percent absolute cover in the shrub canopy and greater than 50 percent relative cover in the shrub canopy. Mostly continuous allscale scrub is present in the southern quarter of the biological study area, and patchy allscale scrub is found in the middle of the biological study area between fallow fields and in the oil fields.

The biological study area includes 15 National Wetlands Inventory or National Hydrography Dataset water features: 2 creeks (Salt Creek and Chico Martinez Creek) and 13 flowlines/features. However, there are 16 culvert systems proposed for work.

Caltrans Field Surveys

Caltrans biologists and a California Department of Fish and Wildlife Liaison completed a field review on February 27, 2020 to evaluate potential habitat for the blunt-nosed leopard lizard and the potential need for surveys. As a result of this meeting, it was decided a protocol-level blunt-nosed leopard

lizard survey would be completed in sections of the biological study area that contained suitable habitat for the blunt-nosed leopard lizard.

A field review was completed from July 14 through July 16, 2021 to verify the presence and quality of vegetation communities within the biological study area.

Blunt-Nosed Leopard Lizard Surveys

Culverts 1 through 9 were in the blunt-nosed leopard lizard survey area. Culverts 10 through 16 did not have suitable habitat for the blunt-nosed leopard lizard and were not included in the survey area. The project impact area includes all areas that are within 30 feet of the centerline of each culvert. Parts of the project impact area extend past the Caltrans right-of-way at all nine culverts. Caltrans determined that field surveys for the blunt-nosed leopard lizard would include only areas within the Caltrans right-of-way that could potentially support the species, and those areas were predetermined by Caltrans. All suitable habitat in the Caltrans right-of-way was surveyed either on foot or with binoculars, resulting in 100 percent coverage of the right-of-way. Areas that are outside the Caltrans right-of-way but inside the 50-foot-wide project impact area buffers were not surveyed for the blunt-nosed leopard lizard due to restrictions accessing areas outside the Caltrans right-of-way.

Small Mammal Trapping Survey

As recommended by standard trapping protocol (U.S. Fish and Wildlife Service, 2013), trapping was largely conducted during the optimal trapping season (April 1 through October 31). Due to project time limitations, trapping was not completed by the end of the recommended survey season but was completed by November 2, 2020. There are no other obvious limitations that may have influenced the trapping results.

Aquatic Resources Delineation Survey

The survey area consisted of the inlets and outlets of the 16 culverts proposed for work in the project area, plus a 200-foot-wide buffer around the inlets and outlets.

Surveyors were to stay within the Caltrans right-of-way when performing the survey. Private property was within the 200-foot-wide buffer at several inlets and outlets. At these locations, the complete 200-foot-wide buffer could not be surveyed and, in some cases, prevented the surveyors from identifying the presence or absence of an ordinary high-water mark and/or bank indicators. The Culvert 10 inlet was very densely vegetated; however, no ordinary high-water mark or bank indicators were visible or accessible.

There are 10 flowlines in the biological study area that were not included in the aquatic resource delineation. All of these flowlines are hydrological

features that have been mapped on the National Wetlands Inventory map as potential riverine features; therefore, all have potential to be jurisdictional areas. These flowlines were not included in the aquatic resources delineation because they are all in parts of the biological study area that have no anticipated impacts: they either pass through culverts in the biological study area that are not proposed for culvert work or they enter and exit the biological study area without crossing State Route 33.

Ruderal (weedy) vegetation can be described as vegetation that grows in recently disturbed soils. Ruderal vegetation was found running along the edge of the paved State Route 33 along the entire length of the biological study area. Vegetation found in most of the biological study area was mostly bare ground, fallow fields, and annual grasslands. Only from post miles 40.4 to 42.4 was allscale scrub dominant in the biological study area.

Botanical Surveys

Focused botanical surveys to identify special-status plant species were completed in April and May 2021 on a Caltrans project that is adjacent to this project and shares a similar climate (State Route 33 Culvert Rehabilitation project—project ID 06-1800-0042; post miles 21.8 to 39.8). No special-status plant species were observed during this survey effort.

Environmental Consequences

Direct and indirect impacts on biological resources have been evaluated. Direct impacts are those that involve the initial loss of biological resources due to grading and construction. Indirect impacts are those that would be related to disturbance from construction or operation of the project.

Temporary indirect effects from all construction-related activities include dust, potential fuel spills from construction equipment, possible night lighting during construction, and activities of equipment or personnel outside designated construction areas and Environmentally Sensitive Areas, as well as operational effects such as effects on adjacent habitat caused by stormwater runoff, traffic, and litter. In addition, construction may indirectly affect native habitats by enhancing germination of invasive plant species. It is likely there would be disturbance resulting from noise, vibration, vehicle activity, and the presence of work crews, resulting in the potential displacement of animals from the work area.

Noise or vibration could affect burrowing animals or nesting birds. Runoff from the construction site or operational roadway could impact water quality next to the project site, which would degrade habitat quality. Night lighting during construction or operation of the project could interfere with typical foraging or predation of nocturnal species in adjacent open space areas, increasing the potential for some wildlife to avoid these areas. Indirect effects are difficult to quantify because they are a result of normal activities and can vary day to

day. Temporary project impacts include those necessary for grading, staging area, construction access, borrow and disposal sites, and utility relocations.

Permanent impacts result in either new loss of habitat or create new areas of ground disturbance. There is little potential for habitat to be salvaged or regrow in an area.

Total permanent impacts to vegetation due to this project are anticipated to be approximately 0.02 acre. Permanent impacts would result from culvert replacements at culvert systems 1, 3, and 16. Culverts at these systems will be replaced with larger culverts, thereby increasing the permanent footprint of the culvert. The habitat undergoing permanent impacts (allscale scrub, annual grassland, and ruderal vegetation) is not suitable for any species due to the proximity to the roadway with increased risk of collision and the highly disturbed nature of the habitat. These impacts are considered temporary because those areas would be recontoured and revegetated with a native seed mix after construction; therefore, they would be available to be used as habitat again by species after construction.

Special-Status Plant Species: Federally and/or State Listed Species

California Jewelflower

The California jewelflower (*Caulanthus californicus*) is federally and state listed as endangered. The California jewelflower is also in the California Native Plant Society inventory of rare and endangered plants with a 1B.1 rank.

The California jewelflower is an annual herb that is part of the mustard family (Brassicaceae). The jewelflower typically blooms from February through May (California Native Plant Society, 2021a).

The nearest California Natural Diversity Database occurrence of the California jewelflower is about 1 mile from the biological study area; however, this occurrence states the species is extirpated (gone) from this location.

Focused botanical surveys of the biological study area were not completed for this project; however, this species was not observed incidentally during other surveys that occurred during the blooming season.

A total of 0.46 acre of temporary impacts is anticipated for allscale scrub habitat. Although the project has potential to impact low-quality habitat for this species, no direct impacts to the California jewelflower are anticipated. The habitat onsite is unlikely to support this species due to the existing level of disturbance of the habitat. However, botanical surveys would be conducted within the project footprint prior to construction to ensure the California jewelflower is not present onsite. Avoidance and minimization measures would be implemented to ensure potential impacts are minimized.

Caltrans has determined that the project may affect but is not likely to adversely affect the California jewelflower. Informal consultation with the U.S. Fish and Wildlife Service would be required under Section 7 of the Endangered Species Act. A Letter of Concurrence is anticipated to be issued.

Kern Mallow

The Kern mallow (*Eremalche parryi* ssp. *kernensis*) is federally listed as endangered. The Kern mallow is also in the California Native Plant Society inventory of rare and endangered plants with a 1B.2 rank.

The Kern mallow is an annual herb that is part of the mallow family (Malvaceae) and is endemic to California (California Native Plant Society, 2021a). The Kern mallow typically occurs in the valley saltbush scrub natural community, where it grows under and around spiny and common saltbushes and in patches with other herbaceous plants, rather than in the intervening alkali scalds.

A small part of the action area overlaps with a small part of a presumed extant Kern mallow California Natural Diversity Database occurrence. This occurrence (EONDX#2734) is from 2016 and states that multiple Kern mallow individuals and multiple colonies have been observed within allscale scrub habitat across an area that is thousands of acres wide. Less than 1 percent of the area where the Kern mallow has been observed is within the limits of the action area.

Focused botanical surveys of the biological study area were not completed for this project; however, this species was not observed incidentally during other surveys that occurred during the blooming season.

A total of 0.46 acre of temporary impacts is anticipated for allscale scrub habitat. Although the project has potential to impact low-quality habitat for these species, no direct impacts to the Kern mallow are anticipated. The habitat onsite is unlikely to support this species due to the existing level of disturbance of the habitat. However, botanical surveys would be conducted within the project footprint prior to construction to ensure the Kern mallow is not present onsite. Avoidance and minimization measures would be implemented to ensure potential impacts are minimized.

Caltrans has determined that the project may affect but is not likely to adversely affect the Kern mallow. Informal consultation with the U.S. Fish and Wildlife Service would be required under Section 7 of the Endangered Species Act. A Letter of Concurrence is anticipated to be issued.

San Joaquin Woolly-Threads

The San Joaquin woolly-threads (*Monolopia congdonii*) is a federally listed endangered species. It is also included in the California Native Plant Society

inventory of rare and endangered plants with a 1B.2 rank (California Native Plant Society, 2021a).

The San Joaquin woolly-threads is typically found in chenopod scrub and valley and foothill grasslands (sandy soils) with a February through May bloom period (may also bloom in January).

The nearest California Natural Diversity Database occurrence of the San Joaquin woolly-threads is about 2 miles from the biological study area.

Focused botanical surveys of the biological study area were not completed for this project; however, this species was not observed incidentally during other surveys that occurred during the blooming season.

A total of 0.46 acre of temporary impacts is anticipated for allscale scrub habitat. Although the project has potential to impact low-quality habitat for this species, no direct impacts to the San Joaquin woolly-threads are anticipated. The habitat onsite is unlikely to support this species due to the existing level of disturbance of the habitat. However, botanical surveys would be conducted within the project footprint prior to construction to ensure the San Joaquin woolly-threads is not present onsite. Avoidance and minimization measures would be implemented to ensure potential impacts are minimized.

Caltrans has determined that the project may affect but is not likely to adversely affect the San Joaquin woolly-threads. Informal consultation with the U.S. Fish and Wildlife Service would be required under Section 7 of the Endangered Species Act. A Letter of Concurrence is anticipated to be issued.

Culvert Impacts

Five culvert systems (Culverts 1, 2, 4, 8, and 16) are aligned with National Wetlands Inventory or National Hydrography Dataset water features. Both Salt Creek and Chico Martinez Creek are National Wetlands Inventory or National Hydrography Dataset water features. Neither Salt Creek nor Chico Martinez Creek flows through any of the 16 culvert systems. There would be no work in Salt Creek or Chico Martinez Creek or in any of the other eight National Wetlands Inventory or National Hydrography Dataset water features that do not align with one of the 16 culvert systems proposed for work within the biological study area.

Culverts that have ordinary high water marks and/or bank features are Culverts 1, 2, 3, 7, 8 (inlet only), 9 (inlet only), 11 (inlet only), 12 (outlet only), 13, 14, 15 (inlet only), and 16. Four culvert systems (Culverts 4, 5, 6, and 10) and 5 inlets or outlets were not delineated because no ordinary high water mark and bank indicators were present. There is a total of 1.53 acres of jurisdictional waters within the 16 culvert systems in the biological study area.

Impacts to waters at each culvert were estimated by combining the area of the culvert (length of the culvert by width or diameter of culvert) and the area delineated as the ordinary high water mark or bank area that was within a 30-foot buffer around each culvert. The new culvert area was used for culverts that are to be replaced, and the existing culvert area for culverts that are to be repaired or removed was used. The 30-foot buffer around each culvert was used because that is where any impacts are anticipated to occur. If the water feature at an inlet or outlet was not delineated because it did not have an ordinary high water mark or bank area, the potential impacts to this feature were estimated by extending the width of the culvert to the edge of the 30-foot buffer to account for the channel. The 30-foot-wide buffer is contained within the 200-foot-wide biological study area.

For the project, there would be a total of approximately 0.48 acre of impacts to waters of the State in the 16 culvert systems: 0.04 acre of permanent impacts and 0.44 acre of temporary impacts.

Work at culverts would be performed during no-flow conditions. Road paving activities would not impact waterways. Culvert work would result in temporary impacts to annual grassland, ruderal areas, and allscale scrub vegetation due to trenching required to remove the existing culverts. This vegetation is upland vegetation and is not considered a wetland indicator or riparian vegetation.

At Culverts 1, 3 and 16, culverts are being replaced with larger reinforced concrete boxes, and this work would result in minor permanent impacts and an increase in culvert flow capacity. Culvert repair work would have very minor, temporary impacts to channel features that would not involve fill or result in alterations to flow or carrying capacity. Culvert replacement work would result in impacts to waterways due to soil disturbance and excavation of the culvert trench. In no case are the proposed actions anticipated to result in diminished stream flow or altered flow patterns. Culvert removal and backfill would have minor temporary impacts to waterways.

A 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife would be required. In addition, a 401 Waste Water Discharge permit from the Regional Water Quality Control Board would also be required. A Section 404 permit from the U.S. Army Corps of Engineers will not be required because there is no connection between the 16 culvert systems and a Waters of the United States, or traditional navigable water.

Wetland Impacts

One potential wetland was observed in the agriculture detention basin at post mile 55.1 within the biological study area. This detention basin is outside of the project impact area for the project, outside the Caltrans right-of-way, and isolated. There are no temporary construction easements planned in areas that contain the detention basin. No impacts to the detention basin are anticipated.

There would be no impacts to the flood basin that runs parallel to the east side of State Route 33 in the biological study area from approximately post mile 46.5 to post mile 46.9. There is a large metal oil pipe between the Caltrans right-of-way and the flood basin, so physically accessing the flood basin by vehicle is impossible. The flood basin is outside the project impact area for the project and outside the Caltrans right-of-way. There are no temporary construction easements planned for the area that contains the flood basin.

There are no anticipated impacts to any wetlands or riparian habitat. There would be no tree removal at any of the 16 culvert systems.

Special-Status Animal Species: Federally and/or State Listed Species

Blunt-Nosed Leopard Lizard Impacts

The blunt-nosed leopard lizard is federally and state listed as endangered, in addition to having state fully protected status. This is a relatively large lizard, ranging from 3.4 to 4.7 inches, snout to vent (length). Its color varies from yellowish or light grey-brown to dark brown, depending on the surrounding soils and vegetation.

The blunt-nosed leopard lizard is a scarce resident of sparsely vegetated alkali and desert scrub habitats. Blunt-nosed leopard lizards can be found at elevations of 100 to 2,400 feet above sea level, on alkali flats, desert washes, arroyos, canyons, and low foothills. Suitable habitat for the blunt-nosed leopard lizard contains sparsely vegetated shrubs and grassland habitats in areas of low topographic relief. No designated critical habitat exists within the project area.

Temporary impacts to potential blunt-nosed leopard habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to the blunt-nosed leopard lizard or its habitat are expected.

Giant Kangaroo Rat Impacts

The giant kangaroo rat is federally and state listed as endangered. This species is found on slopes in grasslands and shrub communities. Typical habitat includes stretches of easily excavated sandy loam covered with annual grasses and herbs.

The giant kangaroo rat was not detected within the right-of-way during protocol surveys done in 2020. No giant kangaroo rat burrows were found during the trapping effort within the State Route 33 right-of-way, but potential habitat occurs in the biological study area. The right-of-way is mostly degraded from the south end of the project at post mile 40.4 to post mile 42.5, but there is suitable allscale scrub habitat outside the right-of-way that could support the giant kangaroo rat. Also, potential giant kangaroo rat burrows

were seen near Trap Line 6, outside the right-of-way and east of State Route 33. Giant kangaroo rats could forage within the right-of-way between post miles 40.4 and 42.5, resulting in potential project impacts to the species. Habitat within the oil fields between post miles 42.5 and 46.9 is fragmented, but giant kangaroo rats are known to occur in isolated patches throughout the oil fields.

Temporary impacts to potential giant kangaroo rat habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to the giant kangaroo rat or its habitat are expected. While the potential exists that giant kangaroo rats taking refuge in burrows or haystacks may be entombed or crushed by vehicles and heavy equipment if present onsite, giant kangaroo rats can relocate and potentially avoid danger. Avoidance and minimization measures would be in place to minimize any potential impacts to the species, with practicable efforts made to minimize impacts to the species' habitat.

San Joaquin (Nelson's) Antelope Squirrel

The San Joaquin antelope squirrel, also known as the Nelson's antelope squirrel, is state listed as threatened. This squirrel has tiny, rounded ears and a streamlined, spindle-shaped body with short legs. Suitable habitat contains scattered shrubs, annual forbs, and grasses, and it is distributed over broken terrain with small gullies and washes. San Joaquin antelope squirrels are typically active during the day, but they avoid hot temperatures during midday. San Joaquin antelope squirrels live in family groups. Breeding occurs from February into May, with a peak in April, producing 1 litter of 10 on average.

Protocol-level small mammal trapping was performed within the project impact area in October and November of 2020. No San Joaquin antelope squirrels were captured, but two were seen in the biological study area during the survey. Incidental observations of the species were also made during field surveys for other species. Thirty-one observations of the San Joaquin antelope squirrel were made within the biological study area between April and September of 2020 during blunt-nosed leopard lizard surveys. One individual was seen in the biological study area during general botanical surveys in July 2021; one individual was seen in the biological study area during a field review in July 2021. Most incidental observations of the San Joaquin antelope squirrel were made in the southern end of the project area within allscale habitat between post miles 40.4 and 42.4. One observation was made at the north end of the biological study area where a San Joaquin antelope squirrel was seen running away from State Route 33 in annual grassland habitat with dense patches of Russian thistle.

Critical habitat for this species is not present in the biological study area.

Temporary impacts to potential San Joaquin antelope squirrel habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to the San Joaquin antelope squirrel or its habitat are expected. However, a 2081 Incidental Take Permit is anticipated for potential impacts to this species. Preconstruction surveys and biological monitoring will ensure individuals are not within the project work zone. Mitigation for this species will be determined during the consultation process.

San Joaquin Kit Fox

The San Joaquin kit fox is federally listed as endangered and state listed as threatened. The San Joaquin kit fox is the smallest canid species in North America. Kit foxes have a small, slim body, relatively long ears set close together, a narrow nose, and a long bushy tail tapering slightly toward the black-tipped tail. They typically carry their tail low and straight.

The San Joaquin kit fox is found in the southern half of California in annual grassland or grassy open stages of vegetation with scattered shrubs and brush. San Joaquin kit foxes dig their own dens in open, level areas with loose-textured soils supporting scattered, shrubby vegetation. They are active all year, mostly nocturnal, but occasionally they can be seen during the daytime in cool weather.

Most San Joaquin kit fox habitat has been converted to urban and agricultural development, especially within the San Joaquin Valley. Remaining habitat parcels are isolated and scattered, including ruderal areas. In some areas, such as Bakersfield, San Joaquin kit foxes have adapted to urban environments and use human-made structures, including culverts, as burrows.

Suitable, but suboptimal, habitat for the San Joaquin kit fox is found in the project impact area and biological study area. This habitat includes allscale scrub, annual grasslands, fallow agriculture fields, habitat in disturbed oil fields, and ruderal vegetation. Sign (scat) was found at one trap during a small mammal trapping survey in October 2020. A roadkill San Joaquin kit fox was seen by a Caltrans biologist in the biological study area during blunt-nosed leopard lizard surveys in September 2020.

There is no San Joaquin kit fox critical habitat in the biological study area. During 2021 field surveys, rodent burrows were seen throughout the biological study area at various distances from State Route 33. Most of the culverts were plugged with soil and vegetation, so they were not currently used by a kit fox as a means to cross State Route 33. Although this species is known to occur in the general area, San Joaquin kit foxes are not expected to occur in the project impact area during construction of this project.

Temporary impacts to potential San Joaquin kit fox habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to the San Joaquin kit fox or its habitat are expected. Construction activity has the potential to disturb individual kit foxes due to the destruction of burrows and associated noise, vibration, dust, and the presence of workers and active equipment. This potential for disturbance would be greater during any work performed at night because the species is mostly nocturnal.

Swainson's Hawk

The Swainson's hawk (*Buteo Swainsoni*) was listed as a threatened species in 1983 by the California Fish and Game Commission. This medium-sized hawk has relatively long, pointed wings that curve up somewhat while the bird is in flight. The most distinctive identifying features of adults are the dark head and breast band distinctive from the lighter-colored belly, and the underside of the wing with the linings lighter than the dark gray flight feathers.

Breeding occurs late March to late August, with peak activity late May through July. Swainson's hawks often nest near riparian systems. Foraging habitat includes dry land and irrigated pasture, alfalfa, fallow fields, low-growing row or field crops, new orchards, and cereal grain crops.

This species was not seen in the biological study area during surveys. The nearest California Natural Diversity Database occurrence is approximately 7 miles outside of the biological study area. There is no suitable nesting habitat in the biological study area because there are no riparian systems and no trees in grasslands or fallow fields. Suitable foraging habitat in the biological study area and in areas adjacent to the biological study area includes annual grasslands, fallow fields, and allscale scrub.

No impacts to nesting habitat would occur. Temporary impacts to potential Swainson's hawk foraging habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to the Swainson's hawk or its habitat are expected. The availability of suitable foraging habitat would not change because of the project. No tree removal is anticipated, so there would be no removal of nesting habitat. No take of this species is anticipated with implementation of avoidance and minimization measures.

Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) was listed as state threatened in 2018. Tricolored blackbirds are gregarious birds, often seen in large compact groups year-round.

Tricolored blackbirds breed near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. This bird feeds in grassland and cropland habitats. The species' basic requirements for selecting breeding sites are open accessible water; a protected nesting substrate, including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few miles of the nesting colony. Tricolored blackbirds forage on ground in croplands, grassy fields, flooded land, and along edges of ponds.

This species was not observed in the biological study area during surveys. The nearest California Natural Diversity Database occurrence is approximately 2 miles outside of the biological study area. There is one agriculture detention basin at post mile 55.1 that is filled with cattails. This basin is approximately 1.7 acres, and there are no sources of open water in the basin. It is unlikely this basin will be used for nesting habitat due to its small size and lack of open water.

There is suitable foraging habitat in the biological study area and in areas adjacent to the biological study area within the annual grasslands. The agriculture detention basin is outside the project impact area, and there would be no impacts to the detention basin. Therefore, no impacts to potential nesting habitat for tricolored blackbirds would occur.

Temporary impacts to potential tricolored blackbird foraging habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to tricolored blackbirds or their habitat are expected. The availability of foraging habitat would not change due to the project. No take of this species is anticipated with implementation of avoidance and minimization measures.

Special-Status Animal Species: Special-Status Non-Listed Species

San Joaquin Coachwhip

The San Joaquin coachwhip is a California species of special concern. The San Joaquin coachwhip is a snake that ranges from 3 to 8 feet long. Coloration is highly variable: light yellow, olive brown, or occasionally reddish above, with a few pale or no neck bands, and may be light below. These snakes inhabit a variety of habitats, including desert, prairie, scrubland, juniper-grassland, woodland, thorn forest, and farmland.

Marginally suitable habitat in the form of allscale scrub is present in the biological study area. Fallow fields and ruderal vegetation provide habitat that is anywhere from poor quality to not suitable depending on the presence or absence of annual grasses as food source for prey.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to San Joaquin coachwhips or their habitat are expected.

Burrowing Owls

The burrowing owl is a California species of special concern. The burrowing owl is the only owl in North America that nests in underground burrows. This small owl (about 9 inches long, with a 15-inch wingspan, and weighing 5 to 8 ounces) is brown with white spots on the wings and back, with an off-white breast with brown bars. The eyes are yellow, and the face is highlighted by a white eyebrow.

Burrowing owls can be active during the day or night. Their habitat consists of open, dry annual or perennial grasslands, deserts, or open scrublands with low vegetation, soils suitable for digging, and a suitable prey base of burrowing rodents, small reptiles, and insects. Suitable habitat is identified by the presence of potential burrows, perch sites, and/or burrowing owl sign such as scat, tracks, or feathers associated with burrowing owl survey guidelines.

No burrowing owls were incidentally observed during surveys. A focused burrowing owl survey was not completed. The nearest California Natural Diversity Database occurrence is from 2017, less than half a mile from the biological study area. This record indicated that an active burrow was seen 500 feet west of State Route 33 in 2017. The burrow was in cattle-grazed grassland.

General habitat associations were determined during field surveys. This included habitat requirements of grasslands, fallow fields, and sparsely vegetated scrub seen during surveys. Allscale scrub provides potential habitat for this species in the biological study area. Some of the annual grasslands are fenced in, and fencing may provide perch sites for burrowing owls. Fallow agriculture fields provide habitat that is anywhere from poor quality to not suitable for the species depending on the presence or absence of annual grasses as a food source for prey.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to burrowing owls or their habitat are expected. While there is potential that burrowing owls taking refuge in their burrows may be entombed or crushed by vehicles and heavy equipment if present onsite, owls can relocate to avoid danger. Avoidance and minimization measures would be in place to minimize any potential impacts to the species.

Le Conte's Thrasher

Le Conte's thrasher (*Toxostoma lecontei*) is a California species of special concern and is often a permanent resident, though this bird has been recorded in some parts of its range only in the breeding season. It typically nests and forages in sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills with saltbush and/or cholla (*Cylindropuntia sp.*). The bird generally does not inhabit steep-sided canyons, preferring small arroyos, open flats, or dunes. Nesting may begin in February or even January and last until June in some areas.

Le Conte's thrasher was not seen in the biological study area during surveys. Marginally suitable habitat for foraging and nesting is present in the biological study area in the form of allscale scrub. Le Conte's thrasher could nest in allscale shrubs found in the biological study area or adjacent to the biological study area.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to Le Conte's thrashers or their habitat are expected. No take of this species is anticipated with implementation of avoidance and minimization measures.

Loggerhead Shrike

The loggerhead shrike is a California species of special concern only when nesting (according to the California Department of Fish and Wildlife special-status species list). Loggerhead shrikes require an open habitat with an area to forage, elevated perches, and nesting sites. These birds are often found in open pastures or grasslands and appear to prefer red-cedar and hawthorn trees for nesting. Nesting activities for this species generally occur March through early August.

Poor quality nesting habitat in the form of allscale scrub is present in the biological study area. The allscale habitat in the biological study area is disturbed by traffic noise and vibrations daily. There are no fences in the allscale habitat from which a loggerhead shrike may perch for foraging. This species was seen during protocol-level small mammal and blunt-nosed leopard lizard surveys completed in the biological study area in 2020.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to loggerhead shrikes or their habitat are expected. No take of this species is anticipated with implementation of avoidance and minimization measures.

American Badger

The American badger is a California species of special concern and is found mostly in grasslands and other open habitats with friable, uncultivated soils. American badgers are solitary animals who are mainly active at night. They construct underground burrows for protection and sleeping. A typical den may be as far as 10 feet below the surface and contain approximately 33 feet of tunnels and an enlarged sleeping chamber.

Allscale scrub provides marginal habitat for this species in the biological study area. Annual grasslands and fallow agricultural fields provide habitat that is anywhere from poor quality to not suitable for the species depending on the presence or absence of annual grasses as a food source for prey. Two roadkill individuals were found during a field review.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to American badgers or their habitat are expected. No take of this species is anticipated with implementation of avoidance and minimization measures.

Short-Nosed Kangaroo Rat

The short-nosed kangaroo rat is a California species of special concern and is found mostly in arid grasslands with scattered shrubs and shrublands, and friable soils. This species is nocturnal and active year-round. Allscale scrub provides habitat for this species in the biological study area. Annual grasslands, fallow agricultural fields, and ruderal vegetation provide habitat that is anywhere from poor quality to not suitable for the species depending on the presence or absence of annual grasses as a food source.

This species was present during small mammal trapping surveys of the biological study area of the Caltrans right-of-way in 2020. All animals captured were in excellent overall health. There were 20 total captures of the short-nosed kangaroo rat: 12 new captures and 8 recaptures. Short-nosed kangaroo rats were captured in ruderal vegetation adjacent to either allscale scrub or annual grassland.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to short-nosed kangaroo rats or their habitat are expected. No take of this species is anticipated with implementation of avoidance and minimization measures.

Tulare Grasshopper Mouse

The Tulare grasshopper mouse is a California species of special concern. This mouse is found mostly in arid shrubland communities along the western margin of the Tulare Basin, including western Kern County, Carrizo Plain Natural Area, and the Cuyama Valley side of the Caliente Mountains, San Luis Obispo County, and the Ciervo-Panoche Region, in Fresno and San Benito counties. Tulare grasshopper mice are nocturnal and active year-round.

Allscale scrub and ruderal vegetation provide habitat for this species in the biological study area. This species was present during small mammal trapping surveys of the biological study area of the Caltrans right-of-way in 2020. There were two total captures of the Tulare grasshopper mouse: two new captures and no recaptures. Tulare grasshopper mice were captured in ruderal vegetation adjacent to allscale scrub.

Temporary impacts to potential habitat would occur during soil disturbance associated with culvert replacements. Temporary impacts associated with culvert re-linings would be less invasive with minor soil disturbance at the culvert inlets. No permanent impacts to Tulare grasshopper mice or their habitat are expected. While the potential exists for this species to be crushed by vehicles and heavy equipment, it can move and potentially may avoid danger. Avoidance and minimization measures would be in place to minimize any potential impacts to the species.

Avoidance, Minimization, and/or Mitigation Measures

Special-Status Plant Species: Federally and/or State Listed Species and Non-Listed Species

Potential avoidance and minimization efforts for this project consist of the following:

- Preconstruction Worker Environmental Awareness Training will be held for all project personnel, and special-status species that are present and have potential to be present and protection requirements for each species will be discussed.
- Preconstruction botanical surveys will be conducted during the blooming season prior to construction using the California Department of Fish and Wildlife *Protocols for Surveying and Evaluation Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*, dated March 20, 2018. The project impact area and all areas within temporary construction easements will be walked by Caltrans biologists, and all plant species that are observed will be documented during the preconstruction survey. Plants that are not immediately identifiable will be collected and identified using *The Jepson Manual: Higher Plants of California* (Hickman and Jepson, 1993).

- If any special-status plant species including, but not limited to, the California jewelflower, Kern mallow, or San Joaquin woolly-threads are discovered during preconstruction botanical surveys or construction, Caltrans will coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife as needed to determine the best plan of action to avoid impacts to sensitive plant species.

Blunt-Nosed Leopard Lizard

Although blunt-nosed leopard lizards are not expected to be in the project impact area, this is a fully protected species, and there is potential habitat in the biological study area. Potential avoidance and minimization efforts for this species may include the following:

- Preconstruction surveys for the blunt-nosed leopard lizard will be conducted using the California Department of Fish and Wildlife-approved survey methodology for the blunt-nosed leopard lizard. The project impact area for each culvert that supports suitable blunt-nosed leopard lizard habitat, with a 50-foot-wide buffer where feasible, will be surveyed by Caltrans biologists.
- If blunt-nosed leopard lizards are found within the biological study area, the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife will be contacted to discuss ways to proceed with the project and avoid take to the maximum extent possible.
- A biological monitor will be onsite during initial ground-disturbing activities in areas of suitable blunt-nosed leopard lizard habitat.
- Project-related vehicles should observe a daytime speed limit of 20 miles per hour throughout the site in all project areas, except on county roads and state and federal highways. Requiring low speed limits within the construction site will lessen the probability that blunt-nosed leopard lizards can be run over by vehicles and equipment.

Giant Kangaroo Rat

The following are avoidance and minimization measures for the giant kangaroo rat:

- A qualified biologist will be present at the construction site during initial ground-disturbing activities and for activities in habitat that may contain the species.
- A preconstruction survey will occur for the giant kangaroo rat. All habitat within the project impact area that could support this species will be included in the preconstruction survey area. If this species is present within the project impact area, work will cease, and the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife will be

contacted. To the greatest extent practicable, efforts will be made to avoid the species' habitat.

- Project-related vehicles should observe a daytime speed limit of 20 miles per hour throughout the site in all project areas, except on county roads and state and federal highways. Requiring low speed limits within the construction site will lessen the probability that kangaroo rats can be run over by vehicles and equipment.

San Joaquin Antelope Squirrel

Potential avoidance and minimization measures for this species may include the following based on coordination with the California Department of Fish and Wildlife:

- Preconstruction visual surveys will be performed within 30 days prior to construction.
- Surveys will be conducted within the project footprint and a 50-foot area outside the project impact area to identify habitat features.
- Active San Joaquin antelope squirrel burrows will be marked with a pin flag and avoided with a 50-foot buffer area, where possible.
- If avoidance is not possible, then the burrow will be hand excavated by a biological monitor with a current San Joaquin antelope squirrel handling permit.
- The biological monitor will be present at the construction site during ground-disturbing activities at each culvert.
- Prior to initiating construction of the project, a biological monitor will provide a Worker Environmental Awareness Training for all project personnel. Training will cover special-status species that are present or have potential to be present in the biological study area and protection requirements for each species.
- Environmentally Sensitive Area fencing will be installed at the limit of the project impact area at all culverts that contain suitable San Joaquin antelope squirrel habitat prior to the start of ground-disturbing activities. Environmentally Sensitive Area fencing installation and removal will be monitored by a Caltrans/U.S. Fish and Wildlife Service/California Department of Fish and Wildlife-approved biological monitor or biologist.
- Project-related vehicles should observe a daytime speed limit of 20 miles per hour throughout the site in all project areas, except on county roads and state and federal highways. Requiring low speed limits within the construction site will lessen the probability that San Joaquin (Nelson's) antelope squirrels can be run over by vehicles and equipment.

- All steep-walled trenches or excavations deeper than 12 inches will include escape ramps. At least one escape ramp will be provided in any onsite trenches or excavations at no more than a 2 to 1 slope. Such trenches or excavations will be inspected for wildlife immediately prior to backfilling.
- Any holes, trenches, or excavations without escape ramps that will not be filled within the working day must be covered overnight and inspected prior to beginning work on the following day.

An incidental take permit is anticipated for the San Joaquin (Nelson's) antelope squirrel. Mitigation measures proposed for impacts to the San Joaquin antelope squirrel may include:

- Compensation for loss of habitat through purchase of credits from a mitigation bank, preservation of habitat, or enhancement or restoration of habitat as identified through coordination with the California Department of Fish and Wildlife.

San Joaquin Kit Fox

Based on the potential for kit foxes to occur, Section 7 consultation with the U.S. Fish and Wildlife Service is anticipated. Avoidance and minimization efforts are anticipated to be similar to the following:

- Project-related vehicles should observe a 20 miles per hour speed limit in all project areas, except on county roads and state and federal highways; this is particularly important at night when kit foxes are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.
- To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Preconstruction/pre-activity surveys will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact San Joaquin kit foxes.
- Surveys will be conducted within the proposed project boundary and a 200-foot-wide buffer where feasible outside the project impact area to identify habitat features.

- Food trash and other garbage that may attract wildlife to the work area will be disposed of in closed containers and removed at the end of each workday. Feeding of any wildlife will be prohibited.
- All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is used or moved in any way.
- Use of rodenticides and herbicides in project areas should be restricted.
- Firearms, except by qualified and permitted public safety agents, and pets will not be permitted on the work site.
- A Worker Environmental Awareness Training for the San Joaquin kit fox will be provided to all construction workers before the start of construction.
- If natal/pupping dens are discovered within the project area or within 200 feet of the project impact area, the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife will be immediately notified.
- A 250-foot-wide no-disturbance buffer will be established around natal dens, with a 150-foot-wide no-disturbance buffer around known dens, and a 50-foot-wide no-disturbance around potential or atypical dens. Disturbance to all San Joaquin kit fox dens will be avoided to the maximum extent possible.
- A qualified biologist will be present at the construction site during initial ground-disturbing activities at each culvert where there has been evidence of San Joaquin kit fox presence.
- To the extent possible, a biologist will be available on-call during all construction periods when not present onsite.
- Section 7 Consultation with the U.S. Fish and Wildlife Service is anticipated for the San Joaquin kit fox. Mitigation, if required, will be determined in coordination with the resource agencies during the consultation process. It is anticipated that a Letter of Concurrence would be issued before construction is started for the project.

Swainson's Hawk and Tricolored Blackbird

- In accordance with the Migratory Bird Treaty Act, to avoid effects to nesting birds, any native or exotic vegetation removal or tree-trimming activities should occur outside of the nesting bird season.
- If construction occurs during the nesting season, February 1 to September 30, a biological monitor will conduct a preconstruction nesting survey to

ensure no Swainson's hawks or tricolored blackbirds are nesting in the biological study area or adjacent to the project area.

- If nesting Swainson's hawks or tricolored blackbirds are found onsite, a 500-foot no-disturbance buffer will be established around the nesting birds.

Special-Status Animal Species: Special-Status Non-Listed Species

San Joaquin Coachwhip

Potential avoidance and minimization efforts for this species may include the following:

- Preconstruction surveys of the project impact area will be conducted to avoid potential impacts to this species.
- A qualified biologist will be present at the construction site during initial ground-disturbing activities and for activities in habitat that may contain the species.
- Project-related vehicles should observe a 20 miles per hour speed limit in all project areas, except on county roads and state and federal highways. Requiring low speed limits within the construction site will lessen the probability that snakes can be run over by vehicles and equipment.
- Areas of disturbance will be recontoured and revegetated with a native seed mix.

Burrowing Owl

Avoidance and minimization efforts for the burrowing owl include the following:

- To ensure that any burrowing owls that may occupy the biological study area in the future are not affected by the project, preconstruction surveys will be completed 30 days prior to construction following the California Department of Fish and Wildlife 2012 surveys guidelines outlined in the 2012 Staff Report for Burrowing Owl Mitigation.
- If nesting burrowing owls are found onsite, a no-disturbance buffer will be established around the nesting owls, with reference to the California Department of Fish and Wildlife 2012 Staff Report.

Le Conte's Thrasher

The following are proposed avoidance and minimization measures for Le Conte's thrasher:

- In accordance with the Migratory Bird Treaty Act, to avoid effects to nesting birds, any native or exotic vegetation removal or tree-trimming activities should occur outside of the nesting bird season.
- If construction occurs during the nesting season, February 1 to September 30, a biological monitor will conduct a preconstruction nesting survey to ensure no Le Conte's thrashers are nesting in the project area.
- If nesting Le Conte's thrashers are found onsite, a 100-foot no-disturbance buffer will be established around the nesting birds.
- During the nesting season, a qualified biologist will be present at the construction site during initial ground-disturbing activities and for activities in habitat that may contain the species.

Loggerhead Shrike

The following are proposed avoidance and minimization measures for the loggerhead shrike:

- In accordance with the Migratory Bird Treaty Act, to avoid effects to nesting birds, any native or exotic vegetation removal or tree-trimming activities should occur outside of the nesting bird season.
- If construction occurs during the nesting season, February 1 to September 30, a biological monitor will conduct a preconstruction nesting survey to ensure no loggerhead shrikes are nesting in the project area.
- If nesting loggerhead shrikes are found onsite, a 100-foot no-disturbance buffer will be established around the nesting birds.
- During the nesting season, a qualified biologist will be present at the construction site during initial ground-disturbing activities and for activities in habitat that may contain the species.

American Badger

The following are proposed avoidance and minimization measures for the American badger:

- Preconstruction surveys of the project impact area and Caltrans right-of-way will be conducted to avoid potential impacts to this species.
- A qualified biologist will be present at the construction site during initial ground-disturbing activities and for activities in habitat that may contain the species.
- Preconstruction Worker Environmental Awareness Training will be held for all project personnel discussing special-status species that are present

and have potential to be present and protection requirements for each species.

Short-Nosed Kangaroo Rat

The following are avoidance and minimization measures for the short-nosed kangaroo rat:

- A preconstruction survey of the project impact area will occur for the short-nosed kangaroo rat. If this species is observed onsite, the animal will be allowed to leave on its own volition. To the greatest extent practicable, efforts will be made to avoid the species' habitat.
- A biological monitor will be present during initial ground-disturbing activities.

Tulare Grasshopper Mouse

Potential avoidance and minimization efforts for this species may include the following:

- Preconstruction surveys of the project impact area will be conducted to avoid potential impacts to this species.
- A qualified biologist will be present at the construction site during initial ground-disturbing activities.
- Project-related vehicles should observe a 20 miles per hour speed limit in all project areas, except on county roads and state and federal highways. Requiring low speed limits within the construction site will lessen the probability that mice can be run over by vehicles and equipment.

2.1.5 Cultural Resources

Considering the information in the Section 106 Compliance Screened Project/Activity Memo dated May 26, 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
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

2.1.6 Energy

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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 Identification Report dated September 25, 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: <ul style="list-style-type: none"> 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

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in 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 waste water disposal systems where sewers are not available for the disposal of waste water?	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 Climate Change Study dated September 10, 2021, 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?	No Impact

Affected Environment

The project is included in the 2018 Kern Council of Government’s Regional Transportation Plan/Sustainable Communities Strategy. The Air Resources Board’s greenhouse gas emission reduction targets for the Kern Council of Governments at the time the Regional Transportation Plan/Sustainable

Communities Strategy was adopted were 5 percent by 2020 and 10 percent by 2035.

The Sustainable Communities Strategy strives to reduce air emissions from passenger vehicle and light duty truck travel by better coordinating transportation expenditures with forecasted development patterns to help meet the California Air Resources Board greenhouse gas targets for the region. These strategies include well-maintained local streets, roads, and highways, and transportation system management to maximize network efficiency (Kern Council of Governments 2018).

Environmental Consequences

Construction greenhouse gas emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

A greenhouse gas emissions study using the Federal Highway Administration's Infrastructure Carbon Estimator Tool has been prepared for this project.

This project will generate the following construction and maintenance greenhouse gas emissions:

1. 3,737 metric tons of carbon dioxide (CO₂) are the proposed construction greenhouse gas emissions for this project.
2. 3,647 metric tons of carbon dioxide (CO₂) are the proposed maintenance greenhouse gas emissions for this project. There would be a 2.41 percent reduction in greenhouse gas emissions due to alternative construction and maintenance techniques.

Avoidance, Minimization, and/or Mitigation Measures

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all Air Resources Board emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Initial Site Assessment dated November 5, 2018, 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 one-quarter 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, would 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 two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
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 Compliance Memo dated June 18, 2021, 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 would: (i) result in substantial erosion or siltation onsite or offsite;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	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

Considering the information in the Draft Project Report and Project Initiation Report dated June 24, 2019, the following significance determinations have been made:

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

Considering the information in the Mineral Resource Deposit Database from the U.S. Geological Survey dated September 28, 2016, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	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 Compliance Study dated August 30, 2021, 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?	Less Than Significant 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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

Affected Environment

The area within the project limits and adjacent to the project is rural. Land uses designated for this area are composed of empty fields and open space.

Environmental Consequences

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications Section 14-8, “Noise Control.”

Construction equipment is expected to generate noise levels ranging from 80 to 88 A-weighted decibels from a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 decibels per doubling of distance. No adverse noise impacts from construction are anticipated because construction would be conducted in a rural setting and in accordance with Caltrans Standard Specifications, Section 14-8.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would minimize the temporary noise impacts from construction:

- Do not exceed a maximum sound level of 86 A-weighted decibels at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.

- Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

2.1.14 Population and Housing

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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

Question:	CEQA Significance Determinations for Public Services
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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 would 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

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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

Question—Would the project:	CEQA Significance Determinations for Transportation
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

Considering the information in the Section 106 Screen Project/Activity Compliance Memo dated May 26, 2021, the following significance determinations have been made:

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

Considering the information in the Draft Project Report dated June 24, 2019, the following significance determinations have been made:

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 storm water 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
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.1.20 Wildfire

Considering the information in the U.S. Operational Fire Danger Forecast Database from the U.S. Geological Survey dated December 21, 2018, the following significance determinations have been made:

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

Question—Would the project:	CEQA Significance Determinations for Wildfire
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?	No Impact

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
<p>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.)</p>	<p>No Impact</p>
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<p>No Impact</p>

Appendix A Title VI Policy Statement

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 handwritten signature in blue ink, appearing to read 'Toks Omishakin'.

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 January 14, 2022 to February 14, 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.

Two letters were submitted during the public circulation and comment period, as shown below. The first letter (from the California Department of Conservation) was received on February 8, 2022. The second letter (from the California Department of Fish and Wildlife) was submitted on March 17, 2022.

Comment from the California Department of Conservation

**California Department of Conservation
Geologic Energy Management Division
David Shabazian, Director
801 K Street, MS 18-05
Sacramento, CA 95814**

Date: 02/08/2022

To: Trais Norris

2015 East Shield Avenue, Suite
100, Fresno, CA 93726, USA
trais.norris@dot.ca.gov

Construction Site Well Review (CSWR) ID: 1012420

Assessor Parcel Number(s): 04337015, 05714038, 05714050, 05715151, 05715150, 04337044, 04337020, 04337021, 04337016, 04337054, 05714048, 05714020, 05714022, 05716137, 05716138, 05729020, 05729019, 05729025, 05729016, 05729013, 05729011, 05729014, 05718041, 05718036, 05718010, 05725023, 05718029, 05718035, 05716253, 05729017, 05729022

Property Owner(s): CalTrans District 6

Project Location Address: State Route 33 in Kern County near McKittrick Avenue, Bakersfield, California 00000

Project Title: Blackwell's Corner Capital Preventative Maintenance - State Route 33 in Kern County near McKittrick

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 2/8/2022. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in Kern County, within the boundaries of the following fields: Any Field, Beer Nose Our records indicate there are 9 known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 1
- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 5
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 3

The Division categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or

water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

- a. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.
- b. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.
- c. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and

after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.
2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Inland district office, and file for Division review an amended site plan with well casing diagrams.

The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (661) 440-8942 or via email at marvelous.egboro@conservation.ca.gov.

Sincerely,

Jeff Kimber

Jeff Kimber for Mark Ghann-Amoah District Deputy

cc: Trais Norris – Submitter

Wells Not Abandoned to Current Division Requirements as Prescribed by Law & Projected to be Built Over or Have Future Access Impeded

The wells listed below are not abandoned to current Division requirements as prescribed by law, and based upon information provided, are projected to be built over or have future access impeded. **The Division expects these wells to be reabandoned in compliance with current California law, prior to development activities.**

API	Well Designation	Operator	Well Evaluations
0402941922	O.L.C. 1	Forest Gray Energy	Idle well

Wells Not Abandoned to Current Division Requirements as Prescribed by Law & Not Projected to be Built Over or Have Future Access Impeded

The wells listed below are not abandoned to current Division requirements as prescribed by law, and based upon information provided, are not projected to be built over or have future access impeded.

API	Well Designation	Operator	Well Evaluations
0402936500	1	F. B. Langstroth	Not in compliance with CCR 14. 1723.5. less than 25' cement plug @ surface.
0402929585	O.L.C. 2	The Superior Oil Company and Independent Exploration Co.	Not in compliance with CCR 14. 1723.5. less than 25' cement plug @ surface.
0402929567	O.L.C. 4	Mobil Oil Exploration & Production North America, Inc.	Not in compliance with CCR 14. 1723.5. less than 25' cement plug @ surface.
0402943748	Gump 1	King Resources Company	Not in compliance with CCR 14. 1723.5. less than 25' cement plug @ surface.

API	Well Designation	Operator	Well Evaluations
0402958568	Hanwell 1	Damson Oil Corporation	Not in compliance with CCR 14. 1723.5. Top of cement plug @ 1124'

Wells Abandoned to Current Division Requirements as Prescribed by Law & Not Projected to be Built Over or Have Future Access Impeded

The wells listed below are abandoned to current Division requirements as prescribed by law, and based upon information provided, are not projected to be built over or have future access impeded.

API	Well Designation	Operator	Well Evaluations
0402963724	NGC-CMI-Gump 1	Natural Gas Corp. of Calif.	Plugged and Abandoned
0402943120	Gump 2	Western Continental Operating Company	Plugged and Abandoned
0402941771	S & G Gump 1	Chevron U.S.A. Inc.	Plugged and Abandoned

Caltrans Response to Comment from the California Department of Conservation

The above recommendations from the California Department of Conservation will be followed. Caltrans does not anticipate any impacts to the wells mentioned in this letter because the closest well to State Route 33 is 150 feet away and will not be impacted by the project. Caltrans also does not own the wells evaluated in this construction well site review. Caltrans used the Geologic Energy Management Division's online mapping application Well Finder to locate oil and gas wells by their unique well number, also known as American Petroleum Institute numbers.

Comment from the California Department of Fish and Wildlife

March 17, 2022

Jennifer Taylor
California Department of Transportation,
District 6
2015 East Shields Avenue, Suite 100
Fresno, California 93726

**Subject: Blackwell's Corner Capital Preventative Maintenance
(Project) Initial Study with proposed Mitigated Negative
Declaration State Clearinghouse No. 2022010218**

Dear Ms. Taylor:

The California Department of Fish and Wildlife (CDFW) received a proposed Mitigated Negative Declaration (MND) and its supporting Initial Study (IS) prepared by the California Department of Transportation (Caltrans) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife.

Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code. While the comment period may have ended, we appreciate your consideration of our comments.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and

Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans

Objective: Caltrans proposes to rehabilitate an approximately 18.6-mile segment of State Route 33 (SR 33) between Post Mile 40.4 and Post Mile 59.0 (Project site) in Kern County. All Project-related activities will occur within the existing right-of-way within the paved travel lanes, the unpaved but compacted and engineered shoulder backing, proposed new right-of-way, or within the ruderal areas beyond the travel lanes and shoulder backing. Work would include resurfacing of the existing SR 33, repair of localized failures, the sealing of cracks wider than 1.25-inches, loop Vehicle Detection Systems, the creation of centerline rumble strips, and the repair or replacement of existing culvert locations. Activities include trenching, grading, and resurfacing outside shoulders.

Location: The Project site exists between Post Mile 40.4 and Post Mile 59.0 and is north of the City of McKittrick in Kern County.

Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

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.

Currently, the proposed IS/MND indicates that the Project-related impacts to Biological Resources would 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 and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State and federally endangered giant kangaroo rat (*Dipodomys ingens*), the State and federally endangered and State fully protected blunt-nosed leopard lizard (*Gambelia sila*), and the State species of special concern burrowing owl (*Athene cucularia*).

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 the State-listed and special status species. Therefore, CDFW does not agree with these conclusions and herein suggests measures to minimize and avoid Project-related impacts to special status species. CDFW also recommends that Caltrans identify a path forward in the event that avoidance of any State-listed species is not feasible.

I. Environmental Setting and Related Impact

Would the Project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?

COMMENT 1: San Joaquin kit fox (SJKF)

Issue: The Project activities will involve varying degrees of ground disturbance and the staging and laydown of equipment and materials at discreet locations along the 18.6 mile segment of SR 33. 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 resulting in abandoned pups. Caltrans proposes pre-activity clearance surveys of the Project footprint and a 200-foot buffer between 14 and 30 days of commencing project activities, the daily inspection of deep trenches and steep-walled holes within the Project footprint, and the inspection of pipes greater than three inches in diameter prior to burying, capping, or moving in any way. Further, while Caltrans proposes consulting with USFWS in the event individual SJKF are detected during these surveys and/or inspections, Caltrans does not propose consulting with CDFW.

Specific Impacts: While CDFW agrees with Caltrans' plans to conduct pre-activity surveys and daily inspections of trenches, ditches, and materials at the Project footprint, CDFW recommends the pre-activity surveys be done to detect individuals and dens beyond the 200-foot area surrounding the Project footprint. Additionally, CDFW recommends Caltrans consult with CDFW in the event SJKF are detected during the surveys and/or inspections.

Evidence impact would be significant: While habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al., 2013), disturbance in proximity to a den can result in unsuccessful pupping and cause individuals to become more susceptible to predation. Both results of the Project-related disturbance could constitute significant effects to the species.

Recommended Potentially Feasible Avoidance and Mitigation Measure(s): Because SJKF are known to occur in the general vicinity of the Project footprint and because dens could be present outside the Project footprint but sufficiently

near the Project footprint to be affected by the Project-related activities, CDFW recommends the following edits to the SJKF avoidance and minimization measure section of the IS. Further, CDFW recommends these revised measures be made conditions of Project approval.

Recommended Edits to Avoidance and Minimization Measures to specifically address SJKF in the IS.

CDFW recommends the pre-activity clearance surveys for SJKF be conducted to identify SJKF dens at and within 250 feet of the Project footprint, and that Caltrans coordinate with USFWS and CDFW in the event that individuals and/or dens are detected during these surveys. These surveys can be limited to 100 feet beyond the Project footprint if work commences outside the pupping season. Through the aforementioned coordination, CDFW will recommend a 250-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, and absolutely no disturbance to the dens within the above buffers without contacting CDFW and obtaining written authorization to do so. If the above edits to the existing avoidance and minimization measures are not made, and/or the aforementioned buffers are not feasible, Caltrans should propose obtaining incidental take coverage under section 2081 subdivision (b) of Fish and Game Code in the revised IS, and that the revised IS support a MND. In summary, if implementation of the edited avoidance measure is not feasible, additional mitigation (take authorization from CDFW) would be required to reduce SJKF impacts to less-than-significant and to comply with CESA.

[[Caltrans' Response to Comment 1:

Where Caltrans has legal access to do so, Caltrans will conduct pre-activity clearance surveys for San Joaquin kit fox dens at and within 250 feet of the project footprint. If a San Joaquin kit fox den is found to be present onsite, then Caltrans will coordinate with both the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service to incorporate an appropriate no-disturbance buffer, which may include: 250 feet around natal dens, 100 feet around known dens, and 50 feet around potential or atypical dens.]]

COMMENT 2: Giant Kangaroo Rat (GKR) and Blunt-nosed Leopard Lizard (BNLL)

Issue: Both GKR and BNLL are known to occur in the general vicinity of the Project site. While much of the Project will occur on existing paved areas, there are discreet areas adjoining the Project which persist as suitable habitat. Caltrans proposed to survey 50-feet around existing culverts where work will occur, but did not propose an avoidance buffer for the species. CDFW recommends Caltrans conduct an assessment of these ruderal areas adjoining the Project site for potentially suitable GKR and BNLL habitat. If suitable GKR and BNLL habitat exists in areas of planned Project-related

ground disturbance, equipment staging, or materials laydown, burrow openings in these areas would have to be completely avoided by a minimum of 50 feet in order to avoid possible take of the species.

Specific Impacts: Without a determination with respect to the presence or absence of even marginal GKR and/or BNLL habitat at and adjoining the Project site, CDFW cannot concur that the Project-related impacts to both or either species will be avoided or are less-than-significant. Both BNLL and GKR spend much of their time underground in burrows which extend as far as 50 feet from a burrow opening and unless those burrow openings are avoided by at least 50 feet, Project-related ground disturbance can result in take of the species through burrow chamber collapse, entrapment, etc. In the IS, Caltrans indicates that the Project will not result in any significant impact to either species. Caltrans does propose pre-activity surveys for both species but does not ascribe quantified buffer distances to avoid burrow openings which may exist within the ruderal portions of the right-of-way or adjoining ruderal lands.

Evidence impact would be significant: Habitat loss resulting from agricultural conversion and development is the primary threat to both GKR and BNLL. GKR are known to have occur in ruderal areas, which have connectivity to portions of the Project right-of-way. Both GKR and BNLL could continue to occupy ruderal areas within and adjoining these portions of the Project right-of-way and Project-related ground disturbance in these areas could result in take and significant impacts to both or either species.

Recommended Potentially Feasible Avoidance and Mitigation Measure(s): Because suitable GKR and/or BNLL habitat may be present in the vicinity of at least portions of the Project area, CDFW recommends the following avoidance and minimization measures be added to ensure that effects to the species will be less- than-significant and completely avoided. Further, CDFW recommends these measures be made conditions of Project approval.

Recommended Mitigation Measure: Recommended inclusion of Avoidance and Minimization Measures for BNLL and GKR in the IS.

In order to determine if GKR and/or BNLL occupy ruderal parts of the right-of- way or adjoining lands, CDFW recommends Caltrans revise the IS to include plans to assess whether ruderal lands within or adjoining (within 50 feet) the right-of-way constitute suitable habitat for GKR or BNLL. If not, this should be addressed in the IS and no further measures would be needed. But if suitable habitat is present at or within 50 feet of the right-of-way, and suitable burrows cannot be avoided, CDFW recommends the IS include a measure involving protocol-level surveys for both species in advance of commencing Project activities. If no individuals are detected during these surveys, Caltrans could potentially construct the Project and avoiding the species and associated significant impacts. However, if GKR and/or BNLL are found to occupy areas within or adjacent to the right-of-way, the Project would have the potential to result in take and significant impacts to the

species. If burrow avoidance is not feasible, in advance of Project implementation, Caltrans should consult with CDFW regarding how to implement the Project in a manner that complies with CESA. While Caltrans could seek and obtain incidental take coverage under section 2081 subdivision (b) of Fish and Game Code for Project-related take of GKR, CDFW cannot issue the same coverage for BNLL due to its State fully-protected status.

[[Caltrans' Response to Comment 2:

Caltrans will conduct walkover surveys to evaluate habitat suitability for the giant kangaroo rat to determine if protocol-level surveys are warranted before starting project activities. These surveys will be conducted within 50 feet of ground disturbance areas if Caltrans has legal access to do so. Caltrans is also proposing to conduct protocol-level surveys for the blunt-nosed leopard lizard within suitable habitat before starting project activities. These surveys will be conducted within 50 feet of ground disturbance areas if Caltrans has legal access to do so.]]

COMMENT 3: Burrowing Owl (BUOW)

Issue: BUOW may occur near the Project site. BUOW inhabit open grassland or adjacent canal banks, ROWs, vacant lots, etc. containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover.

Specific impact: Potentially significant direct impacts associated with subsequent activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact is potentially significant: BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). Therefore, subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact):

To evaluate potential impacts to BUOW, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the IS prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure: BUOW Surveys

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium’s “Burrowing Owl Survey Protocol and Mitigation Guidelines” (CBOC 1993) and CDFW’s Staff Report on Burrowing Owl Mitigation” (CDFG 2012). Specifically, CBOC and CDFW’s Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

[[Caltrans Response to Comment 3, Mitigation Measure Burrowing Owl Surveys:

Caltrans will conduct protocol-level surveys for the burrowing owl in accordance with California Burrowing Owl Consortium’s “Burrowing Owl Survey Protocol and Mitigation Guidelines” and California Department of Fish and Wildlife’s Staff Report guidelines before starting project activities.]]

Recommended Mitigation Measure: BUOW Avoidance:

CDFW recommends no-disturbance buffers, as outlined in the “Staff Report on Burrowing Owl Mitigation” (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW’s Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

[The following table has been reformatted to meet the publishing and readability requirements of the Americans with Disabilities Act. The content remains the same as the original.]

Location	Time of Year	Level of Disturbance-- Low	Level of Disturbance-- Medium	Level of Disturbance-- High
Nesting Sites	April 1 to August 15	200 meters	500 meters	500 meters
Nesting Sites	August 16 to October 15	200 meters	200 meters	500 meters
Nesting Sites	October 16 to March 31	50 meters	100 meters	500 meters

[[Caltrans Response to Comment 3, Mitigation Measure Burrowing Owl Avoidance:

Caltrans will implement appropriate no-disturbance buffers for the burrowing owl, if necessary, prior to and during any ground-disturbing activities in accordance with the “Staff Report on Burrowing Owl Mitigation” (CDFG 2012).]]

Recommended Mitigation Measure: BUOW Passive Relocation and Mitigation:

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

[[Caltrans Response to Comment 3, Mitigation Measure Burrowing Owl Passive Relocation and Mitigation:

If burrowing owls are found in the Project Impact Area and avoidance is not possible, Caltrans will coordinate with the California Department of Fish and Wildlife regarding appropriate minimization and mitigation measures.]]

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDDB. The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

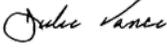
FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist Caltrans in identifying and avoiding the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Javier Mendez, Environmental Scientist, at the address provided on this letterhead, or by electronic mail at javier.mendez@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...

Julie A. Vance
Regional Manager

Attachment 1: Recommended Mitigation Monitoring and Reporting Program

cc: United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, California 95825

ec: Office of Planning and Research, State Clearinghouse
state.clearinghouse@opr.ca.gov

LITERATURE CITED

CBOC 1993. California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.

CDFG 2012. CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.

Cypher, B. L., S. E. Phillips, and P. A. Kelly. 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. *Canid Biology and Conservation* 16(7): 25–31.

Gervais et al. 2008. Gervais, J.A., D.D. Rosenberg, and L.A. Comrack. Burrowing Owl (*Athene cunicularia*) in Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RECOMMENDED
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)**

PROJECT: Blackwell’s Corner Capital Preventative Maintenance Project

SCH No: 2022010218

RECOMMENDED MITIGATION MEASURE	STATUS/ DATE/ INITIALS
<i>Before Disturbing Soil or Vegetation</i>	[blank cell]
Mitigation Measure 1: SJKF Habitat Assessment	[blank cell]
Mitigation Measure 2: SJKF Surveys	[blank cell]
Mitigation Measure 4: SJKF Take Authorization if Avoidance is not feasible	[blank cell]
Mitigation Measure 5: GKR Surveys	[blank cell]
Mitigation Measure 7: GKR Take Authorization if Avoidance not feasible	[blank cell]
Mitigation Measure 8: BNLL Avoidance	[blank cell]
Mitigation Measure 10: BUOW Surveys	[blank cell]
Mitigation Measure 12: BUOW Passive Relocation and Mitigation if Avoidance not feasible	[blank cell]
<i>During Construction</i>	[blank cell]
Mitigation Measure 3: SJKF Avoidance	[blank cell]
Mitigation Measure 6: GKR Avoidance	[blank cell]
Mitigation Measure 9: BNLL Avoidance	[blank cell]
Mitigation Measure 11: BUOW Avoidance	[blank cell]

[The above table has been slightly reformatted—to show blank cells—to meet the publishing and readability requirements of the Americans with Disabilities Act. The content remains the same as the original.]

List of Technical Studies Bound Separately (Volume 2)

Air Quality Report

Noise Study Report

Water Quality Report

Natural Environment Study

Historical Property Survey Report

- Historic Resource Evaluation Report
- Historic Architectural Survey Report
- Archaeological Survey Report

Hazardous Waste Reports

- Initial Site 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:

Trais Norris

District 6 Environmental, California Department of Transportation
2015 East Shields Avenue, Suite 100, Fresno, CA 93726

Or send your request via email to: trais.norris@dot.ca.gov

Or call: 209-601-3521

Please provide the following information in your request:

Project title: Blackwell's Corner Capital Preventative Maintenance

General location information: State Route 33 in Kern County near McKittrick Avenue, from the end of Cymric Wash Bridge to 1.1 mile south of the State Routes 33/46 junction

District number-county code-route-post mile: 06-KER-33-40.4/59.0

Project ID number: 06-1900-0010