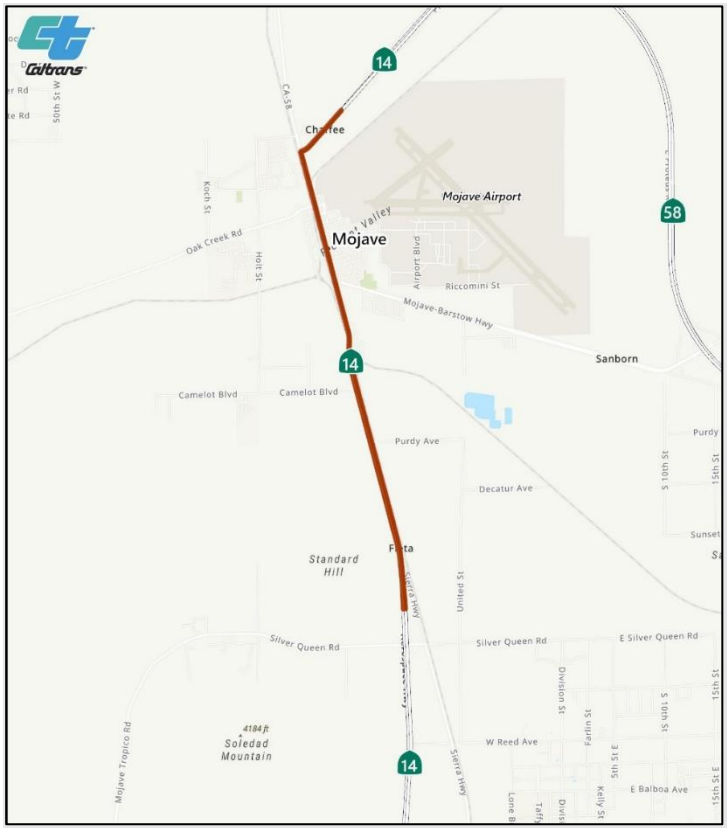
Mojave Pavement

Kern County, California
District 09-KER-014-post miles R12.6 to16.7
EA 09-37520/Project ID 0918000036
State Clearinghouse Number: 2022060289

Initial Study with Proposed Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

March 2023

General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Kern County in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, the potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-9/district-9-projects-list/Mojave-Pavement
- Printed copies of the document are available for review at the Caltrans district office at 500 South Main Street, Bishop, California 93514-3423; and the Kern County Library-Mojave Branch, 15555 O Street, Mojave, California 93501.
- Attend the virtual public information meeting on April 25, 2023.
- Tell us what you think. If you have any comments regarding the proposed project, please attend the virtual meeting, and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Cecilia Boudreau, District 9 Environmental Division, California Department of Transportation, 500 South Main Street, Bishop, California 93514.
- Or submit comments via the following website: https://deavpm.wixsite.com/mojave-pavement
- Or submit comments via email to: cecilia.boudreau@dot.ca.gov.
- Submit comments by the deadline: May 10, 2023.

What happens next:

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

Printing this document: To save paper, this document has been set up for two-sided printing (to print the front and back of a page). Blank pages occur where needed throughout the document to maintain proper layout of the chapters and appendices.

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For individuals with sensory disabilities, this document can be made available in alternate formats (i.e., Braille, large print, sign language interpreter, etc.) and those needing information in a language other than English, please write to or call Caltrans, Attention: Bob Gossman, 500 South Main Street, Bishop, California 93514; telephone 760-881-7145 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

09-KER-14-PM R12.6/16.7
EA 09-37520/Project ID 0918000036

Restore pavement, upgrade existing roadway facilities to meet current standards, and improve accessibility and highway operations on State Route 14 from post miles R12.6 to 16.7 in Kern County.

INITIAL STUDY
with Proposed Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency: California Transportation Commission,
California Department of Fish and Wildlife,
Lahontan Regional Water Quality Control Board

Kirsten Helton
Deputy District Director, Planning and Environmental Analysis
California Department of Transportation
CEQA Lead Agency

3/27/2023

Date

The following individual can be contacted for more information about this document:

Cecilia Boudreau, District 9 Environmental Division, 500 South Main Street, Bishop, California 93514-3423, phone: 760-874-8330; email: cecilia.boudreau@dot.ca.gov

DRAFT
Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: 2022060289

District-County-Route-Post Mile: 09-KER-14-R12.6/16.7

EA/Project Number: EA 09-37520/Project ID 0918000036

Project Description

The California Department of Transportation (Caltrans) proposes improvements to a 5-mile stretch of State Route 14 in Kern County. The project would begin south of the community of Mojave at post mile R12.6, about 0.5 mile north of Silver Queen Road overcrossing, and extend through downtown Mojave, ending about 0.6 mile north of north junction Business Route 58 at post mile 16.70. The project would rehabilitate the existing roadbed, upgrade existing bridge railing and metal beam guardrailing, upgrade drainage systems, reconfigure the north and south junction of Business Route 58 and State Route 14, construct an acceleration lane at Purdy Avenue, construct sidewalks and driveways, and bring curb ramps up to Americans with Disabilities Act standards.

Determination

An Initial Study has been prepared by Caltrans District 9. On the basis of this study, it is determined that the proposed action will not have a significant effect on the environment for the following reasons:

- The project will have no impact to Aesthetics, Agriculture and Forest Resources, Air Quality, Cultural Resources, Energy, Geology and Soils, Land Use and Planning, Mineral Resources, Population and Housing, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

- The project will have less than significant impacts to Biological Resources, Hazards and Hazardous Materials, Noise, Hydrology and Water Quality, and Greenhouse Gas Emissions.

Kirsten Helton
Deputy District Director, Planning and Environmental Analysis
California Department of Transportation

Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes improvements to a 5-mile stretch of State Route 14 in Kern County. The project would begin south of the town of Mojave at post mile R12.6, about half a mile north of Silver Queen Road overcrossing and extend through downtown Mojave, ending a little over half a mile north of north junction Business Route 58 at post mile 16.70. The project would rehabilitate the existing roadbed, upgrade existing bridge railing, and metal beam guardrailing, upgrade drainage systems, reconfigure the north and south junction of Business Route 58 and State Route 14, construct an acceleration lane at Purdy Avenue, construct sidewalks and driveways, and bring curb ramps up to Americans with Disabilities Act standards.

1.2 Purpose and Need

The project "purpose" is a set of objectives the project intends to meet. The project "need" is the transportation deficiency that the project was initiated to address.

1.2.1 Purpose

The purpose of the project is to:

- Restore and extend the service life of the pavement to a condition that will require minimal maintenance.
- Upgrade existing highway features to current standards.
- Improve operations.
- Increase and improve access and connectivity for multiple modes of transportation.

1.2.2 Need

Address Pavement Needs

The stretch of State Route 14 from post miles R12.6 to 16.7 has exceeded its useful lifespan, and the pavement is deteriorating. Extensive damage to the road surface is contributing to poor ride quality and requires continual maintenance. According to the 2020 Automated Pavement Condition Survey,

the pavement conditions within the project are in fair to poor condition and will continue to degrade over time if not addressed.

Upgrade Highway Elements

- Existing guardrail throughout the project limits is obsolete and needs to be replaced with the standard Midwest Guardrail System railing.
- Existing bridge rails on northbound Bridge 50-0402R at post mile 15.4 are non-standard and must be reconstructed to meet current standards.
- Existing concrete barrier end blocks on southbound Bridge 50-0402L at post mile 15.4 will need to be replaced to connect to standard transition railing.
- The bridge deck on the Oak Creek overcrossing (Bridge 50-049) is cracking and needs repair.
- Several culverts within the project limits lie within the clear recovery zone and need to be extended.
- Existing pavement delineation and signs do not meet current standards for material type and reflectivity and require replacement to meet current standards.

Improve Operations

Intersections within the project limits do not allow for smooth traffic flow. The intersection at Purdy Avenue and State Route 14 does not provide adequate distance for vehicles to accelerate when merging onto State Route 14, and the addition of increased traffic as a result of proposed commercial development is anticipated to further compromise traffic operations at this location. The south intersection at State Route 14 and Business Route 58 does not provide adequate room for large tractor-trailers to turn off and onto State Route 14. The north intersection of State Route 14 and Business Route 58 allows vehicles to make the “free right” turn at a higher rate of speed, thereby increasing the potential for collisions involving pedestrians or cyclists.

Improve Accessibility for All Modes of Transportation

The project extends through a commercial part of Mojave and serves a variety of businesses, including restaurants, hotels, gas stations, convenience stores, grocery stores and other community services. The sidewalk and curb ramps within the project limits do not meet current Americans with Disabilities Act (ADA) standards. There are multiple gaps between sidewalks, and portions of the existing sidewalk facilities are failing. The current sidewalk conditions within the project limits do not allow for continuous pedestrian travel though the commercial center of Mojave.

1.3 Project Description

The project proposes to address multiple Caltrans facilities on State Route 14, from post miles R12.6 to 16.7, within and directly adjacent to the community of Mojave in Kern County. Figure 1-1 shows a map of the general vicinity of the project, and Figure 1-2 shows the specific project location.

The project would rehabilitate four travel lanes of State Route 14 (two southbound and two northbound) and the center median turn lane to improve ride quality, extend the service life of the facility and reduce maintenance needs. The project would also make intersection improvements; improve drainage; upgrade guardrail; improve existing sidewalks and construct new sidewalks where there are gaps; upgrade curb ramps and driveways; improve three bridges (Bridge 50-0402R, Bridge 50-0402L, and Bridge 50-049); and install new pavement markings, stripes and rumble strips to meet current standards.

Under consideration for the project are a Build Alternative—with three pavement strategies using continually reinforced concrete pavement with a design option for using hot mix asphalt for the proposed pavement—and a No-Build Alternative.

Figure 1-1 Project Vicinity Map

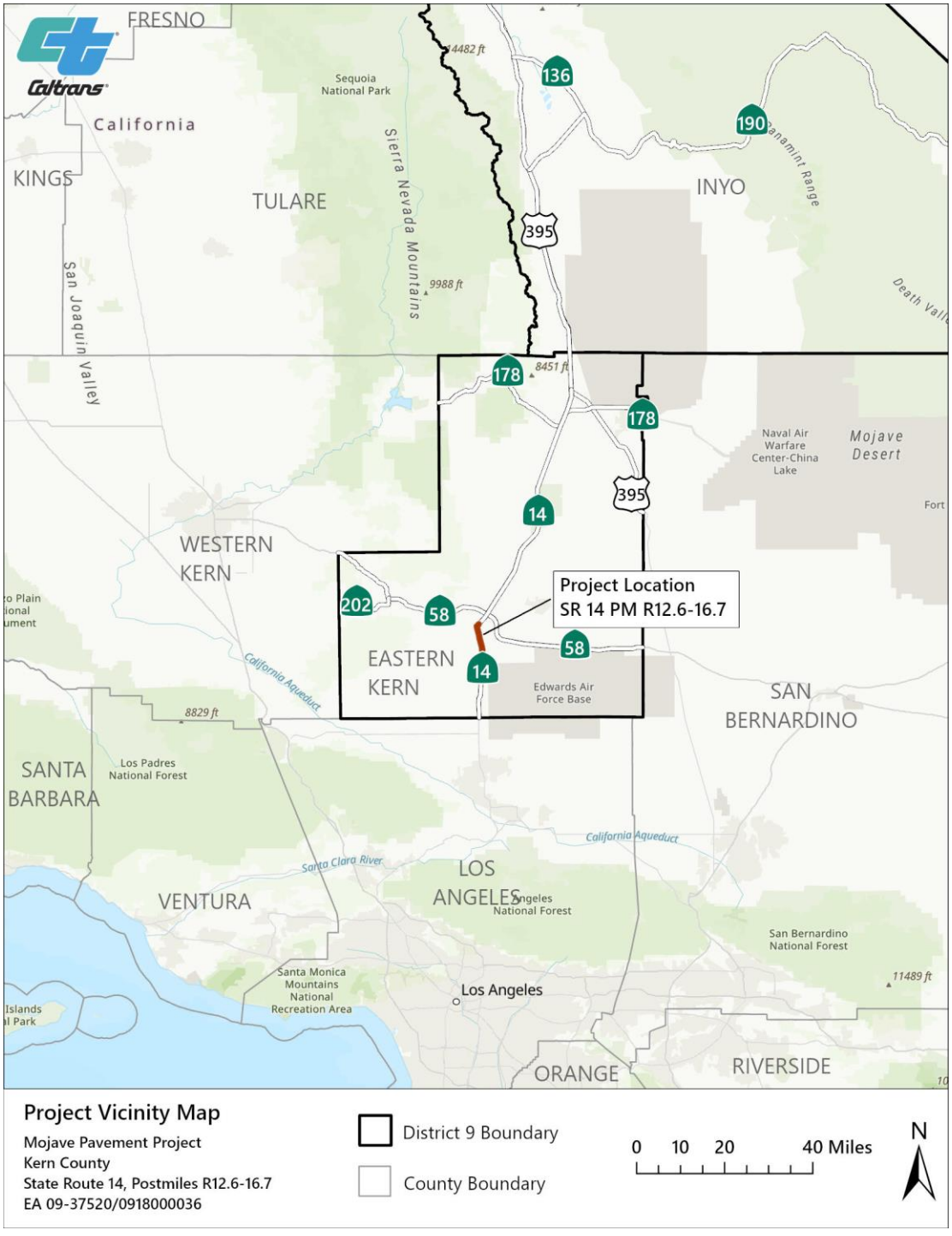
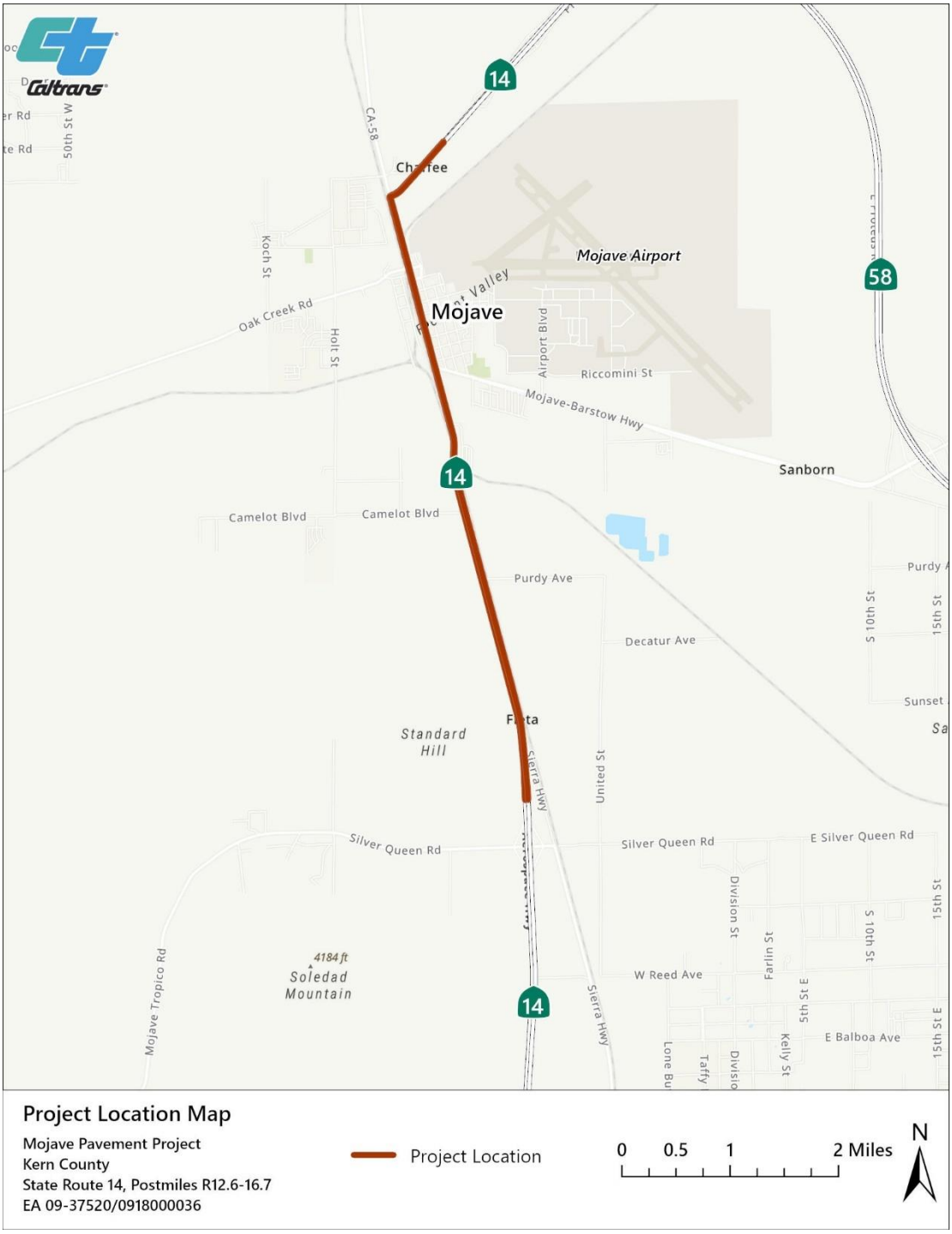


Figure 1-2 Project Location Map



1.4 Project Alternatives

Two alternatives are under consideration: a Build Alternative and a No-Build Alternative.

1.4.1 Build Alternative

The Build Alternative would rehabilitate four travel lanes of State Route 14 (two southbound and two northbound) and the center median turn lane. The work would also make intersection improvements, upgrade curb ramps and driveways, and install new pavement markings, stripes and rumble strips to meet current standards. This alternative would improve existing sidewalks and construct new sidewalks where there are gaps, improve drainage, improve three bridges, and upgrade guardrail within the project limits.

Pavement Rehabilitation Strategies

The Build Alternative includes the following pavement rehabilitation strategies for the various segments of the project:

Post miles R12.6 to R15.5

Pavement Strategy 1 would place a 0.9-foot continuously reinforced concrete pavement overlay over the existing roadway. To bridge the existing roadway deficiencies and provide support for the continuously reinforced concrete pavement overlay, 0.25-foot of hot mix asphalt would be overlain onto the existing roadway prior to placing the continuously reinforced concrete pavement overlay. Due to the increase in roadway elevation, both overlays would extend from the edge of the pavement to the edge of the pavement.

Design Option 1 would do a 1-foot full-depth recycle of the existing roadway, followed by a 0.35-foot overlay using hot mix asphalt and then a 0.2-foot layer of rubberized hot mix asphalt. To provide a consistent roadway surface, this option would extend from the edge of the pavement to the edge of the pavement.

Because there are concrete slabs under the northbound Number 1 lane, the pavement in the Number 1 lane would be removed so that the concrete slabs can be cracked and seated. Hot mix asphalt-Type A would then be placed up to the level of the Full Depth Recycle in the adjacent Number 2 lane. The 0.35-foot hot mix asphalt-Type A overlay and 0.20-foot rubberized hot mix asphalt wearing course would then be placed over the entire area of the northbound lanes before either pavement option could be constructed.

As a result of the increase in elevation of the roadway resulting from the application of new pavement, the shoulder elevation would have to be raised so that there is no drop-off between the edge of the pavement and the shoulders. Shoulder backing (decomposed granite) would be applied to the shoulders within the limits of both Pavement Strategy 1 and Design Option 1. Neither strategy would extend below the existing road base grade; therefore, construction of permanent storm water treatment facilities would not be required.

Post miles R15.5 to L17.38

To conform to the existing curb and gutter and other surface features in this segment, the following pavement strategies are proposed.

Pavement Strategy 2 would remove the existing roadway and portions of the existing base and replace them with a 0.9-foot layer of continually reinforced concreate pavement, 0.25-foot layer of hot mix asphalt, and 0.7-foot layer of aggregate subbase. Since the continually reinforced concrete pavement requires lateral support in the shoulders, the continually reinforced concrete pavement would extend from the edge of the pavement to the edge of the pavement.

Design Option 2 would remove the existing roadway pavement and portions of the existing base and replace them with a 1.5-foot layer of hot mix asphalt and a 1-foot layer of aggregate base material. To address the poor subgrade issues, a subgrade geosynthetic fabric would be installed below the hot mix asphalt to improve subgrade stability. This option would also extend from the edge of the pavement to the edge of the pavement.

Post miles L17.38 to 16.7

The options in this segment are similar to the options in the previous segment and are intended to match the existing pavement height. Due to potential improved subgrade conditions that are unknown at this time, the depth of the pavement section may be reduced.

Pavement Strategy 3 would remove the existing roadway and replace it with a 0.9-foot layer of continually reinforced concrete pavement, a 0.25-foot layer of hot mix asphalt, and a 0.35-foot layer of aggregate subbase. Since the continually reinforced concrete pavement requires lateral support in the shoulders, the continually reinforced concreate pavement would extend from the edge of the pavement to the edge of the pavement.

Design Option 3 is the same as Design Option 2 and would remove the existing roadway pavement and base and replace them with a 1.5-foot layer of hot mix asphalt and a 1-foot layer of aggregate base material. To address the poor subgrade issues, a subgrade geosynthetic fabric would be installed below the hot mix asphalt to improve subgrade stability. This option would also extend from the edge of the pavement to the edge of the pavement. Since this option would extend into the native subgrade, this option would require permanent treatment for storm water runoff.

Pedestrian Facilities Upgrades

Existing pedestrian facilities on State Route 14 in the community of Mojave would be upgraded to meet current Americans with Disabilities Act (ADA) standards. New sidewalks would be constructed where sidewalks are missing, or existing sidewalks would be reconstructed where conditions are poor to create continuous access along the northbound shoulder through Mojave from post miles R15.91 to 16.35. A portion of new sidewalk would intersect with an at-grade crossing of the Union Pacific Railroad line (at post mile L17.06) and would be constructed to allow train and pedestrian traffic. Additional work would replace approximately 19 curb ramps and 15 driveways

that do not comply with current Americans with Disabilities Act standards. See Table 1 for a list of the proposed sidewalk and curb ramp work.

Table 1. Proposed Sidewalk and Curb Ramp Work

Post Mile Begin	Post Mile End	Length (Linear Feet)	Proposed Work
R15.97	R16.05	368	Reconstruct sidewalk and driveways
L16.07	L16.08	43	Reconstruct sidewalk
L16.08	L16.13	168	No work proposed
L16.15	L16.18	153	Reconstruct sidewalk and driveways
L16.18	L16.23	250	No work proposed
L16.25	L16.28	190	Reconstruct sidewalk and driveways
L16.28	L16.32	194	No work proposed
L16.34	L16.41	394	No work proposed
L16.43	L16.46	149	No work proposed
L16.46	L16.48	127	Reconstruct sidewalk
L16.48	L16.50	123	No work proposed
L16.52	L16.53	80	Reconstruct sidewalk
L16.53	L16.56	170	No work proposed
L16.56	L16.59	151	Reconstruct sidewalk and driveways
L16.61	L16.67	346	No work proposed
L16.67	L16.68	54	Reconstruct sidewalk and driveways
L16.70	L16.73	150	No work proposed
L16.73	L16.75	88	Reconstruct sidewalk and driveways
L16.75	L16.77	139	No work proposed
L16.79	L16.85	306	No work proposed

Drainage Systems Improvements

Existing culverts within the project limits are within the clear recovery area, which is defined as 20 feet of reasonably flat area beyond the edge of the pavement that maintains safety in the roadway shoulder area (Highway Design Manual, Section 309.1). Any culvert that is within the clear recovery zone would be extended so that the culvert outlet is beyond 20 feet from the edge of the pavement. Table 2 shows a list of culverts that would be extended. Each of the culverts would require installation of flared end sections to convey flows, dissipate energy and reduce erosion at the culvert outlets. Temporary construction easements would be required to construct the culvert extensions, but no permanent right-of-way would be required.

Table 2. Proposed Culvert Extensions

Post Mile	Direction	Length (Feet)	Description of Work
R13.35	Northbound	10	Extend culvert and install flared end section, right shoulder
R14.06	Northbound	10	Extend culvert and install flared end section, right shoulder
R14.25	Northbound	10	Extend culvert and install flared end section, right shoulder
R14.71	Northbound	10	Extend culvert and install flared end section, right shoulder

A new drainage easement is proposed at post mile R15.95 on the east side of the roadway to allow construction of a drainage pipe from the roadway edge to connect to an existing drainage channel. A maintenance agreement with Kern County to use the County's existing easement will allow construction of a channel to promote flow away from the outlet of the drainage system. The channel is anticipated to be a shallow V-ditch about 20 feet wide. Existing vegetation within the easement area would be removed to construct the ditch.

Bridge Improvements

Three bridges within the project limits require improvements: Bridge 50-0402R, Bridge 50-0402L, and Bridge 50-049.

Bridge 50-0402R: On northbound State Route 14 at post mile 15.4, where the roadway passes over the Union Pacific Railroad tracks. The existing bridge overhang would be removed and then reconstructed with an integrated concrete barrier railing and chain link railing. This work is anticipated to be performed from the existing bridge.

Bridge 50-0402L: On southbound State Route 14 at post mile 15.4 where the roadway passes over the Union Pacific Railroad tracks. This bridge would require replacement of the existing concrete barrier end transitions to allow for connection to standard transition railing off the bridge.

Bridges 50-0402R and 50-0402L have existing safety shape on the median retaining wall on the north end of the bridges that would be replaced with a current standard safety shape.

Bridge 50-049: At the Oak Creek overcrossing, at post mile L16.866 on State Route 14. Improvements at this bridge include repairing the deck for cracks in the concrete by applying a methacrylate seal, a resin-like substance used to seal cracks in concrete bridge decks.

Guardrail Upgrades

Existing segments of guardrail within the project limits consist of non-standard metal beam guardrail. The non-standard guardrail would be replaced with the

Midwest guardrail system to meet current standards. Table 3 shows the locations where guardrail would be replaced.

Table 3. Proposed Guardrail Upgrades

From Post Mile	To Post Mile	Length (Feet)	Description
R15.13	R15.32	975	Southbound bridge departure, right shoulder
R15.16	R15.28	625	Northbound bridge approach, right shoulder
R15.22	R15.29	375	Median bridge approach, left shoulder
R15.23	R15.29	350	Southbound bridge departure, left shoulder
R15.42	R15.56	800	Northbound bridge departure, right shoulder
R15.46	R15.52	350	Southbound bridge approach, right shoulder
R15.53	R15.53	Not applicable	Median crash cushion
L16.18	L16.25	300	East side of northbound railroad gate, right shoulder
L17.01	L17.03	Not applicable	Median crash cushion
L17.02	L17.06	200	West side of northbound railroad gate, right shoulder
L17.06	L17.09	175	East side of southbound railroad gate, right shoulder
L17.06	L17.09	Not applicable	Median crash cushion
L17.36	L17.43	400	Southbound signals and power pole, right shoulder
16.44	16.54	550	Southbound box culvert entrances, right shoulder

Intersections Improvements

The project would reconfigure three intersections within the project limits and add lighting to a fourth intersection.

The south junction of State Route 14 with Business Route 58 would be reconfigured to improve operations for longer-wheel-base trucks making right turns on the northbound lane and expand capacity due to increased auto and truck traffic on Business Route 58.

The north junction of State Route 14 with Business Route 58 would be reconfigured to reduce traffic conflicts and improve intersection operation.

As part of the intersection improvements, existing traffic signals and associated controller cabinets would be relocated or upgraded to current standards. Relocation of traffic signal components would be within the Caltrans right-of-way.

The intersection of State Route 14 and Purdy Avenue is the third intersection requiring improvements. This intersection would receive a southbound acceleration lane, which would require widening into the median.

The fourth intersection to be improved is the intersection of Camelot Boulevard and State Route 14, where intersection lights would be installed within the right-of-way in the outside shoulder.

Intersection improvements include the following:

- The south intersection of State Route 14 with Business Route 58 would be restriped to allow for more capacity for turns in the intersection. By reconfiguring the striping for traffic on Business Route 58 turning south onto State Route 14 and removing a portion of the pedestrian island, the project would provide more room in the intersection to enable vehicles to turn. Reconfiguring the striping and replacing one of the right-turn lanes with a left-turn lane will provide more capacity for the number of cars lined up to turn. The work would generally consist of restriping the existing intersection, but a portion of the median island would be removed as well; because of the reconfiguration, the existing traffic signals would be relocated. No new right-of-way would be required for the reconfiguration.

- The north intersection of State Route 14 with Business Route 58 would not be realigned. However, the existing “free right” turn would be removed, and stop control would be placed on the northbound right-turn movement. This change would eliminate conflicts between vehicles making the “free right” turn and southbound Business Route 58 vehicles turning left onto northbound State Route 14. This would also eliminate conflicts with bicycles passing through the intersection on northbound Business Route 58. This improvement would require full removal of the existing median island and relocation of one existing traffic signal.

- The median crossover at Purdy Avenue would be reconfigured to accommodate pending development on Purdy Avenue. A southbound acceleration lane would be constructed, and additional widening of the crossover may be required to allow for truck movements.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative would maintain the facility in its current condition and would not make any of the improvements proposed in the Build Alternative. Therefore, the No-Build Alternative would not meet the purpose and need of the proposed project. The pavement would continue to deteriorate, and ride quality would continue to worsen. Pedestrian facilities and accessibility under the Americans with Disabilities Act would not be improved. Intersection operations would continue to decline, and highway elements (bridges, drainage, guardrail) would remain non-standard. Maintenance needs would increase as the road continues to deteriorate.

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

This project will include Caltrans standard measures that are typically used on all Caltrans projects. Caltrans standard measures are considered features of

the project and are evaluated as part of the project. Caltrans standard measures are not implemented to address any specific effects, impacts or circumstances associated with the project, but are instead implemented as part of the project's construction to address common issues encountered on projects. The measures listed below are those related to environmental resources and are applicable to the project. These measures can be found in Caltrans 2022 Standard Specifications document.

- 7-1 Legal Relations and Responsibility to the Public
- 10-4 Water Usage
- 10-5 Dust Control
- 10-6 Watering
- 12-1 Temporary Traffic Control
- 12-3 Temporary Traffic Control Devices
- 12-4 Traffic Control Systems
- 13-1 Water Pollution Control
- 13-2 Water Pollution Control Program
- 13-4 Job Site Management
- 13-6 Temporary Sediment Control
- 13-7 Temporary Tracking Control
- 13-10 Temporary Linear Sediment Barriers
- 14-1 Environmental Stewardship
- 14-2 Cultural Resources
- 14-6 Biological Resources
- 14-7 Paleontological Resources
- 14-8 Noise and Vibration
- 14-9 Air Quality
- 14-10 Solid Waste Disposal and Recycling
- 14-11 Hazardous Waste and Contamination
- 14-12 Other Agency Regulatory Requirements
- 17-2 Clearing and Grubbing
- 18-1 Dust Palliatives
- 21-2 Erosion Control Work

Additional standard measures will be added to the project as necessary or appropriate.

1.6 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).

1.7 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	To be obtained before construction.
California Water Resources Board, Lahontan Regional Water Quality Board	401 Water Quality Certification	To be obtained before construction.
U.S. Army Corps of Engineers	404 Nationwide Permit #14	To be obtained before construction.
California Transportation Commission	California Transportation Commission vote to approve funds	With approval of the final Initial Study, the California Transportation Commission will be required to vote to approve funding for the project; the vote is anticipated in August 2023.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant 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 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 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 Visual Impact Questionnaire dated January 10, 2023, 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.

Per a search of the California Department of Conservation's Important Farmland Mapping Tool, there are no designated Prime, Unique or Farmlands of Statewide Importance in or near the proposed project limits. The project will not have any effect on protected farmlands, including those under the Williamson Act, or convert any farmlands to non-agricultural use (https://maps.conservation.ca.gov/DLRP/CIFF).

Impacts to timberland are analyzed as required by the California Timberland Productivity Act of 1982 (California Government Code Sections 51100 et seq.), which was enacted to preserve forest resources. Like the Williamson Act, this program gives landowners tax incentives to keep their land in timber production. Contracts involving Timber Production Zones are on 10-year cycles. Searches of the California Department of Forestry and Fire Protection website and the California Department of Conservation website show no

designated timberlands or Timber Protection Zones in or near the project vicinity. The project will have no effect on protected timberlands since none exist in the project area.

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	**No Impact**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	**No Impact**
c) Conflict with existing zoning, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	**No Impact**
d) Result in the loss of forest land or conversion of forest land to non-forest use?	**No Impact**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	**No Impact**

2.1.3 Air Quality

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

Considering the information in the Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	**No Impact**
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	**No Impact**
c) Expose sensitive receptors to substantial pollutant concentrations?	**No Impact**
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**No Impact**

2.1.4 Biological Resources

Considering the information in the Natural Environment Study (Minimal Impacts) dated January 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	**Less Than Significant Impact**
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	**Less Than Significant Impact**

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	**No 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?	**No Impact**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**No Impact**
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**No Impact**

Affected Environment

The Natural Environment Study outlines a Biological Study Area for the project, defined as the area that encompasses all potential species and habitats present in the direct Project Impact Area, including access routes and staging areas. The project Biological Study Area is in the unincorporated community of Mojave in Kern County, California.

Mojave is 50 miles east of the city of Bakersfield and 100 miles north of the city of Los Angeles, at an elevation of 2,762 feet. The community is in the western region of the Mojave Desert, east of Oak Creek Pass and the Tehachapi Mountains. Mojave is near Edwards Air Force Base, Naval Air Weapons Station China Lake and Palmdale Regional Airport. The landscape is expansive and largely undeveloped.

The region has hot summers and cool winters. Average July temperatures reach a daily maximum of 97.7 degrees Fahrenheit and a minimum of 69.8 degrees Fahrenheit. Average January temperatures reach a daily maximum of 57.8 degrees Fahrenheit and a minimum of 34.3 degrees Fahrenheit. Average annual rainfall is 5.69 inches. Snow is relatively rare, averaging 1.7 inches per year.

Vegetation types in the Biological Study Area include Mojave creosote bush scrub and Mojave mixed woody scrub described as allscale scrub. Creosote

bush scrub has shrubs less than 10 feet tall, with an intermittent to open canopy; the herbaceous layer is open to intermittent with seasonal annuals or perennial grasses. Soils are well-drained, sometimes with desert pavement. Creosote bush scrub can be found on alluvial fans, bajadas, upland slopes, and minor intermittent washes.

Allscale scrub is characterized by shrubs less than 10 feet tall, with an open to continuous canopy; the herbaceous layer is variable and includes seasonal annuals. Soils may be carbonate rich, alkaline, sandy, or sandy clay loams. Allscale scrub can be found in washes, playa lake beds and shores, dissected alluvial fans, rolling hills, terraces, and at the edges of large, low gradient washes.

The project lies in paved, developed, non-vegetated, and/or highly disturbed areas with no riparian vegetation present. Within the Project Impact Area is bare ground with compacted soils along the existing dirt shoulder. These areas lack vegetation due to high use. The edges of the bare ground areas have a high presence of invasive plant species.

In the south portion of the project, along with restoring pavement, the project would construct a stormwater drainage channel, extend four culverts, and add an acceleration lane at Purdy Avenue for southbound traffic. The project would not change the outside edge of the roadway footprint. The acceleration lane at Purdy Avenue for southbound traffic would be constructed in the already disturbed median. The culvert extensions would be on the east side of the northbound lane in the disturbed area between the roadway and the railroad right-of-way. The stormwater drainage channel would be placed at a previous drainage channel, and a 20-foot-wide shallow V-ditch would be constructed. No riparian or wetland plants were found at this site.

Animal Species (CEQA Question a)

Bat Species (Pallid Bat, Western Mastiff Bat and Townsend's Big-Eared Bat)

The pallid bat, western mastiff bat, and Townsend's big-eared bat are considered Species of Special Concern by the California Department of Fish and Wildlife. All bat species are protected under Section 2126 of the California Department of Fish and Wildlife Code. Bat roosts are considered a sensitive resource by of the California Department of Fish and Wildlife where avoidance, minimization, and/or replacement of habitat should be addressed.

Bat habitat can consist of crevices, cavities, and tree/shrub foliage. Within the Project Impact Area, habitat artificially provided by humans include things such as riprap, expansion joints in bridges, and a variety of other structures with cavities and crevices. Artificially provided bat habitat has been identified on the bridge at Silver Queen Road overpass, at the southern end of the project limit, and at drainage culverts within the project limit. Weep holes for water runoff on the Silver Queen Road overpass were identified as marginal bat-roosting habitat.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a species of special concern and protected under the Migratory Bird Treaty Act. This owl is a relatively small bird with a short tail and long legs. It requires underground burrows for breeding and year-round roosting and refuge. Typically, burrowing owls use burrows dug by other animals (ground squirrels, foxes, or badgers), but they can excavate their own burrows too.

Migratory Nesting Birds

The Migratory Bird Treaty Act protects over 800 species of birds in the U.S. from the pursuit, hunt, take, capture or kill; attempt to take, capture or kill; or possess or sell migratory birds, living or dead. The Biological Study Area has potentially suitable low-quality habitat for several bird species. No state or federally listed birds are known or expected to occur in or near the Biological Study Area, and critical habitat for listed bird species does not occur within or near the Biological Study Area.

Jurisdictional Waters (CEQA Question b)

“Waters of the State” is a term that captures all the various aquatic resources regulated by numerous state agencies. It includes rivers, streams, lakes, wetlands, mudflats, vernal pools, and other aquatic sites. The project proposes to extend four existing drainage culverts to allow for wider shoulders to meet the clear recovery space of 20 feet on the road shoulder. The four culverts were determined to lie within ditches identified as State jurisdictional water resources. All four ditches are identified as Riverine system, Intermittent (4) subsystem, and Streambed; they are in an Intermittently Flooded water regime. The culverts convey runoff into open areas for infiltration and are likely considered waters of the state and under the jurisdiction of the Lahontan Regional Water Board and state jurisdictional waters in accordance with the California Department of Fish and Wildlife Lake Streambed Alteration Agreement (California Department of Fish and Wildlife 1600 permit). These ditches/channels contain flowing water for only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.

The project would also reshape and modify the drainage channel at post mile 15.95 to convey flow away from the outlet. This channel was determined to fall under the jurisdiction of the California Department of Fish and Wildlife and would be temporarily impacted by construction to direct flow away from the outlet of the existing drainage system at post mile16.0. This channel is a constructed and maintained channel for stormwater runoff only. The existing vegetation in the channel consists of invasive species, including Russian thistle (*Salsola spp*), Bermuda grass (*Cynodon dactylon*), and saltcedar (*Tamarix ramosissima*).

Environmental Consequences

The following section analyzes environmental consequences as they pertain to each CEQA significance threshold.

Response to a) Less Than Significant Impact

Bat Species

The California Natural Diversity Database (BIOS and RareFind) search provided four documented special-status bat observations within a 9-U.S. Geological Survey 7.5-inch quadrangle search around the project area (CDFW 2021). These observations include one pallid bat, two Townsend's big-eared bat, and one western mastiff bat all in the vicinity of Soledad, particularly around the Arroyo Seco Wash. All entries were based on specimens collected from before 1950, and no modern (within the last 20 years) observations in the project vicinity have been documented for any special-status bat species.

When surveyed, the Silver Queen Road overpass had no bats present. The culverts were determined to be poor habitat, did not meet all requirements for bat habitat, and did not provide adequate refuge from predators.

Construction activities may result in indirect temporary impacts (noise, human activities, etc.) to bat species, if found within or adjacent to the Biological Study Area. Construction activities that occur near potential bat-roosting locations would likely result in noise and/or vibration, but would be of short duration at any given location. The greatest potential indirect impacts to bat species from the project are related to work near the Silver Queen Road bridge (overpass). However, the bridge was determined to be marginal roosting habitat for bat species, and no observations of bats or signs of roosting were found during surveys.

No permanent impacts are anticipated to bats or bat roosts from the project.

Burrowing Owl

A protocol-level burrowing owl habitat assessment and survey conducted from April to June 2021 determined the Biological Study Area had suitable and marginal owl habitat consisting mostly of Mojave creosote bush scrub and Mojave mixed woody scrub. Surveys were conducted during nesting season. Ten burrow sites were found within the project site. No burrowing owl or sign (evidence of the species), except for some whitewash in one burrow, was observed. It is assumed the burrows that did not have any owl sign were used by larger mammals.

Construction activities that occur near potential burrowing owl den locations would likely result in noise and/or vibration, but would be of short duration at any given location.

No permanent impacts are anticipated to burrowing owls from the project.

Migratory and Nesting Birds

Bird surveys found no special-status bird species within the Biological Study Area. The California Natural Diversity Database quadrangle search identified the Swainson's hawk as potentially occurring within the Biological Study Area. However, during field surveys, it was determined that habitat for the Swainson's hawk was not present within the Biological Study Area or adjacent area. The project would do minimal vegetation removal along the road edge, and no trees would be removed as a result of the project. Excavation of the culvert outlets to add the extension and flared end section would require some minor vegetation removal. Outside the existing disturbed shoulder, work is proposed to reshape an existing drainage ditch; at that location, invasive plants would be removed to construct the ditch.

No impacts to migratory and nesting birds are anticipated from construction of the project.

Response to b) Less Than Significant Impact

Jurisdictional Waters of the State

The project would extend four culverts in the southern portion of the project and reshape a drainage ditch at post mile 15.95. The culvert extension work would consist of excavation of the culvert outlet (east side) to allow for a 2-foot extension to be added. Each of the culverts would have new flared end sections installed to dissipate flow energy. Temporary impacts would occur to provide equipment access, minor grading of the channel bottom, and upland vegetation removal. Vegetation trimming and removal would be minimal and be limited to the minimum necessary to accomplish the work. The anticipated total area of impact required for the culvert extensions, permanent and temporary, would be less than 0.10 acre. Therefore, a U.S. Army Corps of Engineers non-reporting Nationwide 14 permit would be used for this work.

The drainage reshaping work would temporarily impact the California Department of Fish and Wildlife jurisdictional drainage conveying flow away from the outlet of the existing drainage system. Once modified, the channel would consist of a shallow V-ditch approximately 20 feet wide. The existing invasive vegetation within the drainage easement area would be removed to construct of the ditch. This work is anticipated to provide for minor enhancements of the existing jurisdictional resource by improving water flow and removing non-native invasive plants.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures will be implemented for this project:

(CEQA Question a)

Bat Species

BIO-1: Pre-construction bat surveys of culverts and any other potential roosting habitat will be conducted at least 48 hours before construction.

BIO-2: If bats are found within the Project Impact Area, then a bat exclusionary plan will be developed in coordination with California Department of Fish and Wildlife and an Environmentally Sensitive Area (ESA) may be delineated to ensure no impacts occur to bats or active roosting habitat.

Burrowing Owl

BIO-3: If determined necessary by a Caltrans Biologist, a pre-construction survey for burrowing owls will be conducted 72 hours before ground disturbance during general nesting bird surveys in areas containing burrows or suitable habitat to avoid direct impact to burrowing owls.

BIO-4: If burrowing owls are found, coordination with the California Department of Fish and Wildlife will occur and buffers for occupied burrows shall be established at approximately 500 meters during the breeding season (February 1 to August 31) and at approximately 50 meters during the non-breeding season.

BIO-5: Buffer zones will be clearly marked with flagging and/or construction fencing. Passive relocation techniques shall be implemented if an occupied burrow cannot be avoided and the burrowing owl(s) must be moved. Passive relocation includes encouraging owls to move from occupied burrows to alternate natural burrows outside of the 500-meter buffer. California Department of Fish and Wildlife guidance indicates that passive relocation must be conducted between September 1 and January 31 (California Department of Fish and Wildlife 2012). Occupied burrows shall not be disturbed during the breeding season.

Migratory and Nesting Birds

BIO-6: Pre-construction nesting bird surveys will be conducted within 72 hours prior to any ground disturbance regardless of the time of year as species nesting times vary within and outside of the normal nesting period.

BIO-7: If a nest is found within the Project Impact Area, an appropriate no-work buffer will be implemented as determined by the project Biologist to reduce potential impacts caused by construction until the nesting season has finished, nesting activities have completed, and the bird nestling has fledged, and left the area. No-work buffers can vary in size depending on listing status and species. Buffers as large as a half-mile may be used for the Swainson’s hawk; 500 feet for other nesting raptors; 250 feet for nesting songbirds. Any nest found within the Project Impact Area will be monitored by a qualified Biologist. If a nest is

found outside the Project Impact Area, but within a specified buffer distance based on the type of bird species, a no-work buffer may be implemented, and monitoring may occur by a qualified Biologist. If the construction activities do not appear to be disrupting nesting activities (parent birds not exhibiting stressed behavior, territorial behavior, or abandoning nest, etc.), then the qualified Biologist may clear the area for construction to proceed.

(CEQA Question b)

Jurisdictional Waters of the State

BIO-8: Fiber rolls and/or silt fencing (with no plastic mesh) will be used to protect water resources and delineate the edge of the permanent impact area.

BIO-9: If water is present during work in jurisdictional areas, a full-time qualified biologist will be present to monitor during temporary clear water diversion activities and during all work in the jurisdictional drainage.

BIO-10: In the event that water is present in the jurisdictional drainages, pump screens will be used during clear water diversion and will be in compliance with Caltrans Standard Specifications (SSP) for Species Protection (SSP 14- 6.02).

BIO-11: Environmentally Sensitive Area (ESA) fencing will be placed at the temporary impact boundaries to prevent unnecessary impacts beyond the area needed to conduct the work.

2.1.5 Cultural Resources

Considering the information in the Section 106-Cultural Resources Review for the Mojave Pavement Project (EA: 09-37520) in Kern County, California dated January 17, 2023, 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**
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	**No Impact**

2.1.6 Energy

Considering the information in the Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, 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 Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	**No Impact**
ii) Strong seismic ground shaking?	**No Impact**
iii) Seismic-related ground failure, including liquefaction?	**No Impact**
iv) Landslides?	**No Impact**
b) Result in substantial soil erosion or the loss of topsoil?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
c) Be located on a geologic unit or soil that is unstable, or that 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 Analysis dated January 30, 2023, 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 lies in and adjacent to the community of Mojave in Kern County, California on State Route 14. The project is in a rural area, with a mostly natural-resources and transportation-based economy. State Route 14 is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is U.S. Route 395, which is 36 miles to the east. Traffic counts in the project area are moderate. The Union Pacific Railroad—Mojave Subdivision rail tracks run parallel to the

Caltrans State Route 14 right-of-way, carrying freight trains each day. The Kern Council of Governments guides transportation development in the project area. The Kern County General Plan Circulation, Safety, and Traffic elements address greenhouse gases in the project area.

Environmental Consequences

The following section analyzes environmental consequences as they pertain to each CEQA significance threshold.

Response to a) Less Than Significant Impact

The purpose of the project is to rehabilitate existing pavement and bring highway facilities (curbs, sidewalks, gutters, and driveways) to current Americans with Disabilities Act standards. The project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational greenhouse gas emissions. Because the project would not increase the number of travel lanes on State Route 14, no increase in vehicle miles traveled would occur as a result of project implementation. Construction greenhouse gas emissions were estimated using the California Construction Emission Tool (CAL-CET2021). The project is estimated to require 200 working days and is estimated to produce 1,523 tons of carbon dioxide (CO_2) total.

Once complete, the project is anticipated to increase the pedestrian traffic, in turn, reducing vehicle greenhouse gas emissions.

Avoidance, Minimization, and/or Mitigation Measures

To the extent feasible, the following measures will be implemented:

GHG-1: Where feasible, use material sources and borrow sites as close to the project location as possible, reducing the number of haul trips and distance traveled per trip.

GHG-2: Where feasible, use recycled water or reduce consumption of potable water for construction.

GHG-3: Where feasible, schedule truck trips outside of peak morning and evening commute hours.

GHG-4: Where feasible, use alternative fuels such as renewable diesel for construction equipment.

GHG-5: Use solar-powered signal boards, if feasible.

GHG-6: Where feasible, limit idling of vehicles and equipment onsite for delivery and dump trucks and other diesel-powered equipment.

GHG-7: For improved fuel efficiency from construction equipment, do the following:

- Perform regular vehicle and equipment maintenance.
- Use right sized equipment for the job.
- Use equipment with new technologies.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, 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?	**Less Than Significant 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**

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
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**

Affected Environment

Surveys and studies were conducted by specialists to assess the projects existing hazards and hazardous waste including an Initial Site Assessment (ISA) and Asbestos and Lead-Containing Paint Survey. An Initial Site Assessment (ISA) was performed for this project by GeoCon Inc. in August 2022. The ISA identified multiple properties adjacent to the project with Leaking Underground Historic Tanks (LUST) or permitted underground storage tanks that have the potential to leak contaminants. The ISA also identified the potential to encounter lead-contaminated soils adjacent to SR 14 resulting from deposition by vehicle exhaust with leaded gasoline (ADL). Aerially Deposited Lead (ADL) testing is also scheduled prior to construction in conjunction with the PSI to determine actual amounts of lead in the roadside soil.

An Asbestos and Lead-Containing Paint Survey Report was also performed for this project by GeoCon Inc. in August 2022. This report sampled and analyzed bridge materials on Bridges 50-0402L and 50-0402R. The report found Category I/nonfriable/nonhazardous asbestos material in the sheet packing shims under the existing bridge railing. Lead-containing paint was identified in graffiti abatement gray paint currently on the bridge columns and deck. The concentration of lead within the paint is not considered a California or Federal hazardous waste, however, all paint on the bridges should be treated as lead-containing for the purpose of worker health and safety.

The existing guardrails within the project have treated wood for support posts. Where guardrail is expected to be replaced treated wood waste will be produced and require safe handling and proper disposal.

Environmental Consequences

The following section analyzes environmental consequences as they pertain to each CEQA significance threshold.

Response to a) Less Than Significant Impact

The multiple properties adjacent to the project with Leaking Underground Historic Tanks (LUST) or permitted underground storage tanks have the potential to leak contaminants. The general project work is not expected to go deeper than the existing road prism and therefore is not expected to unearth any potential contaminated soil from leaking storage tanks. However, a Preliminary Site Investigation will be performed prior to construction for properties identified for in-fee right-of-way acquisition and at properties where work activities could extend into sub-soils to confirm the depth and extent of potentially contaminated soils.

The Asbestos and Lead-Containing Paint Survey Report found minor amounts of asbestos and lead in the bridge construction and paint. The bridge shims have been identified as a Category I asbestos material, and do not need to be removed prior to other bridge work or treated as a hazardous waste. Lead paint was identified as graffiti abatement paint on the bridge columns. The concentration of lead within the paint is not considered a California or Federal hazardous waste, however all paints on the bridges should be treated as lead-containing for the purpose of worker health and safety. Aerially Deposited Lead (ADL) from the historical use of leaded gasoline, exists along roadways throughout California. There is the likely presence of soils with elevated concentrations of lead as a result of Aerially Deposited Lead on the state highway system right-of-way within the limits of the project alternatives. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, Aerially Deposited Lead Agreement between Caltrans, and the California Department of Toxic Substances Control. This Aerially Deposited Lead Agreement allows such soils to be safely reused within the project limits if all requirements of the Aerially Deposited Lead Agreement are met.

The removal and replacement of treated wood guardrail posts will generate treated wood waste. Caltrans standard specifications for the handling, storage, transportation, and disposal of Treated Wood Waste will be included in the project.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures will be incorporated into the final project pans for known hazards and hazardous materials.

HW1-If contaminated soils are encountered during construction activities, work would stop in the affected area, and Caltrans would implement the Emergency Construction Contract and independently hire a Class A contractor with a hazardous substance removal and remedial actions certification from the California State License Board to remove the contaminated soil material before resuming construction. This would be done per the provisions of the Caltrans Construction Manual.

HW2- Samples and analyses for ADL contaminated roadside soils will be conducted prior to construction in conjunction with the Preliminary Site Investigation. If sampling confirms that soils contain lead in amounts above regulatory limits, excess soil shall be disposed of as hazardous waste unless it can be reused within the project limits per the terms of the July 2016 Soil Management Agreement for Aerially Deposited Lead-Contaminated Souls issued by the Department of Toxic Substances Control.

HW3- For worker health and safety, a lead compliance plan will be required to be produced by a certified Industrial Hygienist prior to construction. This plan will include notifications, trainings, and procedures to ensure worker safety when working around aerially deposited lead in soils and leaded paint on bridges.

HW4-Treated Wood Waste: Standard specifications for handling, storage and disposal will be included in the contract.

HW5- The contractor will be required to notify Eastern Kern Air Pollution Control District at least 10 days prior to starting demolition work on bridges.

HW6- Standard Special Provision 36-4 will be included in the specifications package requiring a lead compliance plan to cover the removal of paint striping from the existing highway.

2.1.10 . Hydrology and Water Quality

Considering the information in the Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, 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**

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
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;	**Less Than Significant 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**

Affected Environment [CEQA Question c(i)]

Waters of the U.S. include all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters. Waters of the U.S. are under the jurisdiction of the U.S. Army Corps of Engineers. The determination of jurisdictional waters can be made after a specialist has prepared a wetland/waters delineation report that the U.S. Army Corps of Engineers reviews and verifies and then approves the Jurisdictional Determination; the wetlands or waters are then referred to as “jurisdictional areas.” A preliminary jurisdictional determination is non-binding, but a written indication that wetlands/waters of the U.S. could be present on the project site without performing a detailed wetland/waters delineation report.

The project engineer identified four existing drainage culverts that would need to be extended within the project limit to allow for clear recovery space on the road shoulder. The culverts convey drainage waters that seem to flow into an

internally draining basin in the Mojave Desert and therefore are unlikely to be considered waters of the U.S.; however, an Approved Jurisdictional Determination from the U.S. Army Corps of Engineers is not available. This means Caltrans will either need to apply for a new Approved Jurisdictional Determination to verify the waters are not federally jurisdictional, or alternatively, prepare a Preliminary Jurisdictional Determination and accept federal jurisdiction over the waters in the project area. Due to the very small area of impact, Caltrans will prepare a Preliminary Jurisdictional Determination, accept federal jurisdiction, and use the Nationwide Permit 14 procedures for a non-reporting 404 permit.

The culverts convey runoff into open areas for infiltration and are likely considered waters of the state and under the jurisdiction of the Lahontan Regional Water Quality Control Board and California Department of Fish and Wildlife. The culvert extensions would have minimal permanent impact areas, and each culvert would have new flared end sections installed to dissipate the water flow energy on the outlet end. The minimal permanent impact area may meet the criteria for a low-impact discharge under Section 401 of the Clean Water Act.

Environmental Consequences

The following section analyzes environmental consequences as they pertain to each CEQA significance threshold.

Response to c)(i) Less Than Significant Impact

The project would disturb more than 1 acre of soil that would then be vulnerable to erosion and siltation. The soil disturbance is therefore covered under the Construction General Permit requiring the development of a Storm Water Pollution Prevention Plan. The plan would be prepared by the contractor for Caltrans' and the Lahontan Regional Water Quality Control Board's approval prior to the start of construction activities.

The project would extend four culverts in the southern portion of the project. The culvert extension work would excavate the culvert outlet (east side) to allow for a 2-foot extension to be added. Each of the culverts would have new flared end sections installed to dissipate flow energy. Temporary impacts would occur to provide equipment access, minor grading of the channel bottom, and upland vegetation removal. The anticipated total area of impact, permanent and temporary, for the culvert extension would be below the threshold for reporting U.S. Army Corps of Engineers Nationwide 14 Permit, less than 0.10 acre.

Avoidance, Minimization, and/or Mitigation Measures

WQ-1: Implementation of biological minimization measures BIO-8 through Bio-11 will serve in avoiding and minimizing impacts to waters under the

jurisdiction of the U.S. Army Corps of Engineers and the Lahontan Regional Water Quality Control Board.

WQ-2: A 401 Water Quality Certification from the Lahontan Regional Water Quality Control Board and a U.S. Army Corps of Engineers 404 (non-reporting) permit are anticipated for this project. All Permit Conditions will be implemented as part of the project.

2.1.11 Land Use and Planning

Considering the information in the Community Impact: Memo to File dated January 17, 2023, 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 Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, 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 Air/Noise/Hazardous Waste/Water/ Paleontology Study Memo dated January 4, 2023, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	**No Impact**
b) Generation of excessive groundborne vibration or groundborne noise levels?	**No Impact**
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?	**Less Than Significant Impact**

Affected Environment

The project area is rural with no sensitive noise receptors next to the work area. The baseline noise condition of this section of the project area is a four-lane highway that experiences moderate to heavy truck and vehicle traffic. Work would occur within the highway lanes and shoulders, and construction noise levels would not be significantly elevated above the baseline condition.

In the northern half of the project, at about post mile 15.40, State Route 14 approaches the industrialized portion of downtown Mojave and becomes a commercialized main street. This portion of the project is bounded on the east (northbound) side by multiple food establishments, motels, and gas stations and bounded on the west by Union Pacific Railroad facilities. No residences were identified directly adjacent to the proposed work area in preliminary reviews via Google Earth imagery, except for the Tierra Grand Mobile Home Park, which is offset from the highway near post mile 15.5 (see Figure 2-1).

Figure 2-1: Map of State Route 14 at Railroad Undercrossing and Tierra Grand Mobile Home Park (in relation to project boundary)

Environmental Consequences

The following section analyzes environmental consequences as they pertain to each CEQA significance threshold.

Response to c) Less Than Significant Impact

The project is defined as a Class III project for noise abatement and analysis under 23 CFR 772. Noise abatement is not required for this project because the project does not alter the alignment of the highway, nor does it increase vehicular capacity. Post-construction noise levels throughout the project limits would not increase as a result of the project.

A portion of the project is within 2 miles of the Mojave Air and Space Port. During construction activities, elevated noise levels would be created from construction activities, but are not anticipated to affect the Air and Space Port.

Avoidance, Minimization, and/or Noise Abatement Measures

In accordance with normal Caltrans procedures, it is recommended the Public Information Office perform pre-construction outreach and notification for adjacent businesses, the mobile home park, and motels so that noise-sensitive residents and guests are aware of the upcoming construction noise. Along with normal Caltrans public outreach, a public meeting is anticipated during the public comment period for the draft environmental document, which will have a 30-day circulation period.

No night work is anticipated at this time. Such work would be avoided in the downtown Mojave area. However, if the contractor requests to perform night work, a noise analysis may be required.

2.1.14 Population and Housing

Considering the information in the Community Impacts: Memo to File dated January 17, 2023, 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 Community Impact: Memo to File dated January 17, 2023, 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**
Parks?	**No Impact**
Other public facilities?	**No Impact**

2.1.16 Recreation

Considering the information in the Community Impact: Memo to File dated January 17, 2023, 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 Community Impact: Memo to File dated January 17, 2023, 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**
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 - Cultural Resources Review for the Mojave Pavement Project (EA: 09-37520) in Kern County, California dated January 17, 2023, 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**

Question:	CEQA Significance Determinations for Tribal Cultural Resources
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**

No tribal cultural resources were identified within the Project Impact Area. On January 25, 2022, letters pursuant to Assembly Bill 52 were sent to six tribes that had previously identified affiliation with the project area: Big Pine Paiute Tribe of the Owens Valley, Bishop Paiute Tribe, 29 Palms Band of Mission Indians, Cabazon Band of Mission Indians, Fernandeño Tataviam Band of Mission Indians, and Torres Martinez Desert Cahuilla Indians. On January 25, 2022, a response was received from Jairo F. Avila (Tribal Historic and Cultural Preservation Officer, Fernandeño Tataviam Band of Mission Indians) confirming the tribe's interest in consulting on the project. Consultation with the Native American Heritage Commission was completed on April 4, 2022.

2.1.19 Utilities and Service Systems

Considering the information in the Community Impact: Memo to File dated January 17, 2023, 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**

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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 Climate Change Analysis dated January 17, 2023, the following significance determinations have been made.

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

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	**No Impact**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	**No Impact**
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Wildfire
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**
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	**No Impact**
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**No Impact**

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS–49 | SACRAMENTO, CA 94273–0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov

September 2022

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."*

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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 PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

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

List of Technical Studies Bound Separately (Volume 2)

Air/Noise/Hazardous Waste/Water/Paleontology Memo—Mojave Pavement Rehab. Caltrans. January 4, 2023

Community Impact: Memo to File. Caltrans. January 17, 2023

Climate Change Analysis. Caltrans, January 30, 2023

Natural Environment Study (Minimal Impact). Caltrans. February 2023

Cultural Resources Memo: Section 106 – Cultural Resources Review for the Mojave Pavement Project (EA:09-37520) in Kern County, California. Caltrans. January 17, 2023

Visual Impacts Assessment Memo. Caltrans, January 11, 2023

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

Cecilia Boudreau
District 9 Environmental Division
California Department of Transportation
500 South Main Street, Bishop, California 93514

Or send your request via email to: Cecilia.Boudreau@dot.ca.gov
Or call: 760-874-8330

Please provide the following information in your request:

Project title: Mojave Pavement

General location information: On State Route 14, near Mojave, Kern County

District number-county code-route-post mile: 09-KER-014-R12.6/16.7

Project EA: 09-37520/Project ID: 0918000036