

SBD 15 PAVEMENT REHAB

SAN BERNARDINO COUNTY, CALIFORNIA
DISTRICT 08-SBD-15 - Post Miles (PM) R121.0 to PM 144.0
EA 08-1L150 / PN 0819000152

Initial Study with Mitigated Negative Declaration



Prepared by the
State of California, Department of Transportation



June 2024

General Information about This Document

What's in this document:

The California Department of Transportation (Caltrans), has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in San Bernardino County on Interstate 15 (I-15) at Post Miles (PM) R121.0 to PM 144.0. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document describes why the project is being proposed, which alternatives are being considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The Draft Initial Study circulated to the public for 30 days between May 9, 2024 and June 10, 2024. Comments received during this period are included in Chapter 3. Changes to the document made since the draft document circulation are shown with a vertical line in the margin. Minor editorial changes and clarifications are not shown. Additional copies of this document and the related technical studies are available for review at 464 W. 4th Street, San Bernardino, CA 92401-1400.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans District 8, Attn: Malisa Lieng, 464 W. 4th Street, 6th Floor - MS 823, San Bernardino, CA. 92401-1400, (909) 261-3955 (Voice); or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

SCH# 2024050406
08-SBD-15-PM R121.0/144.0
EA 08-1L150
PN 0819000152

Multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15), between post mile
(PM) R121.0 and PM 144.0 in San Bernardino County.

Initial Study with Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Kurt Heidelberg

Kurt Heidelberg
Deputy District Director, District 8
Division of Environmental Planning
California Department of Transportation
CEQA Lead Agency

6/26/2024

Date

The following persons may be contacted for more information about this document:

Malisa Lieng
464 W. 4th Street, 6th Floor - MS 823
San Bernardino, CA. 92401-1400
(909) 261-3955

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) plans a multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15). The limits of work for this project are along I-15 between post mile (PM) R121.0 and PM 144.0 in San Bernardino County. The improvements include 0.15' mill and 0.15' overlay, and 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2. The project would also include upgrading the guardrails, replacing AC dikes, restriping (all lanes), sleeve-lining 6 culverts, rock slope protection (RSP) and guardrail installation at PM R137.67, upgrading 18 sign panels (Type 11), rehabilitating 12 freeway lighting Type 10, 15, 30, and 31, and removing vegetation. All work would be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) would be required for each culvert and guardrail location to facilitate the upgrades.

Determination

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

The project would have no effect on: Aesthetics, Agriculture and Forest Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, Wildfire, Mandatory Findings of Significance. In addition, the project would have less than significant effects to: Air Quality, Greenhouse Gas Emissions.

With the following mitigation measures incorporated, the project would have less than significant effects to: Biological Resources.

- **BIO-Waters 1:** Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.
- **BIO-Waters 2:** On-site habitat restoration for temporary impacts for native communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.
- **BIO-Waters 3:** Off-site mitigation banking at a ratio of 3:1 for permanent impacts to native communities.

- **BIO-Waters 4:** Compensatory Mitigation: Any additional permanent impacts to jurisdiction areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.
- **BIO-General 2:** Temporary Artificial Lighting Restrictions: To address potential impacts to desert tortoise, fringed myotis, pallid bat, spotted bat, Townsend's bat, desert bighorn sheep, burrowing owl, and other bat species, artificial lighting must be directed at the job site to minimize light spillover onto habitat areas, if project activities occur at night.
- **BIO-General 4:** Pre-construction Surveys: Pre-construction surveys for desert tortoise, desert bighorn sheep, burrowing owl, fringed myotis, pallid bat, Townsend's big-eared bat, spotted bat and other bat species must be conducted by a qualified biologist within the Project Impact Area within 14 days prior to project activities and following a bat roosting habitat suitability assessment. If one of the species listed above or other special status species is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.
- **BIO-General 6:** Species Avoidance: If during project activities a, bighorn sheep, desert tortoise, or special status plant species is discovered within the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, and the Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be required prior to restarting activities.
- **BIO-General 7:** Worker Environmental Awareness Program (WEAP): A Qualified Biologist must present a biological resource information program/WEAP for desert bighorn sheep, mountain lion, fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, vermilion flycatcher, tortoise, Mojave fringe-toed lizard, monarch butterfly, and special status plant species, prior to project activities to all personnel that would be present within the project limits for longer than 30 minutes at any given time.
- **BIO-General 8:** A qualified biologist must monitor project activities to ensure that measures intended to protect desert tortoise, desert bighorn sheep, burrowing owl, Townsend's big-eared bat, fringed myotis, pallid bat, spotted bat, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.
- **BIO-General 10:** Environmentally Sensitive Area (ESA) Fence Monitoring: Integrity inspections of Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must occur throughout the duration of the project prior to commencing project activities and after activities are completed. If during construction the fence fails, work must stop until it is repaired, and the qualified Biologist inspects (and clears) the job site.
- **BIO-General 11:** Environmentally Sensitive Area (ESA) Fence Removal: All Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant

fencing and enclosures must be removed as a last order of work. During removal, a qualified biologist must be present.

- **BIO-General 12:** Animal Entrapment: To prevent inadvertent entrapment of desert tortoise during project activities, all excavated steep-walled holes or trenches more than 6 inches deep must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the qualified biologist.
- **BIO-Reptile 1:** Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment (including all vehicles, i.e., cars and trucks) for special status reptile species desert tortoise and Mojave fringe-toed lizard before operating equipment at any time.
- **BIO-Reptile 6:** Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work locations (PM R122.23, R126.11, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer as shown on the plans and/or described in the specifications, to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.
- **BIO-Reptile 8:** Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand.
- **BIO-DT 1:** Agency Notification & Reporting Requirements: Any worker who observes desert tortoises within or near the job site found alive, injured, or dead during the implementation of the Project must provide immediate notification to the Resident Engineer and Caltrans biologist. The Caltrans biologist must then notify USFWS and CDFW. Veterinary treatment and/or final deposition must follow USFWS and CDFW approval.
- **BIO-DT 2:** Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in the PA&ED phase to determine if desert tortoise is active in the project area. Measures would be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert

tortoise is confirmed, additional measures may be needed, and must be authorized by appropriate CESA authorization.

- **BIO-DT 6:** Biological Monitoring: An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for desert tortoise and Mojave fringed-toed lizard.
- **BIO-General-PSM 2:** Agency Notification & Reporting Requirements: Any listed species within or near the job site, or as specified in BIO-General-6, found alive, injured, or dead during the implementation of the Project must be immediately reported to the Resident Engineer and Caltrans Biologist. The Caltrans Biologist must then notify the Resource Agencies. Veterinary treatment and/or final deposition must follow Resource Agencies' approval. Monitoring reports must include WEAP Training and be submitted to the Resources Agencies on a timeframe to be determined.


Kurt Heidelberg
Deputy District Director, District 8
Division of Environmental Planning
California Department of Transportation
CEQA Lead Agency

6/26/24
Date

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Chapter 1 Proposed Project

1.1 INTRODUCTION

The California Department of Transportation (Caltrans), plans a multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15). The limits of work for this project are along I-15 between post mile (PM) R121.0 and PM 144.0 in San Bernardino County. The improvements include 0.15' mill and 0.15' overlay, and 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2. The project would also include upgrading the guardrails, replacing AC dikes, restriping (all lanes), sleeve-lining 6 culverts, rock slope protection (RSP) and guardrail installation at PM R137.67, upgrading 18 sign panels (Type 11), rehabilitating 12 freeway lighting Type 10, 15, 30, and 31, and removing vegetation. All work would be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) would be required for each culvert and guardrail location to facilitate the upgrades. Figures 1.1 shows the project location, respectively.

This project is a candidate for programming in the 2022 SHOPP under the Minor Pavement Rehabilitation (201.121) (Anchor Asset) and the following Satellite Assets: Roadside Safety Improvements (201.235), Lighting and Sign Panel (201.170), and Storm Water Mitigation (201.235). The project is also eligible for Federal-aid funding.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

1.2 PURPOSE AND NEED

1.2.1 Purpose

The purpose of this project is to restore this segment of Interstate 15 (I-15) to a state of good repair so that the roadway is in a condition that requires minimal maintenance, extend the life of the facility, improve the ride quality, and upgrade other highway appurtenances and facilities that are worn out or functionally obsolete.

1.2.2 Need

Due to heavy and continuous traffic, the existing pavement is showing distress and deterioration. There are areas of excessive cracking exhibiting poor ride quality that need repair. Other deficiencies in need of being addressed include non-standard guardrail, lighting rehabilitation, sign panel replacement, and rock slope protection (RSP).

1.2.3 Independent Utility and Logical Termini

The project has independent utility and logical termini, as the project is self-contained and is not in need of further repair beyond the project limits at present (see Figure 1-1).

1.3 PROJECT DESCRIPTION

This section describes the action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts.

I-15 is a major interstate goods-movement commuter corridor, which links to the Los Angeles Metropolitan area. It is a primary link between major economic centers and geographic regions. Weekend and holiday recreational traffic volumes on the route are exceptionally high since it serves as a connection to the city of Las Vegas and to the Colorado River area. I-15 is part of the Freeway system, National Highway System, Strategic Highway Network, has a truck network designation of National Network, and is part of the Interregional Road System.

Within the project limits, I-15 traverses rural and undeveloped areas within San Bernardino County with the following land uses, Resource/Land Management (RLM), Commercial (C), and Open Space (OS) within the project limits, while the surrounding area land uses are Single Residential (SR), Low Density Residential (LDR), Limited Industrial (LI), Community Industrial (IC), Resource Conservation (RC), Commercial (C), Highway Commercial (CH), and Regional Industrial (IR). The existing lanes are 12 feet wide and outside shoulders are 10 feet wide throughout the segment.

In the County's General Plan, I-15 is designated as a 4-lane freeway. The project covers a distance of approximately 50.604 lane miles. Within the limits of the project, I-15 is a four-lane, north-south oriented freeway. It has two mixed flow lanes in each direction and an unpaved median.

1.4 PROJECT ALTERNATIVES

One No-build and one Build Alternative has been studied for the project.

1.4.1 No Build Alternative

The "No Build" Alternative is considered the base case scenario and proposes that no improvements be implemented on the mainline facility. Without the project, the existing deficiencies would not be corrected, conditions would continue to worsen, and the mainline would continue to deteriorate and result in the operational breakdown of this area along I-15.

1.4.2 Build Alternative

The project improvements include a multi-asset project with minor pavement rehabilitation improvements on I-15. The limits of work for this project are along I-15 between PM R121.0 and PM 144.0 in San Bernardino County. The improvements include:

- 0.15' mill and 0.15' overlay
- 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2

- upgrading the guardrails and crash cushion to current standards
- restriping (all lanes)
- replacing AC dikes
- sleeve-lining 6 culverts at PM 142.97, R133.27, R130.31, R133.94, R126.11, and R122.23
- RSP and Midwest Guardrail System (MGS) barrier installation at PM R137.67 (northbound direction)
- replace 18 sign panels (Type 11)
- rehabilitating 12 freeway lighting Type 10, 15, 30, and 31
- removing vegetation

All work would be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) would be required for each culvert and guardrail location to facilitate the upgrades.

Bicycle and Pedestrian traffic during construction would be included where applicable. The project would be staged to minimize impacts to existing traffic. Detailed staging plans and traffic handling plans would be developed in the design phase.

The capital cost for support, construction, and right of way for this alternative is estimated at \$59,292,100. The estimated number of working days is 164. If there are any changes to the project design, or if regulatory agency findings necessitate compensatory mitigation, the cost would be added to this estimate.

1.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

No additional alternatives were considered for the project.

1.6 PERMITS AND APPROVALS NEEDED

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

Table 1-1: Permits and Approvals

Agency	PLAC	Status
United States Fish and Wildlife Service (USFWS)	Section 7 Consultation for Threatened and Endangered Species	Caltrans has requested concurrence that the Project is consistent with the Desert Tortoise Programmatic Biological Opinion (PBO) between USFWS and Caltrans, dated Feb. 17, 2021. Concurrence with the PBO was received from USFWS on May 21, 2024.
California Department of Fish and Wildlife	1602 Agreement for Streambed Alteration	Applications for 1602 permit agreement expected after FED approval.
California Regional Water Quality Control Board (RWQCB)	Water Discharge Permit	Application for the WDR permit expected after FED approval.
California Transportation Commission	CTC vote to approve funds.	Following the approval of the FED, the California Transportation Commission would be required to vote to approve funding for the project.



 Build Alternative

Figure 1-1 Project Location Map

SBD 15 Pavement Rehab
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Source: Esri, NASA, NGA, USGS, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Chapter 2 California Environmental Quality Act (CEQA) Evaluation

2.1 DETERMINING SIGNIFICANCE UNDER CEQA

The Department is the lead agency under CEQA. CEQA requires the Department to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of “mandatory findings of significance,” which also require the preparation of an EIR. This chapter discusses the effects of this project and CEQA significance.

2.2 CEQA ENVIRONMENTAL CHECKLIST

This checklist identifies physical, biological, social, and economic factors that might be affected by the project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

CEQA Significance Determinations for Aesthetics

a) No Impact

According to the Visual Impact Assessment (VIA) Questionnaire, completed on June 19, 2023, the project would have no or negligible visual changes to the Environment. In addition, the project would not have a substantial adverse impact on a scenic vista.

b) No Impact

This portion of the I-15 is not officially designated as a state scenic highway and there are no designated scenic highways within the project limits; therefore, the project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The project area is classified as Resource/Land Management (RLM), Commercial (C), and Open Space (OS), while the surrounding areas are Single Residential (SR), Low Density Residential (LDR), Limited Industrial (LI), Community Industrial (IC), Resource Conservation (RC), Commercial (C), Highway Commercial (CH), and Regional Industrial (IR) areas. As such, there would be no impact.

c) No Impact

The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

d) No Impact

The project would also not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

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 Dept. 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.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in 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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

CEQA Significance Determinations for Agriculture and Forest Resources

a) No Impact

According to the California Department of Conservation Map, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use within the project limits. There is also no Forest Land within the project limits.

b) No Impact

The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

c) No Impact

The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

d) No Impact

The project would not result in the loss of forest land or conversion of forest land to non-forest use.

e) No Impact

The project would not 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.

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.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

CEQA Significance Determinations for Air Quality

a) No Impact

The project is located in the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with SCAG, local governments, and the private sector. The AQMP provides the blueprint for meeting state and federal ambient air quality standards. This project is not a capacity-increasing transportation project and would not conflict with or obstruct implementation of the applicable air quality plan.

b) Less Than Significant Impact

The project would have no impact on traffic volumes and would generate a less than significant amount of pollutants during construction due to the duration of project construction. The project is included in SCAG's most recent RTP and RTIP both of which were found to be conforming. Therefore, the project would not conflict with the AQMP, violate any air quality standard, result in a cumulatively considerable net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant. No mitigation is required.

c) No Impact

The project would not expose sensitive receptors to substantial pollutant concentrations, as there are no schools, residences, playgrounds, or medical facilities within the immediate vicinity of the project.

d) No Impact

The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

BIOLOGICAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 NOAA Fisheries?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Biological Resources

a) Less Than Significant with Mitigation Incorporated

The project would have a less than significant effect with mitigation incorporated, 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 NOAA Fisheries.

This includes Federal and State-listed species desert tortoise, least Bell's vireo, and Mohave tui chub, Federal-listed species southwestern willow flycatcher, monarch butterfly, and golden eagle, and State-candidate species mountain lion.

Avoidance and Minimization, and/or Mitigation Measures:

- **BIO-General 1:** Equipment Staging, Storing, & Borrow Sites: All staging, storing, and borrow sites require the approval of the Caltrans biologist.
- **BIO-General 2:** Temporary Artificial Lighting Restrictions: To address potential impacts to desert tortoise, fringed myotis, pallid bat, spotted bat, Townsend's bat, desert bighorn sheep, burrowing owl, and other bat species, artificial lighting must be directed at the job site to minimize light spillover onto habitat areas, if project activities occur at night.
- **BIO-General 4:** Pre-construction Surveys: Pre-construction surveys for desert tortoise, desert bighorn sheep, burrowing owl, fringed myotis, pallid bat, Townsend's big-eared bat, spotted bat and other bat species must be conducted by a qualified biologist within the Project Impact Area within 14 days prior to project activities and following a bat roosting habitat suitability assessment. If one of the species listed above or other special status species is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.
- **BIO-General 5:** Work Avoidance: To address impact to fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, and other bat species, avoid project activities from April 1 to August 31 within 300 feet of all potential roosting structures in the project impact area.
- **BIO-General 6:** Species Avoidance: If during project activities a, bighorn sheep, desert tortoise, or special status plant species is discovered within the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, and the Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be required prior to restarting activities.
- **BIO-General 7:** Worker Environmental Awareness Program (WEAP): A Qualified Biologist must present a biological resource information program/WEAP for desert bighorn sheep, mountain lion, fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, vermilion flycatcher, tortoise, Mojave fringe-toed lizard, monarch butterfly, and special status plant species, prior to project activities to all personnel that would be present within the project limits for longer than 30 minutes at any given time
- **BIO-General 8:** Biological Monitor: A qualified biologist must monitor project activities to ensure that measures intended to protect desert tortoise, desert bighorn sheep, burrowing owl, Townsend's big-eared bat, fringed myotis, pallid bat, spotted bat, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.
- **BIO-General 10:** Environmentally Sensitive Area (ESA) Fence Monitoring: Integrity inspections of Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must occur throughout the duration of the project prior to commencing project activities and after activities are completed. If during construction the fence fails, work must stop until it is repaired, and the qualified Biologist inspects (and clears) the job site.
- **BIO-General 11:** Environmentally Sensitive Area (ESA) Fence Removal: All Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must be removed as a last order of work. During removal, a qualified biologist must be present.

- **BIO-General 12: Animal Entrapment:** To prevent inadvertent entrapment of desert tortoise during project activities, all excavated steep-walled holes or trenches more than 6 inches deep must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the qualified biologist.
- **BIO-General 16: Invasive Weed Control:** To address potential impacts to Lower Bajada and Fan Mojave and Sonoran Desert Scrub, Mojave and Great Basin Upper Bajada and Toe slope, and Shadscale- Saltbush Cool Semi-Desert Scrub communities, Desert Tortoise Designated Critical Habitat, Booth's evening primrose, desert pincushion, Emory's crucifixion-thorn, flat-seeded spurge, Harwood's seriatum, and Wright's jaffueliobryum moss, or other rare plant species, a qualified biologist must identify invasive plant species at the culvert and RSP work locations (PM 142.97, R133.27, R130.31, R133.94, R126.11, R122.23, and R137.67) within the PIA and a 50-foot buffer, within 30 days prior to project activities. Treatment and disposal methods must be approved by the Caltrans biologist prior to vegetation removal.
- **BIO-Bat 1: Bat Management & Mitigation Plan.** A bat habitat assessment of the Project Impact Area will be conducted by a qualified biologist. Should the bat habitat assessment warrant further surveys and require a BMMP, then a BMMP will be developed and implemented in accordance with CDFW guidelines.
- **BIO-Avian 1: Pre-Construction Nesting Bird Survey:** If project activities cannot avoid the nesting bird season, February 1 – September 30, then preconstruction nesting bird surveys must be conducted by a qualified biologist in areas of suitable habitat within the projects limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and avoid nesting birds. If an active avian nest is located, a no-construction buffer (100 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) would be established and Monitored by a qualified biologist.
- **BIO-Avian 2: Pre-Construction Burrowing Owl (BUOW) Survey:** Two burrowing owl pre-construction surveys must be performed by a qualified biologist: one survey 14-30 days prior to project activities, and one survey 24 hours prior to project activities. The surveys will be conducted within the area of suitable BUOW habitat within State right-of-way and within the project limits, as identified in the Burrowing owl Habitat Assessment. If pre-construction surveys confirm occupied burrowing owl habitat within this area, the qualified biologist will coordinate with CDFW on additional measures that may be needed to ensure that no take of burrowing owl occurs.
- **BIO-Reptile 1: Equipment Flagging:** Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment (including all vehicles, i.e., cars and trucks) for special status reptile species desert tortoise and Mojave fringe-toed lizard before operating equipment at any time.
- **BIO-Reptile 5: Trash/Predation:** Caltrans must implement measures to reduce the attractiveness of job sites to common raven, and other predators and scavengers by controlling trash and educating workers.
- **BIO-Reptile 6: Temporary Demarcation:** Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work locations (PM R122.23, R126.11, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer as shown on the plans and/or described in the specifications, to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.

- **BIO-Reptile 8:** Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand.
 - **BIO-DT 1:** Agency Notification & Reporting Requirements: Any worker who observes desert tortoises within or near the job site found alive, injured, or dead during the implementation of the Project must provide immediate notification to the Resident Engineer and Caltrans biologist. The Caltrans biologist must then notify USFWS and CDFW. Veterinary treatment and/or final deposition must follow USFWS and CDFW approval.
 - **BIO-DT 2:** Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in the PA&ED phase to determine if desert tortoise is active in the project area. Measures will be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert tortoise is confirmed, additional measures may be needed.
 - **BIO-DT 6:** Biological Monitoring: An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for desert tortoise and Mojave fringed-toed lizard.
 - **BIO-Arthropod 1:** Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing: No more than 30 days prior to project activities, a qualified biologist must perform a preconstruction survey for rare insect host plants (milkweed) at PM 142.97, R133.27, R130.31, R133.94, R126.11, R122.23 and R137.67 within the PIA and a 50-foot buffer. Should any rare insect host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and host plants must be flagged by the qualified biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the groupings must be fenced with Environmentally Sensitive Area (ESA) temporary fencing.
 - **BIO-Plant 1:** Rare Plant Surveys, Flagging and Fencing: Within 30 days prior to construction, a preconstruction survey must be conducted by a qualified biologist for Booth's evening primrose, desert pincushion, Emory's crucifixionthorn, flat-seeded spurge, Harwood's eriastrum, and Wright's jaffueliobryum moss in areas of suitable habitat, within 50 feet of the PIA. Any rare plant species identified must be flagged for visual identification to construction personnel for work avoidance. Any rare plant species detected that feature multiple plants in a single location must be fenced with Environmentally Sensitive Area (ESA) temporary fencing.
- BIO-Plant 2:** Rare Plant Translocation: If Booth's evening primrose, desert pincushion, Emory's crucifixion-thorn, flat-seeded spurge, Harwood's eriastrum, Wright's jaffueliobryummoss, or other rare plant species is found within the job site and cannot be fenced but can survive transplantation, the qualified biologist/botanist must contact the Caltrans biologist to determine the time and suitable translocation area for the plant species to be moved. Additional requirements and actions must be determined at the time such a situation occurs.
- **BIO-General-PSM 1:** Vehicle Washing: Comply with 2022 SSP or latest version. It would be required that the contractor would wash equipment prior to entering the project site. The biologist would coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation work to verify that they have been washed.
 - **BIO-General-PSM 2:** Agency Notification & Reporting Requirements: Any listed species within or near the job site, or as specified in BIO-General-6, found alive, injured, or dead during the implementation of the Project must be immediately reported to the Resident Engineer and Caltrans Biologist. The Caltrans Biologist must then notify the Resource Agencies. Veterinary treatment

and/or final deposition must follow Resource Agencies' approval. Monitoring reports must include WEAP Training and be submitted to the Resources Agencies on a timeframe to be determined.

b) No Impact

There are significant areas of habitat within the BSA suitable for many of the species listed on the Federal and State threatened and endangered species lists as potentially present in the project area, as well as species on the CNPS and BLM lists.

These areas contain significant stands of native vegetation, dominated by desert wash and desert scrub species. However, the project would have no impact, 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.

c) Less Than Significant with Mitigation Incorporated

The project would have a less than significant effect with mitigation incorporated, 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.

A total of seven drainages that cross I-15 in the project area were identified in the field as potentially impacted by the project. The seven drainages identified in the field are classified as ephemeral, which generally flow for less than three months per year and would therefore be classified as non-permanent waterways (RPWs) by the USACE. The seven ephemeral drainages within the project area are Waters of the State (WOS) under the jurisdiction of CDFW and the Lahontan RWQCB. A CFGC Section 1602 LSAA Permit will be required. In addition, under Section 401 of the CWA, the Project will need certification from RWQCB to ensure the discharge of dredged or fill material into WOS does not violate State water quality standards. The remaining minor drainages were determined not to be WOS as they have no significant nexus to a Traditional Navigable Waterway (TNW). No National Wetland Inventory (NWI) wetlands are located within the limits of the Project area. The project location is within the Soda Lake watershed. The project is located within the Lahontan Regional Water Quality Control Board jurisdiction.

Proposed project impacts to jurisdictional areas would be mitigated and coordinated with RWQCB and CDFW during the permitting process. Aquatic resources present anticipate the need for a RWQCB WDR, and a California Fish and Game Code 1602 permit. These results are subject to modification following a formal jurisdictional delineation and agency verification, as they apply to the streambed modifications (RSP) that are generating the need for the 401 and 1602 permits.

Compensatory mitigation for permanent impacts is potentially anticipated, with resource agency approval, through on-site restoration activities, permitted-responsible mitigation, suitable mitigation/conservation bank credits, suitable in-lieu fee program credits, and/or other mitigation acceptable to the resource agencies involved as applicable. A pre-application consultation with CDFW and RWQCB to discuss potential impacts and appropriate mitigation requirements is recommended. Anticipated mitigation requirements include permanent protection and restoration of compensatory habitat within the watershed associated with the project area. Compensatory mitigation measures intended to satisfy CDFW requirements for anticipated project impacts to WOS would be required.

Avoidance, Minimization, and/or Mitigation Measures:

- **BIO-Waters 1:** Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.

- **BIO-Waters 2:** On-site habitat restoration for temporary impacts for native communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.
- **BIO-Waters 3:** Off-site mitigation banking at a ratio of 3:1 for permanent impacts to native communities.
- **BIO-Waters 4:** Compensatory Mitigation: Any additional permanent impacts to jurisdiction areas would be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.

d) No Impact

The project would have no impact, interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) No Impact

This project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) No Impact

The project would have no impact and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

CEQA Significance Determinations for Cultural Resources

a) No Impact

A Historic Property Survey Report for the project was approved on December 6, 2023. The project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. Caltrans, pursuant to Section 106 PA Stipulation IX.A, has determined a Finding of No Historic Properties Affected is appropriate for this undertaking because there are no historic properties present within the APE. There are also No Historical Resources present, as outlined in CEQA Guidelines 15064.5(a).

b) No Impact

The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

c) No Impact

The project is not anticipated to disturb any human remains, including those interred outside of dedicated cemeteries.

Avoidance, Minimization, and/or Mitigation Measures:

- **CUL 1:** If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.
- **CUL 2:** In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Gary Jones, Acting Senior DNAC: (909) 261-8157. Further provisions of PRC 5097.98 are to be followed as applicable.

ENERGY

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

CEQA Significance Determinations for Energy

a) No Impact

The project is not anticipated to result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

b) No Impact

The project would also not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

GEOLOGY AND SOILS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste-water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

CEQA Significance Determinations for Geology and Soils

a i, ii, iii, iv) No Impact

The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. According to the California Department of Conservation Earthquake Zones of Required Investigation Maps, the project is not

located on an Alquist-Priolo Earthquake Fault Zone. The nearest identified fault is Manix Fault which is approximately 5 miles southwest of PM 110.4.

b) No Impact

The project would not result in substantial soil erosion or the loss of topsoil.

c) No Impact

The project is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d) No Impact

The project is not located on expansive soil, creating substantial direct or indirect risks to life or property topsoil.

e) No Impact

The project does not 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 wastewater.

f) No Impact

The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

GREENHOUSE GAS EMISSIONS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

CEQA Significance Determinations for Greenhouse Gas Emissions

a) Less Than Significant Impact

The project is not a capacity-increasing project. Therefore, the project would not generate operational greenhouse gas emissions, either directly or indirectly, increase the number of travel lanes and/or increase traffic volumes. However, the project would generate a less than significant amount of pollutants during construction due to the duration of project construction. The GHG estimates for construction emissions on-road/offsite operations have been deduced as Carbon Dioxide Equivalent (CO₂e) in 23,443.05 lbs./day and 1922 Tons during the 164 days of construction activity.

b) No Impact

The project would also not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Avoidance, Minimization, and/or Mitigation Measures:

- **GHG-1:** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- **GHG-2:** Maximize use of recycled materials.
- **GHG-3:** Recycle existing project features on-site.
- **GHG-4:** Use recycled water or reduce consumption of potable water for construction.
- **GHG-5:** Use Partial Depth Recycling as the construction method to rehabilitate the pavement.

HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

CEQA Significance Determinations for Hazards and Hazardous Materials

a) No Impact

The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) No Impact

The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) No Impact

The project would also not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d) No Impact

The project would not 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, create a significant hazard to the public or the environment.

e) No Impact

The project is also not 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 or would result in a safety hazard or excessive noise for people residing or working in the project area.

f) No Impact

The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) No Impact

The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Avoidance, Minimization, and/or Mitigation Measures:

- **HAZ-1:** Include 84-9.03B Non-Hazardous Striping/ Marker.

HYDROLOGY AND WATER QUALITY

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

CEQA Significance Determinations for Hydrology and Water Quality

a) No Impact

The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

b) No Impact

The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

c i, ii, iii, iv) No Impact

The project would also not 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: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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 impede or redirect flood flows.

d) No Impact

The project is not within a flood hazard, tsunami, or seiche zones, or does it risk release of pollutants due to project inundation.

e) No Impact

The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Avoidance, Minimization, and/or Mitigation Measures:

- **SWQ-1:** Order No. 2022-0033-DWQ, NPDES No. CAS000003, NPDES Statewide Storm Water Permit for the State of California, Department of Transportation (Caltrans Permit) issued by the California State Water Resources Control Board (SWRCB). This permit regulates stormwater and non-stormwater discharges from Caltrans properties and facilities, and discharges associated with operations and maintenance of the statewide State highway system.
- **SWQ-2:** Caltrans Statewide Stormwater Management Plan (SWMP). The SWMP is the document that describes how Caltrans plans to implement the “Caltrans Permit” requirements.
- **SWQ-3:** During phases “0” and “1”, a Storm Water Data Report (SWDR) will be developed for each phase. The SWDR is a planning document prepared by the Project Engineer that documents stormwater design information associated with the project. It is used to document stormwater-related decisions to assure compliance throughout all phases of project delivery.
- **SWQ-4:** During the construction phase, a Water Pollution Control Document (WPCD) will be developed by the contractor. The WPCD is a project-specific plan that includes a site map(s), identifies construction and contractor activities that could cause pollutants in stormwater, and a description of measures or practices to control these pollutants.

LAND USE AND PLANNING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

CEQA Significance Determinations for Land Use and Planning

a) No Impact

The project would not physically divide the established community of Baker, as the project location is already disturbed and located on the Interstate to the south of the community. Therefore, the project would have no impacts.

b) No Impact

According to the San Bernardino County Land Use Plan, Land Use Zoning Districts Map, the project locations fall within Resource Conservation (RC), General Commercial (CG), and Regional Industrial (IR) areas. The project would not 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.

MINERAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

CEQA Significance Determinations for Mineral Resources

a) No Impact

According to the San Bernardino County General Plan, Mineral Resources, the project is located within the North Desert Region; however, there are no mineral resources classified as “Identified Significant Resources” or as “Potential Significant Resources” within the project limits. Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) No Impact

The project would also not 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.

NOISE

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

CEQA Significance Determinations for Noise

a) No Impact

The project would not expose people to or generate noise levels in excess of standards established in a general plan or noise ordinance, or applicable standards of other agencies. The project is a Type III project under 23 CFR 772.7; therefore, Caltrans Engineering determined that a noise study report was not required for the project. There would be no noise impact.

b) No Impact

Any ground-borne noise or vibration would be limited to the construction period and would be short in duration. Because there are no noise- or vibration- sensitive uses located in the immediate project vicinity and because the proposed project would comply with Caltrans' Standard Specifications, no impacts would occur.

c) No Impact

The project would not permanently increase ambient noise levels in the project vicinity and is not located within an airport land use plan, or in the vicinity of a private airstrip. Also, the project would not expose people to or generate excessive noise levels. Therefore, no noise impacts related to air traffic would occur.

POPULATION AND HOUSING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

CEQA Significance Determinations for Population and Housing

a) No Impact

The project would not induce substantial unplanned population growth in an area, either directly or indirectly, as work is occurring on the existing pavement, and would not induce growth within the project limits.

b) No Impact

The project would also not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

CEQA Significance Determinations for Public Services

a) No Impact

The project would not 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, to include fire and police protection, schools, parks, or other public facilities.

- Response to Fire protection and Police protection: No Impact. The San Bernardino County Fire Station 53, in the community of Baker is located to the north of the project area. The proposed project would not result in an increase in population, and therefore would not increase the demand for community services. No fire stations would be acquired or displaced. In addition, the proposed project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. As a result, there are no impacts.
- Response to Police Protection: No Impact. The nearest San Bernardino County Sheriff's Department and California Highway Patrol is located outside of project limits, in the city of Barstow. The proposed project would not induce growth or increase population in the study area or the greater community beyond what is previously planned for and would not result in the need for additional police protection. No impacts on police protection from operation of the proposed project would occur.
- Response to Schools: No Impact. Baker Valley USD is located 0.5 miles to the north of I-15 on State Route 127. The proposed project would not result in accessibility problems to existing schools as the I-15 Business Route (Baker Blvd) is accessible through the community of Baker and travels

parallel to I-15 and perpendicular to SR 127, and with the appropriate traffic detours, as needed, is not expected to result in any other impacts on school services.

- Response to Parks: No Impact. There are no public parks near the project vicinity; therefore, the proposed project would have no impacts.
- Response to Other Public Facilities: No Impact. There are no other public facilities in the immediate project area. Therefore, there would be no impact on public facilities as a result of construction or operation of the project.

RECREATION

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

CEQA Significance Determinations for Recreation

a) No Impact

The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b) No Impact

The project also does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

TRANSPORTATION

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

CEQA Significance Determinations for Transportation

a) No Impact

The Caltrans District 8 State Highway System Bicycle Access Map indicates that bicyclists can ride on the shoulder of this segment of I-15. "Share the Road" and bicycle signs would be posted at the construction areas. The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

b) No Impact

The project would also not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

c) No Impact

Furthermore, the project would not substantially increase hazards due to a geometric design feature or incompatible uses.

d) No Impact

With appropriate traffic detours, as needed, the project is not anticipated to result in any inadequate emergency access.

TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	☐	☐	☐	☒
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

CEQA Significance Determinations for Tribal Cultural Resources

a) No Impact

The project would not result in 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).

b) No Impact

The project would not result in 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A request for a Sacred Lands File search was sent to the Native American Heritage Commission (NAHC) and a response was received on April 21, 2023. The SLF search results were positive, based on the original post miles planned for the project. A previous Caltrans project (1C720) identified the cultural resource associated with the SLF results and the CCRD confirmed locational information for the site. However, due to a subsequent adjustment to the project post miles for the current project, that location is now outside of 1L150's Area of Potential Effect.

In consultation with the District 8 DNAC it was determined that consultation letters would be sent to Yuhaaviatam of San Manuel Nation and the Twenty-Nine Palms Band of Mission Indians. The initial consultation letter was sent to Jessica Mauck, Director of Cultural Resources, Yuhaaviatam of San Manuel Nation for Section 106, and AB 52. The letter was sent on March 23, 2023. A response was received from Ryan Nordness, Cultural Resource Analyst for Yuhaaviatam of San Manuel Nation,

responded, via email, on April 6, 2023, that he did not think that the project would be of much concern, despite it being in a very culturally sensitive space. The email then requested additional information regarding the shoulder backing and lighting rehabilitation. On November 13, 2023, an email was sent to Dr. Alexandra McCleary, Cultural Lands Manager for Yuhaaviatam of San Manuel Nation, which contained the information requested by Mr. Nordness. In addition, the email stated that the sensitive area has been completely removed from the project and no work would be occurring within or adjacent to that area. No response has been received to date.

On March 23, 2023, an initial consultation letter was sent to Sarah Bliss, Director Tribal Programs EPA, Twenty-Nine Palms Band of Mission Indians, for Section 106 and AB 52. A second consultation letter was sent to Sarah O'Brien, Tribal Archivist, Twenty-Nine Palms Band of Mission Indians on May 5, 2023. On June 19, 2023, a third consultation letter was sent to Ms. O'Brien. No response has been received to date.

No additional information about cultural resources were received during Native American consultation.

UTILITIES AND SERVICE SYSTEMS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals??	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

CEQA Significance Determinations for Utilities and Service Systems

a) No Impact

The project would not 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.

b) No Impact

The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, as applicable.

c) No Impact

The project would not result in a determination by the wastewater treatment provider which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

d) No Impact

The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

e) No Impact

The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

CEQA Significance Determinations for Wildfire

a) No Impact

The project would not substantially impair an adopted emergency response plan or evacuation plan. According to the California State Fire Marshal, Local Responsibility Area (LRA) Fire Hazard Severity Zones (FHSZ) Map, the project is not located in a fire severity zone.

b) No Impact

The project would also not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) No Impact

The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

d) No Impact

The project would also not 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.

MANDATORY FINDINGS OF SIGNIFICANCE

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

CEQA Significance Determinations for Mandatory Findings of Significance

a) Less Than Significant with Mitigation Incorporated

The project does not 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. Biological Resources' avoidance and/or minimization measure would be implemented to ensure the proposed project would result in less-than-significant impact with mitigation incorporated.

b) No Impact

The project does not have impacts that are individually limited, but cumulatively considerable. The proposed project would not result in cumulatively considerable effects when combined with past, present, and reasonably foreseeable future projects and therefore would have no cumulative impact. As such, the proposed project would have no impacts.

c) No Impact

The project does not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

2.3 CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂ that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO₂.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis would include a discussion of both in the context of this transportation project.

Regulatory Setting

For a full list of laws, regulations, and guidance related to climate change (GHGs and adaptation), please refer to [Caltrans' Standard Environmental Reference \(SER\), Chapter 16, Climate Change](#).

Federal

To date, no nationwide numeric mobile-source GHG reduction targets have been established, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project. In January 2023, the White House Council on Environmental Quality (CEQ) issued updated and expanded interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (88 Fed. Reg. 1196) (CEQ NEPA GHG Guidance), in accordance with EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 FR 70935 (Dec. 13, 2021) and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. The CEQ guidance does not establish numeric thresholds of significance, but emphasizes quantifying reasonably foreseeable lifetime direct and indirect emissions whenever possible. This guidance also emphasizes resilience and environmental justice in project-level climate change and GHG analyses.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level rise, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to

climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— “the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Early efforts by the federal government to improve fuel economy and energy efficiency to address climate change and its associated effects include The Energy Policy and Conservation Act of 1975 (42 USC Section 6201); and Corporate Average Fuel Economy (CAFE) Standards. The U.S. Department of Transportation’s National Highway Traffic and Safety Administration (NHTSA) sets and enforces corporate average fuel economy (CAFÉ) standards for on-road motor vehicles sold in the United States. The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards for vehicles under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation’s energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014). These standards are periodically updated and published through the federal rulemaking process.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs).

In 2005, EO S-3-05 initially set a goal to reduce California’s GHG emissions to 80 percent below year 1990 levels by 2050, with interim reduction targets. Later EOs and Assembly and Senate bills refined interim targets and codified the emissions reduction goals and strategies. The California Air Resources Board (ARB) was directed to create a climate change scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Ongoing GHG emissions reduction was also mandated in Health and Safety Code (H&SC) Section 38551(b). In 2022, the California Climate Crisis Act was passed, establishing state policy to reduce statewide human- caused GHG emissions by 85 percent below 1990 levels, achieve net zero GHG emissions by 2045, and achieve and maintain negative emissions thereafter.

Beyond GHG reduction, the State maintains a climate adaptation strategy to address the full range of climate change stressors, and passed legislation requiring state agencies to consider protection and management of natural and working lands as an important strategy in meeting the state’s GHG reduction goals.

Environmental Setting

The project is in a rural area within San Bernardino County along I-15 from PM R121.0 to PM 144.0, with a primarily natural-resources based agricultural and tourism economy. Interstate 15 (I-15) is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is Interstate 40 (I-40), to the south. Traffic counts are low, Connect SoCal 2024 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) guides transportation development in San Bernardino County. The San Bernardino County Greenhouse Gas Reduction Plan Update addresses GHGs in the project area.

GHG Inventories

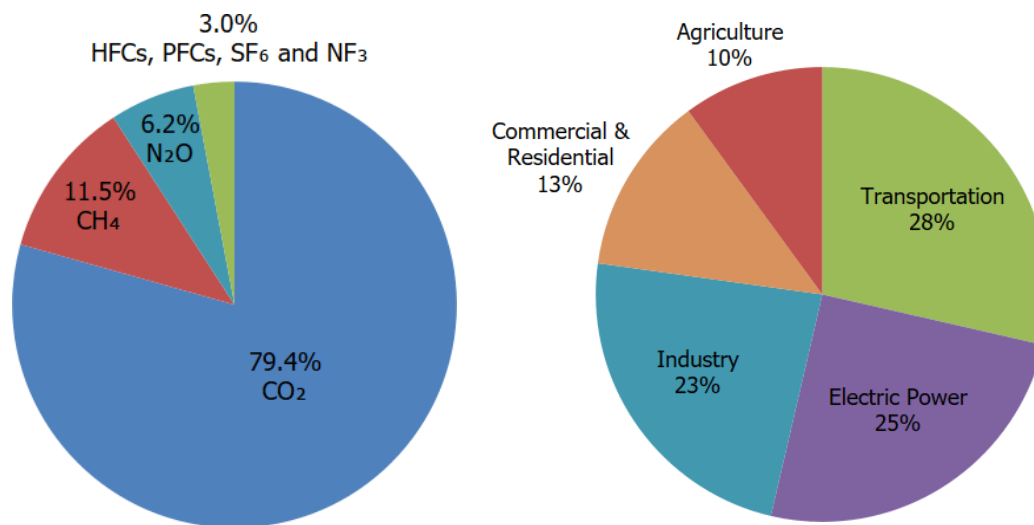
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state of California, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2021 were 5,586.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 12% of total U.S. emissions in 2021 [U.S. EPA 2023a].) While total GHG emissions in 2021 were 17% below 2005 levels, they increased by 6% over 2020 levels. Of these, 79.4% were CO₂, 11.5% were CH₄, and 6.2% were N₂O; the balance consisted of fluorinated gases. From 1990 to 2021, CO₂ emissions decreased by only 2% (U.S. EPA 2023a).

The transportation sector's share of total GHG emissions increased to 28% in 2021 and remains the largest contributing sector (Figure 2-1). Transportation fossil fuel combustion accounted for 92% of all CO₂ emissions in 2021. This is an increase of 7% over 2020, largely due to the rebound in economic activity following the COVID-19 pandemic (U.S. EPA 2023a, 2023b)).

Figure 2-1. U.S. 2021 Greenhouse Gas Emissions



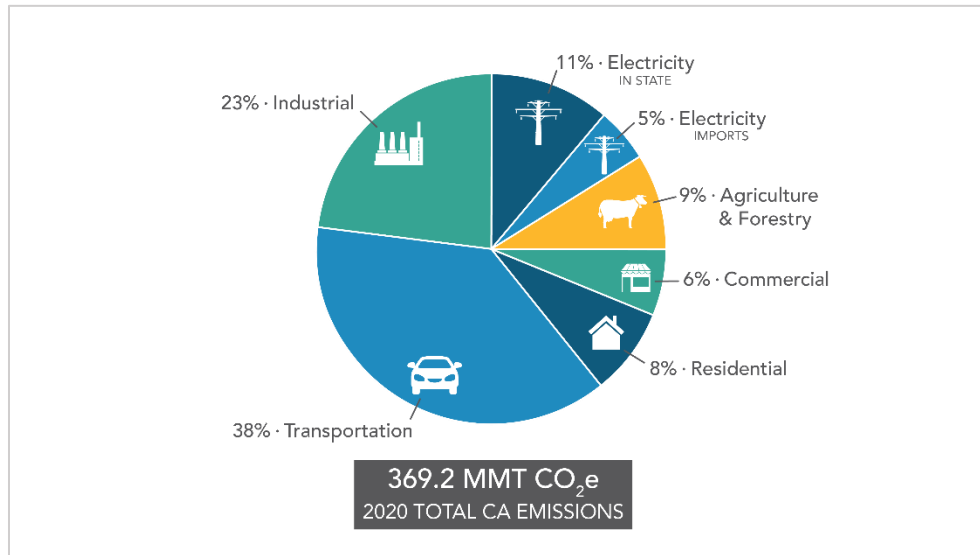
(Source: U.S. EPA 2023b)

State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals.

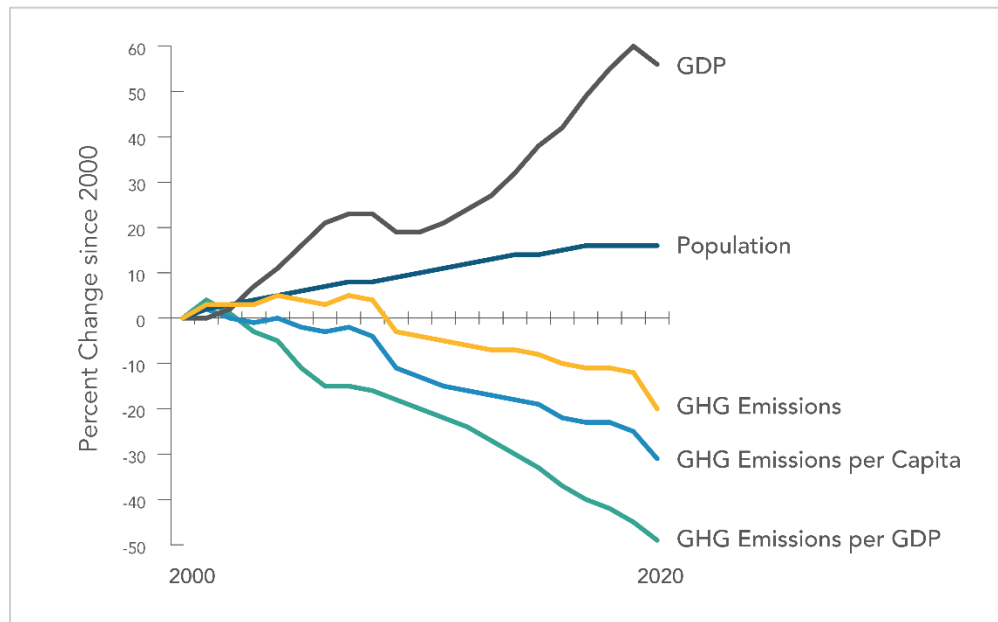
Overall statewide GHG emissions declined from 2000 to 2020 despite growth in population and state economic output (Figures 2-2, 2-3) (ARB 2022a).

Figure 2-2. California 2020 Greenhouse Gas Emissions by Economic Sector



(Source: ARB2022a)

Figure 2-3. Change in California GDP, Population, and GHG Emissions since 2000



(Source: ARB2022a)

AB 32 required ARB to develop a Scoping Plan that describes the approach California would take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California would use to reduce GHG emissions. ARB adopted the first scoping plan in 2008. The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030

target established in EO B-30-15 and SB 32. The 2022 *Scoping Plan for Achieving Carbon Neutrality*, adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (ARB 2022b).

Regional Plans

As required by *The Sustainable Communities and Climate Protection Act of 2008*, ARB sets regional GHG reduction targets for California's 18 metropolitan planning organizations (MPOs) to achieve through planning future projects that would cumulatively achieve those goals and reporting how they would be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for SCAG. The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021).

Table 2-1. Regional and Local Greenhouse Gas Reduction Plans

Plan Title	GHG Reduction Policies or Strategies
<i>2024 Regional Transportation Plan/ Sustainable Communities Strategy (2024 RTP/SCS)</i>	• Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts • Support investments that reduce hazardous air pollutants and greenhouse gas emissions • Reduce the exposure and impacts of emissions and pollutants and promote local and regional efforts that improve air quality for vulnerable populations, including but not limited to Priority Equity Communities and the AB 617 communities • Accelerate the deployment of a zero-emission transportation system and use zero-emission technology to offer short- term benefits where zero-emissions solutions are not yet feasible or commercially viable • Promote equitable use of and access to clean transportation technologies so that they may all benefit from them

<i>San Bernardino Countywide Plan Policy NR-1.7 & 1.8 (Oct 2020)</i>	• Policy NR-1.7 Greenhouse gas reduction targets. We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law. • Policy NR-1.8 Construction and Operations. We invest in County facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage County contractors and other builders and developers to use low-emission construction vehicles and equipment to improve air quality and reduce emissions
<i>San Bernardino County Regional Greenhouse Gas Reduction Plan (March 2021)</i>	• OnRoad-1: Alternative Fueled Transit Fleets • OnRoad-2: Encourage Use of Mass Transit • OnRoad-3: Transportation Demand Management and Synchronization • OnRoad-4: Expand Bike Routes • OnRoad-5: Community Fleet Electrification • OffRoad-2: Idling Ordinance

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH₄ and N₂O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO₂ is the most important GHG, so amounts of other gases are expressed relative to CO₂, using a metric called “carbon dioxide equivalent”, or CO₂e. The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂).

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the project is to restore between PM R121.0 and PM 144.0 on Interstate 15 (I-15), in San Bernardino County, to a state of good repair so that the roadway is in a condition that requires minimal maintenance, extend the life of the facility, improve the ride quality, and upgrade other highway appurtenances and facilities that are worn out or functionally obsolete, and would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on I-15, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions would 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. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered “temporary” in the same way as criteria pollutants that subside after construction is completed. Use of long-life pavement, improved traffic management plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities. The Caltrans Construction Emissions Tool (Cal-CET) was used to estimate construction and Greenhouse gas (GHG) emissions. The GHG estimates for construction emissions on- road/offsite operations have been deduced as Carbon Dioxide Equivalent of CO₂e. The project is anticipated to generate 1922 Tons CO₂e during the 164 days of construction activity.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7 1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and would comply with all ARB emission reduction regulations. Section 14-9.02, Air Pollution Control, 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 GHG emissions.

CEQA Conclusion

The project would increase GHG emissions, during the construction period but is not anticipated to directly nor indirectly, result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Statewide Efforts

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy.

These programs include regulations, market programs, and incentives that would transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (ARB 2022c).

Major sectors of the California economy, including transportation, would need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (OPR 2015).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions would come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart Strategy* (California Natural Resources Agency 2022).

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan for Transportation Infrastructure

The California Action Plan for Transportation Infrastructure (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state would invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and

universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

Caltrans Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a policy to ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. Other Director's policies promote energy efficiency, conservation, and climate change, and commit Caltrans to sustainability practices in all planning, maintenance, and operations. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020) provides a comprehensive overview of Caltrans' emissions and current Caltrans procedures and activities that track and reduce GHG emissions. It identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Caltrans and State goals.

Project-Level GHG Reduction Strategies

The following measures would also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- **GHG 1:** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment
- **GHG 2:** Maximize use of recycled materials
- **GHG 3:** Recycle existing project features on-site
- **GHG 4:** Use recycled water or reduce consumption of potable water for construction
- **GHG 5:** Use Partial Depth Recycling as the construction method to rehabilitate the pavement

Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways.

Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects would vary by location and may, in the most extreme cases, require that a

facility be relocated or redesigned. Furthermore, the combined effects of transportation projects and climate stressors can exacerbate the impacts of both on vulnerable communities in a project area. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance. Caltrans practices generally align with the 2023 CEQ interim Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, which offers recommendations for additional ways of evaluating project effects related to GHG emissions and climate change. These recommendations are not regulatory requirements.

The *Fifth National Climate Assessment*, published in 2023, presents the most recent science and “analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; [It] analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years... to support informed decision-making across the United States.” Building on previous assessments, it continues to advance “an inclusive, diverse, and sustained process for assessing and communicating scientific knowledge on the impacts, risks, and vulnerabilities associated with a changing global climate” (U.S. Global Change Research Program 2023).

The U.S. Department of Transportation recognizes the transportation sector’s major contribution of GHGs that cause climate change and has made climate action one of the department’s top priorities (U.S. DOT 2023). FHWA’s policy is to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

The National Oceanic and Atmospheric Administration provides sea level rise projections for all U.S. coastal waters to help communities and decision makers assess their risk from sea level rise. Updated projections through 2150 were released in 2022 in a report and online tool (NOAA 2022).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California’s Fourth Climate Change Assessment (Fourth Assessment) (2018) provides information to help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state’s people, infrastructure, natural systems, working lands, and waters.

The Fourth Assessment reported that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience an up to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures; a two-thirds decline in water supply from snowpack resulting in water shortages; a 77% increase in average area burned by wildfire; and large-scale erosion of up to 67% of Southern California beaches due to sea level rise. These effects would have profound impacts on infrastructure, agriculture, energy demand, natural systems, communities, and public health (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports would be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event would triple to 370 by 2100, and 3,750 miles would be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. This report provides guidance on assessing risk in the face of inherent uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

EO S-13-08, issued in 2008, directed state agencies to consider sea level rise scenarios for 2050 and 2100 during planning to assess project vulnerabilities, reduce risks, and increase resilience to sea level rise. It gave rise to the 2009 *California Climate Adaptation Strategy*, the Safeguarding California Plan, and a series of technical reports on statewide sea level rise projections and risks, including the *State of California Sea-Level Rise Guidance Update* in 2018. The reports addressed the full range of climate change impacts and recommended adaptation strategies. The current *California Climate Adaptation Strategy* incorporates key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio*, and the CAPTI (described above). Priorities in the 2023 *California Climate Adaptation Strategy* include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, implementing nature-based climate solutions, using best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2023).

EO B-30-15 recognizes that effects of climate change threaten California's infrastructure and requires state agencies to factor climate change into all planning and investment decisions. Under this EO, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies*, to encourage a uniform and systematic approach to building resilience.

SB 1 Coastal Resources: Sea Level Rise (Atkins 2021) established statewide goals to "anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the coastal zone." As the legislation directed, the Ocean Protection Council collaborated with 17 state planning and coastal management agencies to develop the *State Agency Sea-Level Rise Action Plan for California* in February 2022. This plan promotes coordinated actions by state agencies to enhance California's resilience to the impacts of sea level rise (California Ocean Protection Council 2022).

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Caltrans Sustainability Programs

The Director's Office of Equity, Sustainability and Tribal Affairs supports implementation of sustainable practices at Caltrans. The *Sustainability Roadmap* is a periodic progress report and plan for meeting the Governor's sustainability goals related to EOs B-16-12, B-18-12, and B-30-15. The Roadmap includes designing new buildings for climate change resilience and zero-net energy and replacing fleet vehicles with zero-emission vehicles (Caltrans 2023).

Project Adaptation Analysis

Sea Level Rise

The project is outside the coastal zone and not in an area subject to sea level rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected.

Precipitation and Flooding

The project area lies within the Southern Mojave Watershed and is located outside of a floodplain. The National Flood Hazard Layer FIRMette Maps 06071C4625H and 06071C4650H identifies the area as not encroaching upon any FEMA-defined floodplain. The Caltrans Climate Change Vulnerability Assessment mapping tool for District 8 assesses and maps changes in the 100-year storm precipitation depth in the district. According to this assessment, 100-year storm precipitation depth in the project area is expected to increase by 1.2-1.6% by 2055 and 1.2-1.5% by 2085.

Due to the location of the project and the change in percentage of precipitation, the effects of climate change on precipitation and flooding is not likely to adversely affect the project.

Wildfire

According to the CALfire Fire Hazard Severity Zones (FHSZ) Map, the project is not located in a fire hazard severity zone. The Caltrans Climate Change Vulnerability Assessment mapping tool does not identify the project area to have a level of wildfire exposure for the years of 2040 to 2099. In addition, Caltrans 2023 Standard Specification 7-1.02M(2) mandates fire protection procedures during construction, including a fire prevention plan.

Temperature

Temperature affects choice of pavement materials, design of foundations and retaining walls in terms of ground moisture conditions and need for expansion/contraction of bridge joints. During operations and maintenance, higher temperatures would affect safety of employees working outdoors, survival of landscaping and vegetation in right-of-way, and pavement condition, which could require more frequent maintenance.

The project site is located within the "Desert" climate region. The desert climate is known to have high temperatures during the day and nights are typically cold. The Caltrans District 8 Climate Change Vulnerability Assessment Map shows that the average minimum temperature in 2055 is anticipated to increase by 3.4 to 3.9 degrees Fahrenheit. The average seven-day maximum temperature in 2055 is anticipated to increase by 5.77 to 5.85 degrees Fahrenheit. In 2085, the minimum temperature change is anticipated to increase by 6.9 to 7.5 degrees Fahrenheit and the average seven-day maximum temperature change is anticipated to increase by 8.8 to 9.0 degrees Fahrenheit. The materials being used for the proposed project would utilize asphalt binder which is the product that holds the aggregate together. Asphalt binder is resistant to temperature variation and would be used with the Partial Depth Reclamation with Hot Mix Asphalt. As a result, the pavement would be stronger. The project is resilient to the temperature changes in the project area and have been assessed and accounted for in project design pavement materials and material design life.

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, Project Development Team (PDT) meetings. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

3.1 Consultation and Coordination with Public Agencies and Tribal Governments

The following provides a summary of all meetings, correspondence, and/or coordination relevant for the development of the proposed project.

3.1.1 AB 52 Consultation

A request was made to the Native American Heritage Commission (NAHC) for a Sacred Land File (SLF) search and a response was received on April 21, 2023. The SLF search results were positive, based on the original post miles planned for the project. A previous Caltrans project (1C720) identified the cultural resource associated with the SLF results and the CCRD confirmed locational information for the site. However, due to a subsequent adjustment to the project post miles for the current project, that location is now outside of 1L150's Area of Potential Effect.

Letters requesting information about cultural resources or concerns regarding the project were sent to two Native American tribes:

- The initial consultation letter was sent to Jessica Mauck, Director of Cultural Resources, Yuhaaviatam of San Manuel Nation for Section 106, and AB 52. The letter was sent on March 23, 2023. A response was received from Ryan Nordness, Cultural Resource Analyst for Yuhaaviatam of San Manuel Nation, responded, via email, on April 6, 2023, that he did not think that the project would be of much concern, despite it being in a very culturally sensitive space. The email then requested additional information regarding the shoulder backing and lighting rehabilitation. On November 13, 2023, an email was sent to Dr. Alexandra McCleary, Cultural Lands Manager for Yuhaaviatam of San Manuel Nation, which contained the information requested by Mr. Nordness. In addition, the email stated that the sensitive area has been completely removed from the project and no work would be occurring within or adjacent to that area. No response has been received to date.
- On March 23, 2023, an initial consultation letter was sent to Sarah Bliss, Director Tribal Programs EPA, Twenty-Nine Palms Band of Mission Indians, for Section 106 and AB 52. A second consultation letter was sent to Sarah O'Brien, Tribal Archivist, Twenty-Nine Palms Band of Mission Indians on May 5, 2023. On June 19, 2023, a third consultation letter was sent to Ms. O'Brien. No response has been received to date.

No additional information about cultural resources were received during Native American consultation.

3.1.2 California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS)

A list of State-listed species for the project area was obtained from the CDFW California Natural Diversity Database (CNDDB), also on April 25, 2023, updated November 29, 2023. A CNPS list of rare and endangered plants in the project area was obtained on November 6, 2023.

3.1.3 US Fish and Wildlife Service (USFWS), National Oceanographic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS)

An official USFWS species list (generated through IPaC) was requested and received on April 25, 2023; updated November 29, 2023. The project is not within NOAA or NMFS jurisdiction. It will therefore have “No Effect” on any NOAA/NMFS species or Essential Fish Habitat.

3.1.4 Public Participation

The Draft Environmental Document (DED) prepared for the project was circulated for public review and comment between May 9, 2024 and on June 10, 2024.

A Notice of Intent to Adopt a Mitigated Negative Declaration was published in The Sun on May 9, 2024 in English. The notice informed the public of the location where the DED was available for public review, the start and end dates of the public review period, length of the public review period, and how the public could submit comments on the DED. The published notice was also mailed to those listed on the distribution list included in Chapter 5.

Additionally, a Notice of Completion was submitted to the State Clearinghouse on May 9, 2024. The State Clearinghouse distributed the DED to selected state agencies for review between May 9, 2024 and June 10, 2024.

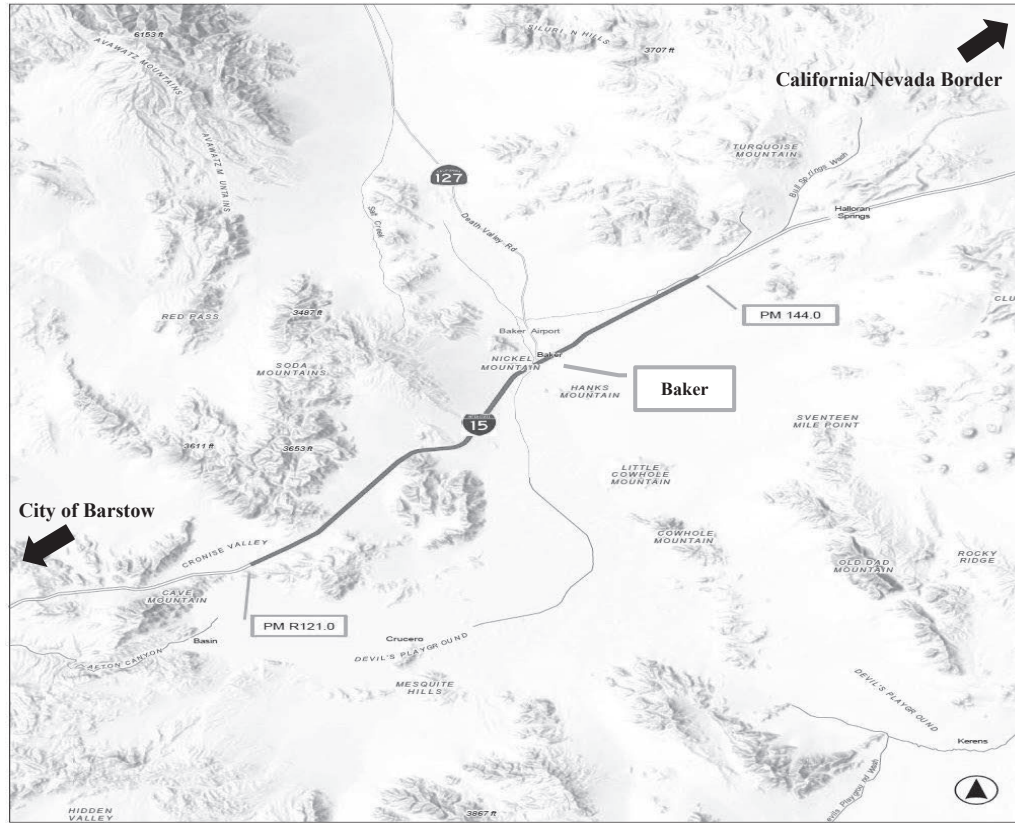
The published newspaper notice and comments received during public circulation are included below.



PUBLIC NOTICE

Notice of Intent to Adopt a Mitigated Negative Declaration

SBD 15 Pavement Rehab



WHAT'S BEING PLANNED

The California Department of Transportation (Caltrans) proposes a multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15). The limits of work for this project are along I-15 between post mile (PM) R121.0 and PM 144.0 in San Bernardino County, near Baker, 1 mile north of Basin Road Overcrossing to 5.5 miles north of East Baker Overcrossing. The improvements include 0.15' mill and 0.25' overlay, and 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2. The project will also include upgrading the guardrails, replacing AC dikes, restriping (all lanes), sleeve-lining 6 culverts, rock slope protection (RSP) and guardrail installation at PM R137.67, upgrading 18 sign panels (Type 11), rehabilitating 12 freeway lighting Type 10, 15, 30, and 31, and removing vegetation. All work will be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) will be required for each culvert and guardrail location to facilitate the upgrades.

WHY THIS AD?

Caltrans has studied the effects this project may have on the environment. Our studies show it will not significantly affect the quality of the environment. The report that explains why is called an *Initial Study (with Proposed Mitigated Negative Declaration)*. This notice is to tell you of the preparation of the *Initial Study (with Proposed Mitigated Negative Declaration)* and of its availability for you to read, and to also offer the opportunity to request a public hearing or to provide comments, and the intent to adopt this Mitigated Negative Declaration.

WHAT'S AVAILABLE?

Copies of the *Initial Study (with Proposed Mitigated Negative Declaration)*, including associated maps, and other project information are available by request via email (SBD15PavementRehab@dot.ca.gov) or via phone at (909)261-3955.

WHERE YOU COME IN

Do you have any comments about processing the project with an *Initial Study with Proposed Mitigated Negative Declaration*? Do you disagree with the findings of our study as set forth in the *Initial Study with Proposed Mitigated Negative Declaration*? Would you care to make any other comments on the project? We'd like to hear what you think. Please submit your comments in writing or via email, no later than June 10, 2024 to:

California Department of Transportation
ATTN: Malisa Lieng, Senior Environmental Planner
464 W. 4th Street, MS 823
San Bernardino, CA 92401-1400;
or via email to SBD15PavementRehab@dot.ca.gov
Please use "SBD 15 Pavement Rehab" in the subject line of the email.

The date we will begin accepting comments is May 9, 2024. If there are no major comments, Caltrans will proceed with the project's design.

CONTACT

For more information about this project please contact the Caltrans District 8 Office of Public Affairs at (909) 383-4631. For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, call or write to Malisa Lieng, Senior Environmental Planner, 464 W. 4th Street, MS 823, San Bernardino, California 92401-1400; (909)261-3955; or use the California Relay Service 1-800-735-2929 (TTY to Voice), 1-800-735-2922 (Voice to TTY), 1-800-854-7784 (From or to Speech to Speech), or dial 711.

CNSB # 3811469

WAR IN THE MIDDLE EAST

Israel says it has reopened key crossing into Gaza

By Joseph Krauss,
Samy Magdy
and Melanie Lidman
The Associated Press

JERUSALEM — The Israeli military said Wednesday it has reopened its Kerem Shalom crossing into Gaza after days of closure, but the U.N. said no humanitarian aid has yet entered, and there is no one to receive it on the Palestinian side after workers fled during Israel's military incursion in the area.

The Kerem Shalom crossing between Gaza and Israel was closed over the weekend after a Hamas rocket attack killed four Israeli soldiers nearby, and on Tuesday, an Israeli tank brigade seized the nearby Rafah crossing between Gaza and Egypt, forcing its closure. The two facilities are the main terminals for entry of food, medicine and other supplies essential for the survival of Gaza's population of 2.3 million Palestinians.

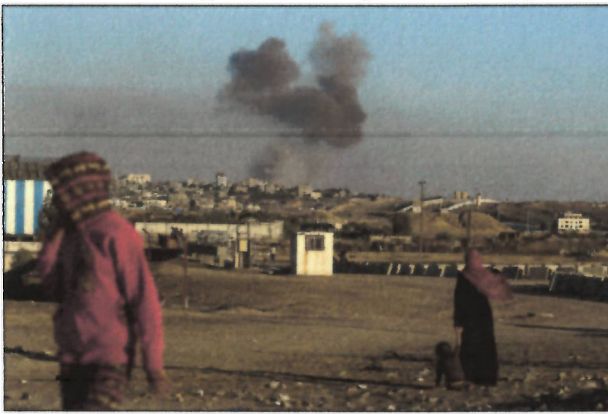
The Israeli foray did not appear to be the start of the full-scale invasion of the city of Rafah that Israel has repeatedly promised. But aid officials warn that the prolonged closure of the two crossings could cause the collapse of aid operations, worsening the humanitarian crisis in Gaza, where the U.N. says a "full-blown famine" is already underway in the north.

The United States paused shipment of bombs to Israel last week over concerns that Israel was approaching a decision on launching a full-scale assault on Rafah, in a further widening of divisions between the two close allies.

The U.S. says it is concerned over the fate of around 1.3 million Palestinians crammed into Rafah, most of whom fled fighting elsewhere. Israel says Rafah is Hamas' last stronghold and that a wider offensive there is needed to dismantle the group's military and governing capabilities.

The U.S., Egypt and Qatar are meanwhile ramping up efforts to close the gaps in a possible agreement for at least a temporary cease-fire and the release of some of the scores of Israeli hostages still held by Hamas. Israel has linked the threatened Rafah operation to the fate of those negotiations. CIA chief William Burns, who has been shuttling around the region for talks on the cease-fire deal, met Wednesday with Israeli Prime Minister Benjamin Netanyahu, a U.S. official said, speaking on condition of anonymity to discuss closed-door negotiations.

With the seizure of Rafah, Israel now controls all of Gaza's crossings for the first time since it withdrew troops and settlers from the territory nearly two decades ago, though it has maintained a blockade with Egypt's cooperation for most of that time. The Rafah crossing has been a vital conduit for humanitarian aid since the start of the war and is the only place



Smoke rises Tuesday following an Israeli airstrike near the wall between Egypt and Rafah, southern Gaza Strip.

where people can enter and exit. Kerem Shalom is Gaza's main cargo terminal.

The U.N. World Food Program deputy executive director, Carl Skau, told The Associated Press that the agency has lost access to its Gaza food warehouse in Rafah, which he said was "communicated as a no-go zone."

"We understand that it's still there, but we are extremely worried of looting," Skau said during a visit to neighboring Lebanon, adding that a U.N. logistics warehouse in Rafah had already been looted. He said the WFP was able to secure a warehouse in Deir al-Balah, in central Gaza, but has not stocked it with food yet.

Associated Press journalists heard sporadic explosions and gunfire in the area of the Rafah crossing overnight, including two large blasts early Wednesday. On Wednesday afternoon, hospital records showed at least 25 people were wounded after Israeli artillery fire struck a part of central Rafah, an area Israel did not call on Palestinians to evacuate ahead of its operation. The military had

no immediate comment.

An Israeli military official said that Hamas had fired unidentified projectiles at Kerem Shalom on Wednesday, confirming an earlier claim from the militant group. There were no immediate reports of serious injuries. The official, speaking on condition of anonymity pending an official announcement, said the attack would make it difficult to continue aid deliveries but that the crossing would reopen today.

COGAT, the Israeli military body in charge of Palestinian civilian affairs, said the Kerem Shalom crossing reopened early Wednesday and released video of what it said were aid trucks entering the half-mile area of the crossing. The video then showed their cargo being unloaded. Typically, Palestinian drivers from the other side of the crossing must pick up the aid after it is unloaded and drive it to distribution destinations within Gaza. The video did not show the aid being picked up.

Juliette Touma, the director of communications for UNRWA, said no aid

had entered as of late afternoon Wednesday and that the U.N. agency had been forced to ration fuel, which is imported through Rafah.

Gaza's Health Ministry meanwhile said at least 46 patients and wounded people who had been scheduled to leave Tuesday for medical treatment have been left stranded.

U.N. agencies and aid groups have ramped up humanitarian assistance in recent weeks as Israel has lifted some restrictions and opened an additional crossing in the north under pressure from the United States, its closest ally.

But aid workers say the closure of Rafah, which is the only gateway for the entry of fuel for trucks and generators, could have severe repercussions, and the U.N. says northern Gaza is already in a state of "full-blown famine."

Skau of the WFP said some food has been delivered to the north in recent weeks.

"When we got up there, people were coming out of the rubble extremely weak, not even able to carry the box of food," he said, adding that an increase in infectious diseases among children could worsen the crisis in the north.

"It's that combination of widespread disease and acute malnutrition that is that deadly cocktail," he said.

COGAT said 60 aid trucks entered through the northern crossing on Tuesday. Some 500 trucks entered Gaza every day before the war.

The war began when Hamas militants breached Israel's defenses on Oct. 7 and swept through nearby army bases and farming communities, killing some 1,200 people, mostly civil-

ians, and abducting another 250. Hamas is still believed to be holding around 100 hostages and the remains of more than 30 others after most of the rest were released during a November cease-fire. Israel, the U.S. and the European Union consider Hamas a terrorist organization.

The war has killed over 34,800 Palestinians, according to Gaza health officials, and has driven some 80% of Gaza's population of 2.3 million Palestinians from their homes. Israel's military campaign has been one of the deadliest and most destructive in recent history, reducing large parts of Gaza to rubble.

Biden has repeatedly warned Netanyahu against launching an invasion of Rafah. But Netanyahu's far-right coalition partners have threatened to bring down his government if he calls off an offensive or makes too many concessions in the cease-fire talks.

The U.S. has historically provided Israel with enormous amounts of military aid, which has only accelerated since the start of the war.

The paused shipment was supposed to consist of 1,800 2,000-pound bombs and 1,700 smaller ones, with the U.S. concern focused on how the larger bombs could be used in a dense urban setting, a U.S. official said Tuesday on the condition of anonymity to discuss the sensitive matter. The official said no final decision had been made yet on proceeding with the shipment.

Magdy reported from Cairo and Lidman from Tel Aviv. Israel Associated Press journalists Aamer Moahani and Zeki Miller in Washington, Kareem Chehaye in Beirut and Julia Frankel in Beirut contributed to this report.

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Baker

WHAT'S BEING PLANNED
The California Department of Transportation (Caltrans) proposes a multi-unit project with minor pavement rehabilitation improvements on Interstate 15 (I-15). The limits of work for this project are along I-15 between post mile (PM) R121.8 and PM 144.9 in San Bernardino County, near Baker, 1 mile north of Baum Road Overcrossing on 5.5 miles north of East Baker Overcrossing. The improvements include 8' 15" mill and 0.25" overlay, and 2' shoulder hacking on each side of the roadway on the mainline, shoulders, and overpass ramps, from PM R121.4 to PM R137.2. The project will also include upgrading the guardrails, replacing AC dikes, regrading (fill lanes), knee-levelling 6 culverts, rock slope protection (RSP) and guardrail installation at PM R137.7, upgrading 18 signs panels (Type 1), rehabilitating 12 freeway lighting Type 10, 15, 35, and 31, and removing vegetation. All work will be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) will be required for each culvert and guardrail location to facilitate the upgrades.

WHY THIS AID?
Caltrans has studied the effects this project may have on the environment. Our studies show it will not significantly affect the quality of the environment. The report that explains why is called an Initial Study with Proposed Mitigated Negative Declaration. This notice is to tell you of the preparation of the Initial Study with Proposed Mitigated Negative Declaration and of its availability for you to read, and to also offer the opportunity to request a public hearing or to provide comments, and the intent to adopt this Mitigated Negative Declaration.

WHAT'S AVAILABLE?
(Copies of the Initial Study with Proposed Mitigated Negative Declaration) including associated maps, and other project information are available by request via email (SBD15PavementRehab@dot.ca.gov) or via phone at (909)261-7955.

WHERE YOU COME IN
Do you have any comments about processing the project with an Initial Study with Proposed Mitigated Negative Declaration? Do you disagree with the findings of our study as set forth in the Initial Study with Proposed Mitigated Negative Declaration? Would you care to make any other comments on the project? We'd like to hear what you think. Please submit your comments in writing or via email, no later than June 15, 2024 to:

California Department of Transportation
ATTN: Malia Lintz, Senior Environmental Planner
484 W. 4th Street, MS 823
San Bernardino, CA 92401-1400,
or via email to SBD15PavementRehab@dot.ca.gov
Please use "SBD 15 Pavement Rehab" in the subject line of the email.

The date we will begin accepting comments is May 9, 2024. If there are no major comments, Caltrans will proceed with the project's design.

CONTACT
For more information about this project please contact the Caltrans District 8 Office of Public Affairs at (909) 383-4631. For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audio cassette, or on computer disk. To obtain a copy in one of these alternate formats, call or write to Malia Lintz, Senior Environmental Planner, 484 W. 4th Street, MS 823, San Bernardino, California 92401-1400, (909)261-7955, or use the California Relay Service 1-800-735-2929 (TTY in Voice), 1-800-735-2922 (Voice to TTY), 1-800-854-7784 (From text to Speech to Speech), or dial 711.



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C220
Ontario, CA 91764
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



June 10, 2024

Malisa Lieng, Senior Environmental Planner
California Department of Transportation, District 8
464 West Fourth Street, 6th Floor, MS 823
San Bernardino, CA 92401

Subject: Initial Study/Mitigated Negative Declaration, SBD-15 Pavement Rehab (Project), State Clearinghouse No. 2024050406, County of San Bernardino

Dear Ms. Lieng:

The California Department of Fish and Wildlife (CDFW) received an Initial Study/Mitigated Negative Declaration (IS/MND) from the California Department of Transportation, District 8 (Caltrans) for the 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, we appreciate 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 the Fish and Game Code.

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.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans District 8

Objective: The objective of the Project is to improve Interstate 15 (I-15) between post mile (PM) R121.0 and PM 144.0 to require minimal maintenance, extend the life of the highway, improve ride quality, and upgrade other highway features that are worn out or functionally obsolete. Primary Project activities include:

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

1.1: Thank you for reviewing the Initial Study. Caltrans appreciates the California Department of Fish and Wildlife's comments.

1.1

Malisa Lieng, Senior Environmental Planner
California Department of Transportation, District 8
June 10, 2024
Page 2 of 28

- Placing 0.15' mill and 0.25' overlay and 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2
- Upgrading the guardrails
- Replacing asphalt concrete (AC) dikes
- Restriping all lanes
- Sleeve-lining 6 culverts
- Installing rock slope protection (RSP) and guardrail at PM R137.67
- Upgrading 18 sign panels (Type 11)
- Rehabilitating 12 freeway lights (Type 10, 15, 30, and 31)
- Removing vegetation

Location: The Project site is in the Mojave Desert and located on I-15 near Baker, south of Basin Road to 7.4 miles north of Route 127 from PM R121.0 to PM 144.0 in San Bernardino County, California at latitude 35°16'3" N and longitude 116°4'26" W.

Timeframe: None provided.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans District 8 in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

I. Mitigation Measure or Alternative and Related Impact Shortcoming

COMMENT #1: Nesting Birds

Section 2.2.4 (d), Page 11, 14; Appendix B, Page 80

Issue: The Project may have impacts on nesting birds, including CESA-listed birds, CDFW Species of Special Concern (SSC), and common birds that are subject to Fish and Game Code Sections 3503, 3503.5, and 3513, and the Migratory Bird Treaty Act of 1918.

Specific impact: Project implementation could result in the loss of nesting and/or foraging habitat for (non-)passerine and raptor species.

Why impact would occur: Nesting avian species could be directly or indirectly impacted during construction and for the life of the Project through the removal of potential foraging habitat and loss of and/or modification of habitat features caused by pavement improvements, the installation of shoulder backing and guardrail, drainage improvements, sign panel replacements, freeway lighting rehabilitation, temporal changes in noise and vibration, and the removal of vegetation. Nest destruction, nest abandonment, behavioral disturbance, increased risk of predation, and degradation of suitable habitat could also lead to significant impacts to nesting avian species and local populations.

The timing of the bird nesting season varies greatly depending on several factors, such as the bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). CDFW staff have observed that changing climate conditions may result in the nesting bird season occurring earlier and/or later in the year than historical nesting season dates. CDFW recommends the completion of nesting bird survey regardless of time of year to ensure compliance with all applicable laws pertaining to nesting and to avoid take of nests.

Evidence impact would be significant: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory

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1.2: The project would implement BIO-Avian 1 which states that Pre-construction surveys would occur if the project activities cannot avoid the nesting bird season. The buffer areas identified in BIO-Avian-1 are appropriate for the project scope and the avian species in the project area. Caltrans will abide by the terms and conditions of the MBTA and the California Fish and Game Code.

Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.), Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure BIO-Avian 1: To address the above issues and help avoid unlawfully taking of nesting birds, CDFW requests Caltrans revise the following mitigation measure in the final IS/MND as follows (edits are in ~~strike~~through and bold).

BIO-Avian 1: Preconstruction Nesting Bird Survey: Project activities shall not result in impacts to nesting birds or result in the take or removal of nests or eggs unless as otherwise provided for under CDFW and USFWS regulations. If project activities cannot avoid the nesting bird season, February 1 – September 30, then Preconstruction nesting bird surveys must be conducted by a qualified biologist experienced with: identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures in areas of suitable habitat including trees, shrubs, bare ground, burrows, cavities, and structures (e.g., bridges) within the projects limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and avoid nesting birds. If an active avian nest is located, a no-construction buffer (400 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) would shall be established and monitored for by a qualified biologist. Buffers shall be delineated by temporary flagging or other means and remain in effect as long as construction is occurring or until the nest is no longer active. Any active nests shall be continuously monitored by a qualified biologist during Project activities that have the potential to cause disturbance to any nesting birds to ensure avoidance buffers are effective. Avoidance buffers shall be expanded and/or modified as needed by the qualified biologist if any nesting bird shows behavioral responses resulting from Project related activities. Concurrent and further surveys shall occur as Project construction progresses, as the nature of the Project is linear in fashion.

COMMENT #2: Bighorn Sheep (*Ovis canadensis nelsoni*)

Section 2.2.4 (a), Page 11-12; Appendix B, Page 63-65

Issue: The Project may have impacts on fully protected species, including desert bighorn sheep. Unless otherwise authorized pursuant to Fish and Game Code section 2081.15, fully protected species may not be taken or possessed at any time.

Specific impact: The IS/MND does not adequately analyze Project impacts on desert bighorn sheep.

Why impact would occur: The Project as described in the IS/MND has the potential to adversely impact fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. Road construction and use thereof could result in bighorn sheep mortality and can cause shifts in home ranges and movement.² MacArthur et al. (1979) found that the energy expenditure, as well as heart and metabolic rates, of female bighorn sheep increased near roads regardless of how often they were used.³ Additionally, roads can be used as corridors for predators

² Trombulak, S. C., and C. A. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology* 14:18–30.

³ MacArthur, R. A., R. H. Johnston, and V. Geist. 1979. Factors influencing heart rate in free ranging bighorn sheep: a physiological approach to the study of wildlife harassment. *Canadian Journal of Zoology* 57:2010–2021.

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1.3: Caltrans appreciates the comment regarding Bighorn Sheep. The suggested revisions to the measure could not be implemented. However, the project will implement measures for lighting and vehicle washing during construction.

The measure, BIO-General 2: Temporary Artificial Lighting Restrictions, has been modified to include bighorn sheep habitat and would ensure that the construction light would not spill over into surrounding areas.

The standard Caltrans vehicle washing measure, Bio-General-PSM-1 - Vehicle Washing, will be implemented. The measure specifies that the contractor will wash equipment prior to entering the project site. The biologist will coordinate with the Resident Engineer to inspect the vehicles and equipment prior to the initiation of work to verify that they have been washed.

of bighorn sheep. Noise from generators or other equipment can disrupt bighorn sheep and limit their ability to hear potential predators.⁴ Further, exposure to artificial light has been shown to suppress the immune response in mammals resulting in increased pathogen and parasite infections^{5,6}; as disease is a primary threat to bighorn sheep, this is of particular concern to CDFW.⁷ Lastly, pathogen transmission in desert bighorn sheep is not well understood, therefore general sanitary practices are recommended.

Evidence impact would be significant: Fully protected species, such as desert bighorn sheep, may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research,
- Efforts to recover a fully protected, endangered, or threatened species,
- Live capture and relocation of a bird species for the protection of livestock, or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Specified types of infrastructure projects may be eligible for an incidental take permit for unavoidable impacts to fully protected species if certain conditions are met (see Fish & G. Code §2061.15). Project proponents should consult with CDFW early in the project planning process.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure BIO-General-PSM 1, BIO-BHS 1 (NEW): To address the above issues and help avoid unlawfully taking of desert bighorn sheep, CDFW requests Caltrans revise and add the following mitigation measures in the final IS/MND as follows (edits are in ~~strike through~~ and **bold**).

BIO-General-PSM 1: Vehicle Washing: ~~Comply with 2022 SSP or latest version. It would be required that the contractor would-~~ **shall** wash equipment prior to entering the project site. The biologist ~~would~~ **shall** coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation of work to verify that they have been washed. **All equipment shall be free of materials including noxious and nuisance weeds, aquatic invasive species, oil, grease, hydraulic fluid, soil, and other debris** The following shall be adhered to:

- **Equipment Certification:** All equipment shall be certified as decontaminated and require re-certification upon entry to the Project once equipment leaves the Project footprint.
- **Decontamination of Project Equipment:** All tools, waders and boots, vehicles, trailers, and other equipment shall be decontaminated. **Project gear and equipment shall be decontaminated utilizing one of four methods: (1) drying, (2) using a hot water soak, (3) hot-water pressure washing, or (4) freezing, as appropriate to the type of gear or equipment. For all four methods, the decontamination process shall begin by thoroughly scrubbing equipment, paying close attention to hard-to-reach areas, and cleaning areas with a stiff-bristled brush to remove all plant, seeds, soil, and other organisms. To decontaminate by drying, equipment shall be allowed to dry thoroughly (i.e., until there is a complete absence of water and all plant, seeds, and soil), preferably in the sun, for a minimum of 48 hours. To decontaminate using hot water, equipment shall either be immersed in 140°F water (or hotter) and be**

⁴ Francis, C. D., and J. R. Barber. 2013. A framework for understanding noise impacts on wildlife: An urgent conservation priority. *Frontiers in Ecology and the Environment* 11:305–313.

⁵ Navara, K. J., and R. J. Nelson. 2007. The dark side of light at night: Physiological, epidemiological, and ecological consequences. *Journal of Pineal Research* 43:215–224.

⁶ Bedrosian, T. A., L. K. Fonken, J. C. Walton, and R. J. Nelson. 2011. Chronic exposure to dim light at night suppresses immune responses in Siberian hamsters. *Biology Letters* 7:468–471.

⁷ U.S. Fish and Wildlife Service [USFWS]. 2007. Recovery plan for the Sierra Nevada bighorn sheep. California/Nevada Operations Office, USFWS, Sacramento, CA, USA.

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allowed to soak for a minimum of 5 minutes or shall be pressure washed with hot water that is at a minimum 140°F at the point of contact or 155°F at the nozzle. To decontaminate by freezing, equipment shall be placed in a freezer that is 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used in contact with water or wet soil within a different watershed, and returned to the Project site.

- **Decontamination Sites:** Decontamination of vehicles and other Project gear and equipment shall be performed in a designated location where runoff can be contained and not allowed to pass into any river, lake, or stream and associated riparian areas and other sensitive habitat areas. Cleaning of equipment may occur at a location that contains and recycles resulting wastewater.

BIO-BHS 1 (NEW) Decontamination of Pathogens: To prevent potential transmission of disease from domestic animals to wild desert bighorn sheep, Project proponent shall require all workers to decontaminate work boots prior to entering Project areas. Decontamination shall involve scrubbing of the soles of work boots with a 10% bleach solution to remove all organic matter and kill pathogens. Alternatively, footwear may be changed to ensure that potentially contaminated footwear does not enter Project areas. Heavy equipment previously used in livestock operations, including, but not limited to, sheep and goat livestock operations, or where roadside clearing has occurred through grazing shall not be utilized for Project activities.

COMMENT 3: Bats

Appendix B Page 63, 65

Issue: The Project has the potential to impact bat species, including but not limited to, pallid bat (*Antrozous pallidus*) (CDFW SSC), spotted bat (*Eudermis maculatum*) (CDFW SSC), fringed myotis (*Myotis thysanodes*), and big-eared bat (*Corynorhinus townsendii*) (CDFW SSC).

Specific impact: The Project site contains suitable habitat for bats, including bridge structures and under road crossings. Project activities and construction, such as mill and overlay and shoulder backing activities occurring near or under bridges and crossings, artificial lighting, and noise and vibrations may impact and disrupt the behaviors of bats and result in possible abandonment of a roost (e.g., maternity roost).

Why impact would occur:

Pallid bats have records in the California Natural Diversity Database (CNDDB) as occurring near the Project location and are known to roost in bridges, such as that present within the Project site. Spotted bats are known to occur in the Mojave Desert and use crevices to roost. Fringed myotis have records on CNDDB near the Project extent and are known to use bridges as night and maternity roosts. Townsends big-eared bats use human made structures to roost and have occurrence records on CNDDB adjacent to the Project extent.

According to the IS/MND's Natural Environmental Study (Minimal Impact) (NESMI), suitable habitat occurs within the study area and Project area, and includes rock crevices, rock outcrops, bridges, and culverts. The Project will directly impact culverts and will occur near or at bridges. The Project also has the potential to occur adjacent to rock crevices and outcrops.

Evidence impact would be significant: Bat populations are declining throughout southern California due to loss of roosting habitat and low reproductive turnover. Fringed myotis, Townsend's big-eared bat, and pallid bat are easily disturbed and very sensitive to disturbances at roosting sites. The protection of bat roosting habitat, particularly habitat identified as maternity or nursery sites, is vitally important to prevent

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1.4: Townsend's big-eared bat has been added to BIO-General 4: Pre-construction surveys, BIO-General 5: Work Avoidance, and Bio-General-7: Worker Environmental Awareness Program (WEAP).

Caltrans will conduct a bat habitat assessment of the Project Impact Area. If the habitat assessment determines that bats are present, a Bat Management & Mitigation Plan (BMMP) will be developed as discussed below.

"Bio-Bat-1: Bat Management & Mitigation Plan. A bat habitat assessment of the Project Impact Area will be conducted by a qualified biologist. Should the bat habitat assessment warrant further surveys and require a BMMP, then a BMMP will be developed and implemented in accordance with CDFW guidelines."

BIO-General 5 has a work avoidance from April 1 to August 31, within 300 feet of all potential roosting structures in the project impact area. CDFW's suggestion of work avoidance from November to February is not feasible due to the nature of the project scope and the logistics involved in construction staging. If bats are determined to be present during construction activities, the BMMP will determine appropriate measures to avoid impacts.

adverse effects to, and further loss of remaining bat populations. Impacts to bat maternity colonies, could be considered potentially significant.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure BIO-General 4, and 5: CDFW appreciates the incorporation of BIO General 4, and 5 aimed to avoid and minimize impacts to bats. CDFW recommends the below revisions to BIO-General 4, and 5 (edits are ~~struckthrough~~ and **bold**) and the adoption of BIO-Bats 1.

BIO-General 4: Preconstruction Surveys: Preconstruction surveys for fringed myotis, pallid bat, spotted bat, **Townsend's big-eared bat**, and other bat species must be conducted by a qualified mammal and bat biologist within the Project Impact Area (PIA) within 14 days prior to the **initiation** of project activities and following a bat roosting habitat suitability assessment **as follows. During appropriate weather conditions and appropriate time of year for the species, a daytime assessment shall be conducted by a qualified bat biologist to examine areas that are suitable for bat use, including maternity roosts. During appropriate weather conditions and appropriate time of year for the species, nighttime bat visual surveys shall be conducted to confirm whether the areas with suitable habitat are utilized by bats. If bats are found roosting within and adjacent to the Project Impact Area, a qualified biologist shall conduct emergence surveys and perform exit counts to approximate the number of bats. Acoustic monitoring shall also be used during these surveys to identify the bat species present, surveys shall also identify roost type and roost status. If one of the bat species listed above or other special status bat species or sign thereof (e.g., occupied roosts, urine staining, guano masses, etc.) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and /or-agency coordination may-shall be required. Additional measures shall be included in a Bat Avoidance and Monitoring Plan submitted to CDFW at least seven days prior to the start of Project activities for review and written approval. Project activities may not start until CDFW's written approval of the Bat Avoidance and Monitoring Plan has been provided. The Bat Avoidance and Monitoring Plan shall include: (1) an assessment of all Project impacts to bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect bats; (3) compensatory mitigation for permanent impacts to roosts if impacted, such as, but not limited to, constructing artificial bat roosting habitats (e.g., bat boxes or panels).**

BIO-General 5: Work Avoidance: To address impacts to fringed myotis, pallid bat, spotted bat, **Townsend's big-eared bat**, and other bat species, ~~avoid~~ project activities ~~shall be avoided from April 1 to August 31~~ within 300 feet of all ~~potential~~-roosting structures in the project impact area **from April 1 to August 31 and November to February to avoid the maternity and hibernation season, respectively.**

COMMENT #4: Burrowing Owl

Issue: The project has the potential to result in permanent and temporary loss, degradation, and impacts to burrowing owl habitat. The potential of direct take of burrowing owl may also occur during the course of the Project activities and life of Project. The IS/MND did not consider the potential presence of burrowing owl, a CDFW SCC that has potential to occur in the Project area.

Specific impact: The Project includes the potential to impact burrowing owl through the collapsing of burrows, entombment, displacement, direct take associated with vehicle and equipment strike, indirect take associated with Project activities such as attracting predators, reduction of habitat and habitat quality associated with road infrastructure activities. The Project as described will cause permanent and temporary impacts to burrowing owl foraging and nesting habitat.

Why impact would occur: Burrowing owl could be directly impacted during construction and for the life of the Project through the removal of potential foraging habitat, and loss of habitat features caused by the installation of shoulder backing. Nest

1.5: Although no burrowing owls or burrowing owl sign were observed during the habitat assessment or subsequent surveys conducted for the project, Caltrans acknowledges the highly mobile nature of this species, and has added the following measure to protect burrowing owl:

BIO-Avian-2 - Preconstruction Burrowing Owl Survey: Two burrowing owl (BUOW) preconstruction surveys must be performed by a qualified biologist: one survey 14-30 days prior to project activities, and one survey 24 hours prior to project activities. The surveys will be conducted within the area of suitable BUOW habitat within State right-of-way and within the project limits, as identified in the Burrowing Owl Habitat Assessment. If the pre-construction surveys confirm occupied burrowing owl habitat within this area, the qualified biologist will coordinate with CDFW on additional measures that may be needed to ensure that no take of burrowing owl occurs.

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destruction, nest abandonment, disturbance from construction noise and activities, increased risk of predation and degradation of habitat could also all lead to significant impacts to burrowing owl individuals and local populations. Habitat conversion may occur indirectly through the introduction of invasive species, which could also negatively affect burrowing owls. The IS/MND does not disclose the potential for impacts to burrowing owl and their habitats as the species was not assessed in the Biological Resources section of the IS/MND. Burrowing owls are known to occur within a reasonable dispersal distance (27 kilometers) of the Project area and potential nesting and foraging habitat occurs within and adjacent to the Project Impact Area (PIA)⁸. Burrowing owls in California have been known to disperse from a range of up to 50-150 kilometers⁹.

Evidence impact would be significant: Burrowing owls are regulated under Fish and Game Code section 3503.5, are a CDFW SSC, and have recently been petitioned for consideration to be listed as Endangered or Threatened under CESA. The Project, as described, may result in injury, direct mortality, indirect mortality, disruption of breeding behavior, and/or may reduce reproductive capacity of the species. However, because the IS/MND does not include mitigation measures specific to burrowing owl, the IS/MND may not adequately mitigate the potential impacts to burrowing owl to a level of less than significant. CDFW considers the direct and indirect take of burrowing owl, and the loss of the species' habitat as a significant impact, unless mitigated to a level of less than significant and in compliance with State (i.e., Fish and Game Code sections 3503.5, etc.) and Federal laws (i.e., Migratory Bird Treaty Act).

Recommended Potentially Feasible Mitigation Measure: CDFW recommends the adoption of Bio-Avian-2 below in the final IS/MND to ensure impacts to burrowing owl, and their habitats are mitigated to a level of less than significant.

Bio-Avian-2 Pre-construction Burrowing Owl Surveys (New): The following burrowing owl preconstruction surveys must be performed by a qualified biologist: one survey 14 to 30 days prior to Project activities; one survey 24 hours prior to Project activities; and burrowing owl preconstruction surveys shall be conducted in accordance with the 2012 Staff Report on Burrowing Owl Mitigation (Staff Report) (See: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>) prior to vegetation removal or ground disturbing activities. If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities and implementing the measures of the Burrowing Owl Plan.

The Burrowing Owl Plan shall describe proposed avoidance, monitoring, relocation, minimization, and/or mitigation actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrows cannot be avoided, the Burrowing Owl Plan shall also describe minimization and compensatory mitigation actions that will be implemented. Proposed implementation of burrow exclusion (i.e., passive relocation) and closure shall only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. The Burrowing Owl Plan shall identify

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⁸ Arnold, R., & Moore, P. (2006, October 11). Burrowing owl [ds45]. Calif. Dept. of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved May 19, 2024, from <https://wildlife.ca.gov/Data/BIOS>

⁹ Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

compensatory mitigation for the temporary or permanent loss of occupied burrow(s) and habitat consistent with the "Mitigation Impacts" section of the 2012 Staff Report and Caltrans shall implement CDFW approved mitigation prior to the initiation of Project activities. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to burrowing owls. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated burrowing owls shall also be included in the Burrowing Owl Plan.

COMMENT #5: Desert Tortoise

Section 1.1, Page 5; Section 2.2.4 (a), Page 11, 12; Appendix B

Issue: The Project has the potential to result in take of desert tortoise, a CESA-listed species, as well as impact wildlife connectivity for the species.

Specific impact: Project implementation could result in direct and/or indirect take of desert tortoise including but not limited to collapsing of desert tortoise burrows, entombment, vehicle and equipment strike, degradation of habitat, and reduction of species movement. The Project also has the potential to result in loss of connectivity across the highway from the installation of RSP.

Why impact would occur: The IS/MND indicates that the Project would have a less than significant effect on desert tortoise with mitigation incorporated and includes several measures to avoid, minimize, and/or mitigate impacts to desert tortoise. However, the IS/MND does not include measures to survey for desert tortoise in the Project area prior to construction. Without these surveys, the Project may not be able to appropriately identify and therefore avoid, minimize, and/or mitigate impacts to desert tortoise. BIO-Reptile 1 requires attaching surveyor flagging to equipment as a reminder to construction personnel to check under equipment for special status reptiles that may be present, such as desert tortoise and Mojave fringe-toed lizard, prior to operating the equipment. CDFW also recommends that all cars and trucks be checked prior to operation. BIO-Reptile 6 requires installation of temporary desert tortoise fencing to exclude desert tortoise from specific Project areas. However, suitable habitat for desert tortoise is present throughout the Project area and installation of temporary desert tortoise fencing is limited to within drainages and any equipment staging, storing, and borrow sites. Thus, additional temporary fencing from that proposed in BIO-Reptile 6 may be needed. BIO-Reptile 6 also considers a 50-foot avoidance buffer, please note that absent take authorization, impacts to desert tortoise must be fully avoided.

Desert tortoises have been documented utilizing culverts for connectivity and it is known that RSP presents a trapping hazard for desert tortoise. Error! Bookmark not defined. Error! Bookmark not defined. BIO-Reptile 8 considers partially filling interstitial spaces within RSP with grout or sand, however, absent additional design information, hydraulic analysis, and best available science in the IS/MND, CDFW is unclear whether the methods proposed are suitable to avoid or minimize impacts to desert tortoise. In conclusion, the IS/MND inadequately discloses the potentially significant impacts of the Project to desert tortoise including the impacts associated with the final designs, such as migratory impediments associated with RSP in the stream channel bed, in addition to identifying ways these impacts could be avoided, significantly reduced, and/or mitigated for through the inclusion of feasible mitigation measures.

Evidence impact would be significant: Desert tortoise was recently uplisted from threatened to endangered under CESA through a unanimous vote by the Fish and Game Commission in April 2024, highlighting the importance and necessity to avoid impacts to desert tortoise, its habitat, and connectivity thereof.

The IS/MND does not provide any information relative to desert tortoise including baseline data or field surveys, and only mentions that "due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a

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1.6: The scope of the project would take place within the established roadway prism, except for areas where culvert and RSP work would take place. The measures discussed in the IS/MND and NES(MI) would ensure that there is no take of desert tortoise, either within the roadway prism or in culvert or RSP areas. A Contractor Supplied Biologist (CSB) will monitor the project and the surrounding habitats throughout the construction of the project. The CSB would ensure no take of desert tortoise within the roadway prism. Additionally, the Temporary desert tortoise fencing would ensure no take of desert tortoise in culvert and RSP areas and staging areas.

Caltrans would modify or add to these measures as noted below:

- Bio-General 4: Preconstruction surveys will be conducted within established and appropriate USFWS and CDFW protocols. Caltrans will add a desert tortoise pre-construction survey to supplement CSB monitoring and DT fencing.
- Bio-Reptile 1 has been modified to include all cars and trucks on the construction site.
- BIO-Reptile 6: The Biological Monitor would ensure there is no take of desert tortoise due to desert tortoise entering the project site. Temporary desert tortoise fencing will be used in any areas of high tortoise activity and staging and storage areas.
- BIO-Reptile 8: Caltrans will provide design schematics of RSP including partially- and fully-filled interstitial spaces to CDFW for review during the project Design phase (Phase 1). Note that any measure related to project design can't be fully evaluated regarding feasibility until the Design phase.

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presence/absence survey must be conducted in the PA&ED phase to determine if desert tortoise is active in the project area.¹⁹ CDFW records indicate that desert tortoise was observed and documented on CNDDB's unprocessed data layer north of Baker and within a half-mile from the Project Area¹⁰. All of these records occur within a continuous band of unimpeded habitat for which desert tortoise has the potential to move freely throughout the Project site in search for mates, food, water, or habitat. In addition, the Project, as described, would remove potential habitat for desert tortoise. CDFW considers the take of desert tortoise and the loss of the species' habitat as a significant impact, unless mitigated to a level of less than significant.

The IS/MND includes a measure for desert tortoise translocation (BIO-DT-2); however, does not consider that handling of CESA-listed species constitutes take under CESA in the form of catch, pursue, capture, and/or attempting to catch, pursue, and/or capture. Further, the IS/MND, under Table 1-1 "Permits and Approvals", considers obtaining take authorization for desert tortoise with the U.S. Fish and Wildlife Service through the approved Programmatic Biological Opinion, but does not consider take authorization from CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure # BIO-General 8, BIO-General 10, BIO-Reptile 1, BIO-Reptile 5, BIO-Reptile 6, BIO-Reptile 8, BIO-DT 2, BIO-DT 6, and 4 NEW Measures: To address the above issues and help avoid unlawfully taking of desert tortoise, CDFW requests Caltrans revise the following mitigation measures in the final IS/MND as follows (edits are in ~~strike~~through and **bold**).

BIO-General 8 Biological Monitor: A qualified biologist must monitor project activities and **provide reports to CDFW weekly** to ensure that measures intended to protect desert tortoise, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.

BIO-General 10 Environmentally Sensitive Area (ESA) Fence Monitoring: Integrity inspections of Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must occur throughout the duration of the project prior to commencing project activities and after activities are completed. If during construction the fence fails, work must stop until it is repaired, and the qualified Biologist inspects (and clears) ~~the at job site of any special status reptiles~~.

BIO-Reptile 1 Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for special status reptile species desert tortoise and Mojave fringe-toed lizard before operating equipment at any time. Prior to operation, personnel shall inspect under vehicles for the presence of special status species. **If a desert tortoise or Mojave fringe-toed lizard (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and agency coordination are required.**

BIO-Reptile 5 Trash/Predation: Caltrans must implement measures to reduce the attractiveness of job sites to common raven, and other predators and scavengers by controlling trash **in raven proof receptacles** and educating workers.

BIO-Reptile 6 Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate ~~both sides of the PIA at the culvert and RSP work locations (PM R122-23, R126-11, R130-31, R133-27, R133-94, 142-97, and R137-67), with a 50-foot buffer the Project footprint as shown on the plans and/or described in the specifications,~~ to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and

¹⁹ California Department of Fish and Wildlife, California Natural Diversity Database (2024, May). Desert tortoise [ds1354]. Calif. Dept. of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved May 20, 2024, from <https://wildlife.ca.gov/Data/BIOS>.

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- BIO-DT 2 has been modified and can be found in the IS/MND.
- BIO-DT 7 and BIO-DT 8 has been addressed via BIO-General 4.
- BIO-DT 9: Caltrans has added "Bio-General-12 Animal Entrapment: To prevent inadvertent entrapment of desert tortoise during project activities, all excavated steep-walled holes or trenches more than 6 inches deep must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the qualified biologist."
- BIO-DT 10: Currently, permanent and temporary impacts to desert tortoise habitat are not anticipated. This will be reviewed and discussed with CDFW during the Design phase, and if mitigation measures are warranted, they will be determined at that time.

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borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.

BIO-Reptile 8 Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be ~~partially filled with concrete grout or sand~~ material suitable to maintain connectivity throughout the service life of the facility. Additional coordination with CDFW is recommended in the design phase.

BIO-DT 2 Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must ~~be authorized through appropriate follow the CESA authorization, current USFWS Biological Opinion guidelines and SLM guidelines as applicable.~~ Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in accordance with Measure BIO-DT 7 the PA&ED phase to determine if desert tortoise is ~~present~~ active in the project area. Measures will be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert tortoise is confirmed, additional measures ~~will~~ may be needed.

BIO-DT 6 Biological Monitoring: An ~~Aceptable~~ Qualified Biologist must monitor project activities ~~shall oversee construction activities~~ to ensure compliance with the protective stipulations for desert tortoise and Mojave fringe-toed lizard.

BIO-DT 7 Mitigation Measure (NEW)

Desert Tortoise Preconstruction Surveys: Desert tortoise preconstruction surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service's 2019 desert tortoise survey methodology (see: https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Pre-project%20Survey%20Protocol_2019.pdf). The survey shall utilize "Linear Project Surveys" for desert tortoise and their sign. Results of the survey shall be submitted to CDFW prior to the start of Project activities. If the survey confirms desert tortoise absence, the CDFW-approved biologist shall ensure desert tortoise does not enter the Project area. A CDFW-approved biologist shall be present to monitor construction at all times when and where desert tortoise has the potential to enter an active construction area of the Project. If the survey confirms presence of desert tortoise, or if a desert tortoise is observed at any time, Caltrans shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take to desert tortoise. If complete avoidance of desert tortoise cannot be achieved, CDFW recommends that Project activities be postponed until appropriate authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.

BIO-DT 8 Mitigation Measure (NEW)

Desert Tortoise Clearance Surveys: Clearance desert tortoise surveys must be conducted by a USFWS authorized and CDFW approved qualified biologist immediately prior to Project activities. Daily construction monitoring for desert tortoise shall occur, when applicable, in accordance with the species-specific measures of this document. If a desert tortoise (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and coordination with USFWS and CDFW is required. Additional measures and/or CESA authorization may be required.

BIO-DT 9 Mitigation Measure (NEW)

Animal Entrapment: To prevent inadvertent entrapment of desert tortoise during Project activities, all excavated steep-walled holes or trenches more than six inches must be covered at the close of each working day by plywood (or similar

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material) or equipped with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. If a desert tortoise (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and agency coordination are required. Desert tortoise may be removed from work areas and out of harm's way to the nearest suitable habitat or translocated, following the most recent CDFW and USFWS guidelines, if authorized, and in accordance with a CDFW ITP. A CDFW ITP will be required and shall be obtained prior to any desert tortoise being handled.

BIO-DT 10 Mitigation Measure (NEW)

Permanent impacts to desert tortoise habitats shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts to desert tortoise habitats shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. If impacts occur and habitat does not recover to pre-project conditions within 5 years, additional compensatory mitigation shall be provided to offset temporal losses. Compensatory mitigation for desert tortoise habitat impacts by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, conservation, and management, or a combination of both, in coordination with CDFW.

COMMENT #6: Special-status and Sensitive Plants, and Sensitive Natural Communities

Section Appendix B Page 70

Issue: The Project has the potential to result in permanent and temporary impacts to special-status plants such as, but not limited to, Booth's evening-primrose (*Eremothera boothii* ssp. *Boothii*) (California Rare Plant Rank (CRPR) 2B.3), Crucifixion thorn (*Castela emoryi*) (CRPR 2B.2), Desert pincushion (*Coryphantha chlorantha*) (CRPR 2B.1), and Wright's Jaffuelobryum moss (*Jaffuelobryum wrightii*) (CRPR 2B.3)

Specific impact: The Project as described has the potential to occur in areas where special-status plants are potentially present. The Project mentions the need for vegetation removal throughout the Project, placement of fencing, and installation of RSP at various drainage systems. Through these activities, the Project has potential to impact special-status plants through mortality, modification of hydrology, compaction of soil, and introduction of invasive species.

Why impact would occur: In reference to plants, the IS/MND mentions, "There are significant areas of habitat within the BSA suitable for many of the species listed on the Federal and State threatened and endangered species lists as potentially present in the project area, as well as species on the CNPS and BLM lists", however, the IS/MND concludes that there would be no impact to rare, sensitive, or special status plants. According to the NESMI, multiple listed species have the potential and were seen within the PIA. For example, Booth's evening primrose (*Eremothera boothii* ssp. *boothii*, CNPS 2B.3) was seen roughly 40 feet from PM 137.67 within the Project site, where RSP will be installed. The IS/MND also mentions removing vegetation as an activity that would occur but does not go into specifics as to the extent of removal or where it would occur.

Evidence impact would be significant: Special-status plants with a CNPS CRPR ranking of series 3 and 4 warrant the consideration of impacts and mitigation thereof under CEQA on the basis that these species are declining in abundance, hold limited taxonomic information, and/or hold other factors

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1.7: The NES(MI) states that Booth's evening primrose was observed in the Project Impact Area (PIA), none of the other special status plants were observed during the rare plant survey conducted for the NES(MI). The NES(MI) for the Project does not state that Crucifixion thorn, Desert pincushion, Wright's Jaffuelobryum moss, and Booth's evening primrose are all present on-site.

RSP is proposed to be installed at PM R137.67, where Booth's Evening Primrose was observed; no other special status plants were observed during the rare plant survey. Booth's Evening Primrose is an annual, therefore, ESA fencing will be placed around this and any other rare plant species after the pre-construction rare plant surveys take place. Caltrans has concluded that there would be no impact to rare, sensitive, or special status plants with implementation of the pre-construction rare plant survey and installation of ESA fencing, where needed.

The suggested revisions to BIO-Plant 1 are appreciated. However, Caltrans will not be revising the current measure.

Regarding the suggested "BIO-Plant 3", any permanent and temporary impacts to CDFW-jurisdictional resources will be addressed in the Lake and Streambed Alteration Agreement (LSAA) 1602 permit.

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which require that they be tracked by CDFW through CNDDB. Furthermore, Special-status plants with a CNPS/CRPR ranking of series 1B and 2B meet the definition for CESA listing as rare, threatened, and/or endangered. Many of the CNPS/CRPR listed plants have not been reassessed from the time of their listing and said listing ranks may not currently reflect their status in a manner that is up to date with stochastic weather events, extreme heat, and anthropogenic impacts. The Project as described may result in direct take of special-status plants and parts thereof, and would result in the loss of the habitats on which they depend on.

Based on CNDDB records, Booth's evening primrose, Crucifixion thorn, Desert pincushion, and Wright's Jaffuelobryum moss have all been observed within the Project area. Furthermore, the NESM for the Project indicates that Crucifixion thorn, Desert pincushion, Wright's Jaffuelobryum moss, and Booth's evening primrose are all present on-site.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measures # BIO-Plant 1: CDFW appreciates the incorporation of BIO-Plant 1 and BIO-Plant 2 aimed to avoid and minimize impacts to special-status plants. CDFW recommends the below revisions to BIO-Plant 1 (edits are ~~struckthrough~~ and **bold**) and the adoption of **BIO-Plant 3**.

BIO-Plant 1:

Rare and **Special-status** Plant Surveys, Flagging and Fencing: Within ~~30 days~~ *the appropriate identification periods for special-status plants and Sensitive Natural Communities, surveys shall be conducted according to the CDFW 2018 Protocols for Surveying and Evaluating Impacts to Special-status Plant Populations and Sensitive Natural Communities (found at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>)*. In addition 3 days prior to construction, a preconstruction surveys must be conducted by a CDFW approved qualified biologist with a minimum of five years of professional experience surveying for special-status plant species, for plants such as but not limited to, for Booth's evening primrose, desert pincushion, Emory's crucifixionthorn, flatseeded spurge, Harwood's eriastrium, and Wright's jaffuelobryum moss, and **Sensitive Natural Communities in California desert environments in areas of suitable-habitat**. Surveys shall be conducted within 150 feet of the PIA. Any rare and special-status plant species identified must be flagged for visual identification to construction personnel for work avoidance. Any rare and special-status plant species detected that feature multiple plants in a single location must be fenced with Environmentally Sensitive Area (ESA) temporary fencing. If non CESA-listed special status plants and/or Sensitive Natural Communities are impacted by Project activities, or if protocol level surveys are not able to be conducted due to Project contracting constraints, cyclical weather constraints (i.e., drought, flooding, etc.), or other reasons conflicting with the Project's build timeline, non CESA-listed special-status plants shall be assumed present in the Project area, and mitigated by acreage in accordance with BIO-Plant-3. If CESA-listed plants are present and impacts cannot be fully avoided, a CESA ITP shall be obtained.

BIO-Plant 3: Permanent impacts (i.e., areas slated RSP, or areas that will not return to their baseline ecological state and form within one calendar-year of occurring impacts) (hereafter as, 'permanent impacts') to non CESA-listed special-status plants, shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts (i.e., areas that will return to their baseline ecological state and form within one-calendar year of occurring impacts) (hereafter as, 'temporary impacts') to non CESA listed special-status plants and their habitats, and Sensitive Natural Communities, shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. Compensatory mitigation for non CESA-listed special-status plant species and Sensitive Natural Communities impacts by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a

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CDFW-approved bank and/or land acquisition, or a combination of both, in coordination with CDFW.

COMMENT #7: Lake and Streambed Alteration (LSA)

Page iii; Section 1.6, Page 5; Section 2.2.4 (c), Pages 11, 13-14; Appendix B, Pages 60-61

Issue: The IS/MND does not fully consider all areas on-site that may be subject to Fish and Game Code section 1602.

Specific impact: The Project as described includes substantial diversion or obstruction of natural flow of a stream; substantial change in the bed, bank, and channel of a stream; and the potential for deposition of debris or other materials containing ground pavement to occur where they may pass into a stream.

Why impact would occur: Based on the review of the materials submitted with the IS/MND, review of aerial photography, and available hydrological information, the Project as described has the potential to impact fish and wildlife resources subject to Fish and Game Code section 1602 et seq. The IS/MND identified "seven drainages as potentially impacted by the Project" and "determined that the remaining minor drainages were determined not to be Waters of the State as they have no significant nexus to a Traditional Navigable Waterway". There is no analysis or evaluation of the "minor drainages" regarding Fish and Game Code section 1602 or whether they will be avoided or temporarily/permanently impacted by the construction activities. The IS/MND further states "these results are subject to modification following a formal jurisdictional delineation and agency verification."

Evidence impact would be significant: Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream, or lake. Please note that "any river, stream, or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with subsurface flow, and the hyporheic zones thereof. The Project, as described in the IS/MND will be subject to Notification under Fish and Game Code section 1602. CDFW considers substantial adverse impacts and the deposition of materials where they may pass into streams as a significant impact, unless mitigated to a level of less than significant.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure # BIO-LSA 1 (NEW): To address the above issues and help avoid impacting Fish and Game Code section 1602 resources, CDFW requests Caltrans add the following mitigation measure in the final IS/MND.

BIO-LSA 1: Caltrans shall notify CDFW under Fish and Game Code section 1600 et seq. for all portions of the Project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Shoulder backing that is planned to be placed in or near channel areas that are subject to Fish and Game Code section 1600 notification shall not consist of asphalt, bitumen, or any other substance or material that is deleterious to fish, plant life, mammals, or birdlife in accordance with Fish and Game Code 5650 et seq.

To minimize significant impacts: To ensure that any LSA notification will meet the threshold of completeness review and not generate an incomplete letter, CDFW recommends Caltrans conduct a new analysis of the Project area for where Fish and

1.8: An LSAA CFGC Section 1602 permit application will be submitted to CDFW, to cover any CDFW-jurisdiction river, stream, lake, ephemeral stream, desert washes, and other watercourses that may be affected by project activities and establish and implement any necessary measures or mitigation that may be needed to protect those resources. Caltrans will continue to coordinate with CDFW through the Design phase and permit application process.

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Game Code section 1602 resources could be affected by the Project, including the placement of materials where they have the potential to pass into channel areas. This includes where paving and shoulder backing activities may have the potential to be within Fish and Game Code section 1602 regulated areas. CDFW is available for coordination and review of areas where Fish and Game Code section 1602 resources occur within the Project area. This may include site visits and analysis prior to the submittal of any LSA notification.

COMMENT #8: Permanent Artificial Lighting/Wildlife Connectivity

Page iii, Section 1.1 Page 1, Section 1.4.2 Page 3

Issue: California wildlife is losing the ability to move and migrate as habitat conversion and built infrastructure fragments habitat and cuts off migration corridors.

Specific impact: Project implementation of artificial lighting could result in the permanent alteration of wildlife connectivity across the landscape in addition to affecting future proposed wildlife crossings.

Why impact would occur: As proposed, the Project will result in modifications to permanent artificial nighttime lighting. Page 3 of the IS/MND indicates that the Project will "rehabilitate 12 freeway lighting Type 10, 15, 30, and 31", but does not include lighting plans and lighting specifications or avoidance and minimization measures associated with permanent artificial nighttime lighting. Additionally, the Project does not analyze any impacts from artificial lighting to the natural landscape or effects thereof, even though the Project limits are within the proposed I-15 Mojave Wildlife Crossing Restoration Project, specifically Soda Mountain Wildlife Crossing (PM R129.75).¹¹ The Project is also located adjacent to open-space areas—areas that provide suitable nesting, roosting, foraging, refugia, and wildlife connectivity for birds, including migratory birds that fly at night, bats, bighorn sheep, mountain lions, and other nocturnal and crepuscular wildlife.

The Project's proposed permanent artificial lighting has the potential to significantly and adversely affect wildlife in the open-space areas adjacent to the Project footprint. Artificial lighting alters ecological processes including, but not limited to, the temporal niches of species; the repair and recovery of physiological function; the measurement of time through interference with the detection of circadian and seasonal cycles¹²; the detection of resources and natural enemies; habitat selection¹³; and navigation¹⁴.

Artificial lighting is increasingly being recognized as an important source of disturbance for wildlife on transportation facilities and has been found to reduce the use of wildlife crossings by sensitive species.¹⁵ Artificial light can function as a barrier to connectivity, which may contribute to isolated populations, reduced genetic diversity, increased species' susceptibility to disease, and limited access to resources.¹⁶

CDFW recommends the final IS/MND includes an analysis of the direct, indirect, and cumulative impacts of permanent artificial nighttime lighting on biological resources within open-space and wildlife connectivity areas adjacent to the Project. CDFW also recommends the final IS/MND includes lighting design plans and lighting specifications.

¹¹ Caltrans. 2024. I-15 Mojave Wildlife Crossing Restoration Project. <https://dot.ca.gov/caltrans-near-me/district-8/district-8-current-projects/i-15-wildlife-crossings>

¹² Russart, K., Nelson, R. J. 2018. Artificial light at night alters behavior in laboratory and wild animals. J. Exp. Zool. 329:401-408.

¹³ R. Barrientos et al. 2023. Nearby night lighting, rather than sky glow, is associated with habitat selection by a top predator in human-dominated landscapes. Philosophical Transactions of the Royal Society B: Biological Sciences, vol. 378, no. 1892.

¹⁴ Gatson, K. J., Bennie, J., Davies, T., Hopkins, J. 2013. The ecological impacts of nighttime light pollution: a mechanistic appraisal. Biological Reviews, 88.4: 912-927.

¹⁵ Shilling, F., et al. 2022. Improving Light and Soundscapes for Wildlife Use of Highway Crossing Structures. The University of California Institute of Transportation Studies.

¹⁶ Rich, L. N., et al. 2020. A review of the potential impacts of artificial lights on fish and wildlife and how this may apply to cannabis cultivation. California Fish and Wildlife, Cannabis Special Issue, 75-90.

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1.9: Thank you for the comment. Caltrans understands CDFW's concerns regarding light spillover from the freeway lighting types. Any changes in the permanent design features of the project will be further discussed in the Design phase (Phase 1).

To address temporary lighting impacts during construction, the following measure was modified to include Townsend's bat, desert tortoise, burrowing owl, and bighorn sheep:

Bio-General-2 - Temporary Artificial Lighting Restrictions:

To address potential impacts to desert tortoise, fringed myotis, pallid bat, spotted bat, Townsend's bat, desert bighorn sheep, burrowing owl, and other bat protected species, artificial lighting must be directed at the job site to minimize light spillover onto habitat areas, if project activities occur at night.

Caltrans cannot add the proposed BIO-Light 1: Permanent Artificial Nighttime Lighting measure to the final IS/MND since the design plans and lighting specifications have not been designed yet. This would occur in the next phase of the project (Design phase).

Evidence impact would be significant: The Project's proposed permanent artificial lighting has the potential to adversely affect wildlife connectivity in the open spaces adjacent to the Project footprint. Several laws and regulations identify the importance of wildlife connectivity and promote interagency collaboration to improve wildlife connectivity in these open spaces. In 2018, the U.S. Secretary of the Interior issued Secretarial Order No. 3362 (SO 3362) directing the Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), and National Park Service (NPS) to work with western state wildlife agencies to enhance the quality of big-game winter habitat and migration corridors on and adjacent to federal lands, which I-15 is adjacent to BLM and NPS lands. Further, the State of California, with the passage of AB 2344, added a requirement to the Streets and Highway Code Section 158 requiring Caltrans to consider wildlife connectivity areas identified by CDFW. CDFW released a 2022 update to the Wildlife Barrier Priorities report, which identifies the top wildlife barriers in each CDFW region of the state including the I-15 Mojave Wildlife Crossings. Effective January 1, 2022 via Senate Bill 790, Fish and Game Code §1955 -1958, titled "Wildlife Connectivity Actions," allows CDFW to adopt guidelines to promote habitat connectivity projects in California.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure BIO-Light 1 (NEW): To address the above issues, CDFW recommends Caltrans add the following mitigation measures in the final IS/MND:

BIO-Light 1: Permanent Artificial Nighttime Lighting: Caltrans shall ensure that all proposed permanent artificial nighttime lighting for the Project is fully shielded, cast downward and directed away from surrounding open-space, reduced in intensity to the greatest extent possible, and does not result in lighting trespass including glare into surrounding areas or upward into the night sky (see the International Dark-Sky Association standards at <http://darksky.org/>). Caltrans shall ensure use of LED lighting with a correlated color temperature of 2,700 Kelvins or less, proper disposal of hazardous waste, and recycling of lighting that contains toxic compounds with a qualified recycler. Photometric studies are recommended to ensure the parameters of this measure are adhered to.

ADDITIONAL COMMENTS

COMMENT # 9: Bio General Measures 2, 6, and 7

The Project proposed several general biological general measures to ensure minimization and avoidance of special status species. CDFW offers the following edits to BIO General 2, 6 and 7.

BIO-General 2: Temporary Artificial Lighting Restrictions: To address potential impacts to ~~fringed myotis, pallid bat, spotted bat, and other bat~~ **crepuscular and nocturnal** species, artificial lighting must be **shielded and directed downward** at the job site to minimize light spillover onto ~~potential bat-roosting areas~~ **adjacent habitat**, if project activities occur ~~at night between dusk and dawn~~. **Caltrans shall ensure that all proposed artificial lighting for the Project is fully shielded, cast downward and directed away from suitable habitat within and adjacent to the Project footprint.**

BIO-General 6 Species Avoidance: If during project activities a bighorn sheep, desert tortoise, or special status plant species is discovered within or adjacent to the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, **or greater distance if the project buffer is determined by the qualified biologist to be ineffective at avoiding impacts. All no-disturbance buffers shall be monitored by the qualified biologist and adjusted as necessary to protect the sensitive resources, based on the professional judgement of the qualified biologist. The and the** Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS ~~may~~ will be required prior to restarting activities.

**1.9
cont.**

1.10

1.10: Caltrans appreciates CDFW's suggested edits to the measures. Any modifications to the measures can be found in the "Biological Resources" section of the IS/MND.

In addition, the Worker Environmental Awareness Program (WEAP) contract task order will cover the items and specifications described in the CDFW comment.

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BIO-General 7 Worker Environmental Awareness Program (WEAP): A Qualified Biologist must present a biological resource information program/WEAP for desert bighorn sheep, mountain lion, fringed myotis, pallid bat, spotted bat, **Townsend's big-eared bat**, vermilion flycatcher, desert tortoise, Mojave fringe-toed lizard, monarch butterfly, and special status plant species **and nesting birds with the potential to occur on the Project site**, prior to project activities to all personnel that would be present within the project limits for longer than 30 minutes at any given time. **The WEAP shall include, but not limited to: (1) information about the distribution and habitat needs of any special-status species that may be present, legal protections for those species, penalties for violations, and mitigation measures and (2) best practices for managing waste and reducing activities that can lead to increased occurrences of opportunistic species and the impacts these species can have on wildlife in the area. Interpretation shall be provided for any non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing any work on-site.**

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 the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is 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 environmental document filing 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.)

CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist Caltrans in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to CDFW staff Steven Recinos, Environmental Scientist, at (909) 484-0167 or steven.recinos@wildlife.ca.gov and Alisha Curtis, Senior Environmental Scientist (Specialist), at (909) 544-2522 or alisha.curtis@wildlife.ca.gov.

Sincerely,

Digitally signed by:

-----BEGIN-----
Kim Freeburn
Environmental Program Manager

cc: Office of Planning and Research, State Clearinghouse, Sacramento

Attachment A: Mitigation and Monitoring Reporting Plan

1.10
cont.

1.11

1.11: Caltrans will report any special status species and natural communities' information observed during Project surveys to the California Natural Diversity Database (CNDDDB).

Upon completion and filing of the Notice of Determination and Final Environmental Document, the CDFW filing fee will be sent to the State Clearinghouse.

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CDFW recommends the following language to be incorporated into the final IS/MND for the Project.

Biological Resources (BIO)			
	Mitigation Measure (MM)	Timing	Responsible Party
BIO-Avian 1	Project activities shall not result in impacts to nesting birds or result in the take or removal of nests or eggs unless as otherwise provided for under CDFW and USFWS regulations. If project activities cannot avoid the nesting bird season, February 1—September 30, then Preconstruction nesting bird surveys must be conducted by a qualified biologist experienced with: - identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; - determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures in areas of suitable habitat including trees, shrubs, bare ground, burrows, cavities, and structures (e.g., bridges) within the projects limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and avoid nesting birds. If an active avian nest is located, a no-construction buffer (100 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) would shall be established and monitored for by a qualified biologist. Buffers shall be delineated by temporary flagging or other means and remain in effect as long as construction is occurring or until the nest is no longer active. Any active nests shall be continuously monitored by a qualified biologist during Project activities that have the potential to cause disturbance to any nesting birds to ensure avoidance buffers are effective. Avoidance buffers shall be expanded and/or modified as needed by the qualified biologist if any nesting bird shows behavioral responses resulting from Project related activities. Concurrent and further surveys shall occur as Project construction progresses, as the nature of the Project is linear in fashion.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-General-PSM 1	Vehicle Washing: Comply with 2022 SSP or latest version. It would be required that The contractor would- shall wash equipment prior to entering the project site. The biologist	Prior to commencing ground- or	Project Proponent

Biological Resources (BIO)		
Mitigation Measure (MM)	Timing	Responsible Party
would shall coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation of work to verify that they have been washed. All equipment shall be free of materials including noxious and nuisance weeds, aquatic invasive species, oil, grease, hydraulic fluid, soil, and other debris The following shall be adhered to: • Equipment Certification: All equipment shall be certified as decontaminated and require re-certification upon entry to the Project once equipment leaves the Project footprint. • Decontamination of Project Equipment: All tools, waders and boots, vehicles, trailers, and other equipment shall be decontaminated. Project gear and equipment shall be decontaminated utilizing one of four methods: (1) drying, (2) using a hot water soak, (3) hot-water pressure washing, or (4) freezing, as appropriate to the type of gear or equipment. For all four methods, the decontamination process shall begin by thoroughly scrubbing equipment, paying close attention to hard-to-reach areas, and cleaning areas with a stiff-bristled brush to remove all plant, seeds, soil, and other organisms. To decontaminate by drying, equipment shall be allowed to dry thoroughly (i.e., until there is a complete absence of water and all plant, seeds, and soil), preferably in the sun, for a minimum of 48 hours. To decontaminate using hot water, equipment shall either be immersed in 140°F water (or hotter) and be allowed to soak for a minimum of 5 minutes or shall be pressure washed with hot water that is at a minimum 140°F at the point of contact or 155°F at the nozzle. To decontaminate by freezing, equipment shall be placed in a freezer that is 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is	vegetation disturbing activities	

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	removed from the site, used in contact with water or wet soil within a different watershed, and returned to the Project site. Decontamination Sites: Decontamination of vehicles and other Project gear and equipment shall be performed in a designated location where runoff can be contained and not allowed to pass into any river, lake, or stream and associated riparian areas and other sensitive habitat areas. Cleaning of equipment may occur at a location that contains and recycles resulting wastewater.		
BIO-General 2	Temporary Artificial Lighting Restrictions: To address potential impacts to fringed myotis, pallid bat, spotted bat, and other bat crepuscular and nocturnal species, artificial lighting must be shielded and directed downward at the job site to minimize light spillover onto potential bat-roosting areas adjacent habitat, if project activities occur at night between dusk and dawn. Caltrans shall ensure that all proposed artificial lighting for the Project is fully shielded, cast downward and directed away from suitable habitat within and adjacent to the Project footprint.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-General 4	Preconstruction Surveys: Preconstruction surveys for fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, and other bat species must be conducted by a qualified mammal and bat biologist within the Project Impact Area (PIA) within 14 days prior to the initiation of project activities and following a bat roosting habitat suitability assessment as follows. During appropriate weather conditions and appropriate time of year for the species, a daytime assessment shall be conducted by a qualified bat biologist to examine areas that are suitable for bat use, including maternity roosts. During appropriate weather conditions and appropriate time of year for the species, nighttime bat visual surveys shall be conducted to confirm whether the areas with suitable habitat are utilized by bats. If bats are found roosting within and adjacent to the Project Impact Area, a qualified biologist shall conduct emergence surveys and perform exit counts to approximate the number of bats. Acoustic monitoring shall also be used	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	during these surveys to identify the bat species present, surveys shall also identify roost type and roost status. If one of the bat species listed above or other special-status bat species or sign thereof (e.g., occupied roosts, urine staining, guano masses, etc.) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may shall be required. Additional measures shall be included in a Bat Avoidance and Monitoring Plan submitted to CDFW at least seven days prior to the start of Project activities for review and written approval. Project activities may not start until CDFW's written approval of the Bat Avoidance and Monitoring Plan has been provided. The Bat Avoidance and Monitoring Plan shall include: (1) an assessment of all Project impacts to bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect bats; (3) compensatory mitigation for permanent impacts to roosts if impacted, such as, but not limited to, constructing artificial bat roosting habitats (e.g., bat boxes or panels).		
BIO-General 5	Work Avoidance: To address impacts to fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, and other bat species, avoid project activities shall be avoided from April 1 to August 31 within 300 feet of all potential-roosting structures in the project impact area from April 1 to August 31 and November to February to avoid the maternity and hibernation season, respectively.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-BHS 1 (New)	Decontamination of Pathogens. To prevent potential transmission of disease from domestic animals to wild desert bighorn sheep, Project proponent shall require all workers to decontaminate work boots prior to entering Project areas. Decontamination shall involve scrubbing of the soles of work boots with a 10% bleach solution to remove all organic matter and kill pathogens. Alternatively, footwear may be changed to ensure that potentially contaminated footwear does not enter Project areas. Heavy equipment previously used in livestock operations, including, but not limited to, sheep and	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	goat livestock operations, or where roadside clearing has occurred through grazing shall not be utilized for Project activities.		
BIO-Avian 2	The following burrowing owl preconstruction surveys must be performed by a qualified biologist: one survey 14 to 30 days prior to Project activities; one survey 24 hours prior to Project activities; and burrowing owl preconstruction surveys shall be conducted in accordance with the 2012 Staff Report on Burrowing Owl Mitigation (Staff Report) (See: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline) prior to vegetation removal or ground disturbing activities. If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities and implementing the measures of the Burrowing Owl Plan. The Burrowing Owl Plan shall describe proposed avoidance, monitoring, relocation, minimization, and/or mitigation actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrows cannot be avoided, the Burrowing Owl Plan shall also describe minimization and compensatory mitigation actions that will be implemented. Proposed implementation of burrow exclusion (i.e., passive relocation) and closure shall only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. The Burrowing Owl Plan shall identify compensatory mitigation for the temporary or permanent loss of occupied burrow(s) and habitat consistent with the "Mitigation Impacts" section of the 2012 Staff Report and Caltrans shall implement CDFW approved mitigation prior to the initiation of Project activities. If		

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to burrowing owls. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated burrowing owls shall also be included in the Burrowing Owl Plan.		
BIO-General 6	If during project activities a bighorn sheep, desert tortoise, or special status plant species is discovered within or adjacent to the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, or greater distance if the project buffer is determined by the qualified biologist to be ineffective at avoiding impacts. All no-disturbance buffers shall be monitored by the qualified biologist and adjusted as necessary to protect the sensitive resources, based on the professional judgement of the qualified biologist. The and the Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may will be required prior to restarting activities.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-General 7	A Qualified Biologist must present a biological resource information program/WEAP for desert bighorn sheep, mountain lion, fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat , vermilion flycatcher, desert tortoise, Mojave fringe-toed lizard, monarch butterfly, and special status plant species and nesting birds with the potential to occur on the Project site, prior to project activities to all personnel that would be present within the project limits for longer than 30 minutes at any given time. The WEAP shall include, but not limited to: (1) information about the distribution and habitat needs of any special-status species that may be present, legal protections for those species, penalties for violations, and mitigation measures and (2) best practices for managing waste and reducing activities that can lead to increased occurrences of opportunistic species and the impacts these species can	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	have on wildlife in the area. Interpretation shall be provided for any non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing any work on-site.		
BIO-General 8	Biological Monitor: A qualified biologist must monitor project activities and provide reports to CDFW weekly to ensure that measures intended to protect desert tortoise, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-General 10	Environmentally Sensitive Area (ESA) Fence Monitoring: Integrity inspections of Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must occur throughout the duration of the project prior to commencing project activities and after activities are completed. If during construction the fence fails, work must stop until it is repaired, and the qualified Biologist inspects (and clears) the at job site of any special status reptiles.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-Reptile 1	Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for special status reptile species desert tortoise and Mojave fringe-toed lizard before operating equipment at any time. Prior to operation, personnel shall inspect under vehicles for the presence of special status species. If a desert tortoise or Mojave fringe-toed lizard (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and agency coordination are required.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-Reptile 5	Trash/Predation: Caltrans must implement measures to reduce the attractiveness of job sites to common raven, and other predators and scavengers by controlling trash in raven proof receptacles and educating workers.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-Reptile 6	Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

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Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	locations (PM R122.23, R126.14, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer the Project footprint as shown on the plans and/or described in the specifications, to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.		
BIO-Reptile 8	Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand material suitable to maintain connectivity throughout the service life of the facility. Additional coordination with CDFW is recommended in the design phase.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-DT 2	Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must be authorized through appropriate CESA authorization follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in accordance with Measure BIO-DT 7 the PA&ED phase to determine if desert tortoise is present active in the project area. Measures will be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert tortoise is confirmed, additional measures will may be needed.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-DT 6	Biological Monitoring: An Acceptable Qualified Biologist must monitor project activities shall oversee construction activities to ensure compliance with the protective stipulations for desert tortoise and Mojave fringe-toed lizard.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-DT 7 (New)	Desert Tortoise Preconstruction Surveys. Desert tortoise preconstruction surveys shall be conducted in accordance with the	Prior to commencing ground- or vegetation	Project Proponent

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	U.S. Fish and Wildlife Service's 2019 desert tortoise survey methodology (see: https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Pre-project%20Survey%20Protocol_2019.pdf). The survey shall utilize "Linear Project Surveys" for desert tortoise and their sign. Results of the survey shall be submitted to CDFW prior to the start of Project activities. If the survey confirms desert tortoise absence, the CDFW-approved biologist shall ensure desert tortoise does not enter the Project area. A CDFW-approved biologist shall be present to monitor construction at all times when and where desert tortoise has the potential to enter an active construction area of the Project. If the survey confirms presence of desert tortoise, or if a desert tortoise is observed at any time, Caltrans shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take to desert tortoise. If complete avoidance of desert tortoise cannot be achieved, CDFW recommends that Project activities be postponed until appropriate authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.	disturbing activities	
BIO-DT 8 (New)	Desert Tortoise Clearance Surveys: Clearance desert tortoise surveys must be conducted by a USFWS authorized and CDFW approved qualified biologist immediately prior to Project activities. Daily construction monitoring for desert tortoise shall occur, when applicable, in accordance with the species-specific measures of this document. If a desert tortoise (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and coordination with USFWS and CDFW is required. Additional measures and/or CESA authorization may be required.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-DT 9 (New)	Animal Entrapment: To prevent inadvertent entrapment of desert tortoise during Project activities, all excavated steep-walled holes or trenches more than six inches must be covered at the close of each working day by plywood (or similar material) or equipped with one or more escape ramps constructed of earth fill or	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. If a desert tortoise (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and agency coordination are required. Desert tortoise may be removed from work areas and out of harm's way to the nearest suitable habitat or translocated, following the most recent CDFW and USFWS guidelines, if authorized, and in accordance with a CDFW ITP. A CDFW ITP will be required and shall be obtained prior to any desert tortoise being handled.		
BIO-DT 10 (New)	Permanent impacts to desert tortoise habitats shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts to desert tortoise habitats shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. If impacts occur and habitat does not recover to pre-project conditions within 5 years, additional compensatory mitigation shall be provided to offset temporal losses. Compensatory mitigation for desert tortoise habitat impacts by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, conservation, and management, or a combination of both, in coordination with CDFW.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-Plant 1	Within 30 days the appropriate identification periods for special-status plants and Sensitive Natural Communities, surveys shall be conducted according to the CDFW 2018 Protocols for Surveying and Evaluating Impacts to Special-status Plant Populations and Sensitive Natural Communities (found at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959). In addition 3 days prior to construction, a preconstruction surveys		

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	must be conducted by a CDFW approved qualified biologist with a minimum of five years of professional experience surveying for special-status plant species, for plants such as but not limited to, for Booth's evening primrose, desert pincushion, Emory's crucifixionthorn, flatseeded spurge, Harwood's eriastrum, and Wright's jaffuelobryum moss, and Sensitive Natural Communities in California desert environments in areas of suitable habitat. Surveys shall be conducted within 150 feet of the PIA. Any rare and special-status plant species identified must be flagged for visual identification to construction personnel for work avoidance. Any rare and special-status plant species detected that feature multiple plants in a single location must be fenced with Environmentally Sensitive Area (ESA) temporary fencing. If non CESA-listed special status plants and/or Sensitive Natural Communities are impacted by Project activities, or if protocol level surveys are not able to be conducted due to Project contracting constraints, cyclical weather constraints (i.e., drought, flooding, etc.), or other reasons conflicting with the Project's build timeline, non CESA-listed special-status plants shall be assumed present in the Project area, and mitigated by acreage in accordance with BIO-Plant-3. If CESA-listed plants are present and impacts cannot be fully avoided, a CESA ITP shall be obtained.		
BIO-Plant 3	Permanent impacts (i.e., areas slated RSP, or areas that will not return to their baseline ecological state and form within one calendar-year of occurring impacts) (hereafter as, 'permanent impacts') to non CESA-listed special-status plants, shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts (i.e., areas that will return to their baseline ecological state and form within one-calendar year of occurring impacts) (hereafter as, 'temporary impacts') to non CESA listed special-status plants and their habitats, and Sensitive Natural Communities, shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. Compensatory mitigation for non CESA-listed special-status plant species and Sensitive Natural Communities impacts by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-ratios) shall be conducted either on-site through restoration activities, or through purchase of	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
	mitigation credits from a CDFW-approved bank and/or land acquisition, or a combination of both, in coordination with CDFW.		
BIO-LSA-1 (New)	Caltrans shall notify CDFW under Fish and Game Code section 1600 et seq. for all portions of the Project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Shoulder backing that is planned to be placed in or near channel areas that are subject to Fish and Game Code section 1600 notification shall not consist of asphalt, bitumen, or any other substance or material that is deleterious to fish, plant life, mammals, or birdlife in accordance with Fish and Game Code 5650 et seq.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-Light-1 (New)	Permanent Artificial Nighttime Lighting: Caltrans shall ensure that all proposed permanent artificial nighttime lighting for the Project is fully shielded, cast downward and directed away from surrounding open-space, reduced in intensity to the greatest extent possible, and does not result in lighting trespass including glare into surrounding areas or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org). Caltrans shall ensure use of LED lighting with a correlated color temperature of 2,700 Kelvins or less, proper disposal of hazardous waste, and recycling of lighting that contains toxic compounds with a qualified recycler. Photometric studies are recommended to ensure the parameters of this measure are adhered to.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

Chapter 4 List of Preparers

California Department of Transportation

Amr Abuelhassan, Project Manager

Jared Anderson, Landscape Architect (Visual)

Donald Cheng, Transportation Engineer (Environmental Engineering - Hazardous Waste)

Alan Espejo, Transportation Engineer (Environmental Engineering - Noise)

Kourtney Graves, Environmental Scientist – Generalist (Initial Study)

Fatima Islam, Transportation Engineer (Environmental Engineering - Air Quality)

Bahram Karimi, Associate Environmental Planner (Paleontology)

Jin Seob Kim, Project Engineer (Transportation Engineering)

Ronn Knox, Associate Environmental Planner (Biology)

Malisa Lieng, Senior Environmental Planner – Generalist (Initial Study)

Steven Magallanes, District Landscape Architect (Visual)

Olufemi Odufalu, Senior Transportation Engineer (Environmental Engineering)

Hung Pham, Project Engineer (Transportation Engineering)

Danny Pheng, Senior Transportation Engineer (Acting)

Mary K. Smith, Associate Environmental Planner (Cultural/Archaeology)

Tri Tran, Transportation Engineer (Storm Water Quality)

Joseph William, District Hydraulics Engineer (Hydraulics/Floodplain)

Chapter 5 Distribution List

An electronic copy of the Initial Study with Mitigated Negative Declaration (IS/MND) and a Notice of Availability (NOA) was distributed to the following federal, state, regional, local agencies, utilities and service providers, as well as interested groups, organizations and individuals, and elected officials.

California Department of Fish and Wildlife
Inland Region
ATTN: Andrew Biggs
3602 Inland Empire Blvd, Suite C-220
Ontario, CA 91764

Mojave Desert Air Quality Management
District
14306 Park Ave.
Victorville, CA 92392

California Highway Patrol
Attn: Administrator
300 E. Mountain View St.
Barstow, CA 92311-2887

U.S. Fish and Wildlife Service
Region 8
2800 Cottage Way
Sacramento, CA 95825

Lahontan Regional Water Quality Control
Board Victorville Branch Office
15095 Amargosa Rd., Bldg. 2 – Ste. 210
Victorville, CA 92394

U.S. Army Corps of Engineers
Attn: Veronica Li, Senior Project Manager
Los Angeles District, Regulatory Division 915
Wilshire Blvd., Suite 1109
Los Angeles, CA 90017

Bureau of Land Management
California Desert District Office
1201 Bird Center Drive
Palm Springs, CA 92262

Office of Historic Preservation State Historic
Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

San Bernardino County Flood Control
825 E. Third St.
San Bernardino, CA 92415-0835

San Bernardino County Planning Dept. 385
N. Arrowhead Ave., First Floor
San Bernardino, CA 92415

California Highway Patrol – HQ
601 N 7th St.
Sacramento, CA 95811

Planning & Environmental Coordinator
BLM Barstow Field Office
2601 Barstow Road
Barstow, CA 92311

Baker Community Services District
P.O. Box 590
Baker, CA 92309-0590

U.S Fish and Wildlife Service – Palm Springs
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262

Baker Valley USD
P.O. Box 460
Baker, CA 92309-0460

San Bernardino County Fire Station - 53
72734 Baker Blvd.
Baker, CA 92309

California State Assembly, District - 33
9700 7th Ave., Suite 227
Hesperia, CA 92345

Native American Heritage Commission
1550 Harbor Blvd., Suite 100
Sacramento, CA 95691

California Transportation Commission
1120 N St.
Sacramento, CA 95814

Appendix A Title VI/Non-Discrimination Policy Statement

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 2023

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 non-discriminatory 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) 639-6392 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 PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES
Director

Appendix B Avoidance, Minimization and/or Mitigation Summary

Permit Type	Agency	Date Received	Expiration	Notes
1602	California Department of Fish & Wildlife (CDFW)			
WDR	California Regional Water Quality Control Board (RWQCB)			

Date of ECR: 6/24/2024

Project Phase:

- ☒ PA/ED (DED/FED)
☐ PS&E Submittal _____ %
☐ Construction

ENVIRONMENTAL COMMITMENTS RECORD (SBD 15 Pavement Rehab)

08-SBd-015
PM R121.0 / 144.0

EA 08-1L150
PN 0819000152
Generalist:
ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementati on of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<u>CULTURAL RESOURCES</u>										
CUL-1: If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.	N/A	Historic Property Survey Report Dec. 6, 2023	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/ Constru ction	Stand ard Spec (SS) 14-1; 14-2					
CUL-2: In the event that human remains are found, the	N/A	Historic Property	District Cultural	Final Design,	Stand ard					

Date of ECR: 6/24/2024

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county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendant (MLD). The person who discovered the remains would contact the District 8 Division of Environmental Planning; Gary Jones, Acting Senior and DNAC: (909) 261-8157. Further provisions of PRC 5097.98 are to be followed as applicable.		Survey Report Dec. 6, 2023	Studies/ District Design/ Resident Engineer/ Contractor	Constru ction	Spec (SS) 14-1; 14-2					
<u>BIOLOGICAL RESOURCES</u>										

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							Date / Initials	Date / Initials	YES	NO
BIO-1: BIO-Waters 1: Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.	36	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					
BIO-2: BIO-Waters 2: On-site habitat restoration for temporary impacts for native communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.	36	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Post Constru ction	SSP					

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							Date / Initials	Date / Initials	YES	NO
BIO-3: BIO-Waters 3: Off-site mitigation banking at a ratio of 3:1 for permanent impacts to native communities.	36	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					
BIO-4: BIO-Waters 4: Compensatory Mitigation: Any additional permanent impacts to jurisdiction areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.	36	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					
BIO-5: BIO-General 1: Equipment Staging, Storing, & Borrow Sites: All staging, storing, and borrow sites	38	Natural Environment Study (Minimal Impacts)	District Design / District Biological Studies / Resident	Constru ction	SSP					

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require the approval of the Caltrans biologist.		Dec. 12, 2023	Engineer / Contractor							
BIO-6: BIO-General 2: Temporary Artificial Lighting Restrictions: To address potential impacts to desert tortoise, fringed myotis, pallid bat, spotted bat, Townsend's bat, desert bighorn sheep, burrowing owl, and other bat species, artificial lighting must be directed at the job site to minimize light spillover onto habitat areas, if project activities occur at night.	42	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	Environmental Biological Studies/ Resident Engineer/ Contractor	Constru ction	SSP					
BIO-7: BIO-General 4: Pre-construction surveys for desert tortoise, desert bighorn sheep, burrowing owl, fringed myotis, pallid bat, Townsend's big-eared bat, spotted bat and	42	Natural Environment Study (Minimal Impacts)	Environmental Biological Studies/ Resident Engineer	Pre-Construct ion	SSP					

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other bat species must be conducted by a qualified biologist within the Project Impact Area within 14 days prior to project activities and following a bat roosting habitat suitability assessment. If one of the species listed above or other special status species is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.		Dec. 12, 2023								
BIO-8: BIO- General 5: Work Avoidance: To address impact to fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, and other bat species, avoid project	42	Natural Environment Study (Minimal Impacts)	Environmental Biological Studies/ Resident Engineer	Constru ction	SSP					

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activities from April 1 to August 31 within 300 feet of all potential roosting structures in the project impact area.		Dec. 12, 2023								
BIO-9: BIO-General 6: Species Avoidance: If during project activities a, bighorn sheep, desert tortoise, or special status plant species is discovered within the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, and the Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be	38	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

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required prior to restarting activities.										
BIO-10: BIO-General 7: Worker Environmental Awareness Program (WEAP): A Qualified Biologist must present a biological resource information program/WEAP for desert bighorn sheep, mountain lion, fringed myotis, pallid bat, spotted bat, Townsend's big-eared bat, vermilion flycatcher, tortoise, Mojave fringe-toed lizard, monarch butterfly, and special status plant species, prior to project activities to all personnel that would be present within the project limits for longer than 30 minutes at any given time.	38	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	Environmental Biological Studies/ Resident Engineer/ Contractor	Pre-Construction	SSP					

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BIO-11: BIO-General 8: Biological Monitor: A qualified biologist must monitor project activities to ensure that measures intended to protect desert tortoise, desert bighorn sheep, burrowing owl, Townsend's big-eared bat, fringed myotis, pallid bat, spotted bat, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.	38	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	Environmental Biological Studies/ Resident Engineer/ Contractor	Constru ction	SSP					
BIO-12: BIO- General 10: Environmentally Sensitive Area (ESA) Fence Monitoring: Integrity inspections of Environmentally Sensitive Area (ESA) fencing, desert	46	Natural Environment Study (Minimal Impacts)	District Design / District Biological Studies / Resident	Constru ction	SSP					

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tortoise temporary fencing, and rare or special status plant fencing and enclosures must occur throughout the duration of the project prior to commencing project activities and after activities are completed. If during construction the fence fails, work must stop until it is repaired, and the qualified Biologist inspects (and clears) the job site.		Dec. 12, 2023	Engineer / Contractor							
BIO-13: BIO-General 11: Environmentally Sensitive Area (ESA) Fence Removal: All Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures	46	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

Date of ECR: 6/24/2024

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must be removed as a last order of work. During removal, a qualified biologist must be present.										
BIO-14: BIO-General 12: Animal Entrapment: To prevent inadvertent entrapment of desert tortoise during project activities, all excavated steep-walled holes or trenches more than 6 inches deep must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to	13	IS/MND June 2024	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

Date of ECR: 6/24/2024

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Ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the qualified biologist.										
BIO-15: BIO-General 16: Invasive Weed Control: To address potential impacts to Lower Bajada and Fan Mojave and Sonoran Desert Scrub, Mojave and Great Basin Upper Bajada and Toe slope, and Shadscale-Saltbush Cool Semi-Desert Scrub communities, Desert Tortoise Designated Critical Habitat, Booth's evening primrose, desert pincushion,	33	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Construction	SSP					

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Emory's crucifixion-thorn, flat-seeded spurge, Harwood's seriastrium, and Wright's jaffueliobryum moss, or other rare plant species, a qualified biologist must identify invasive plant species at the culvert and RSP work locations (PM 142.97, R133.27, R130.31, R133.94, R126.11, R122.23, and R137.67) within the PIA and a 50-foot buffer, within 30 days prior to project activities. Treatment and disposal methods must be approved by the Caltrans biologist prior to vegetation removal.										
BIO-16: BIO-Plant 1: Rare Plant Surveys, Flagging and Fencing: Within 30 days prior	53	Natural Environment Study	District Design / District Biological	Constru ction						

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to construction, a preconstruction survey must be conducted by a qualified biologist for Booth's evening primrose, desert pincushion, Emory's crucifixionthorn, flat- seeded spurge, Harwood's eriastrum, and Wright's jaffueliobryum moss in areas of suitable habitat, within 50 feet of the PIA. Any rare plant species identified must be flagged for visual identification to construction personnel for work avoidance. Any rare plant species detected that feature multiple plants in a single location must be fenced with Environmentally Sensitive Area (ESA) temporary fencing.		(Minimal Impacts) Dec. 12, 2023	Studies / Resident Engineer / Contractor							

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BIO-17: BIO-Plant 2: Rare Plant Translocation: If Booth's evening primrose, desert pincushion, Emory's crucifixion-thorn, flat-seeded spurge, Harwood's eriastrum, Wright's jaffuelobryummoss, or other rare plant species is found within the job site and cannot be fenced but can survive transplantation, the qualified biologist/botanist must contact the Caltrans biologist to determine the time and suitable translocation area for the plant species to be moved. Additional requirements and actions must be determined at the time such a situation occurs.	53	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction						

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BIO-18: BIO-Reptile 1: Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment (including all vehicles, i.e. cars, and trucks) for special status reptile species desert tortoise and Mojave fringe- toed lizard before operating equipment at any time.	46	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					
BIO-19: BIO-Reptile 5: Trash/Predation: Caltrans must implement measures to reduce the attractiveness of job sites to common raven, and other predators and	46	Natural Environment Study (Minimal Impacts)	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

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scavengers by controlling trash and educating workers.		Dec. 12, 2023								
BIO-20: BIO-Reptile 6: Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work locations (PM R122.23, R126.11, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer as shown on the plans and/or described in the specifications, to exclude desert tortoise from these areas. Temporary desert	46	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

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tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.										
BIO-21: BIO-Reptile 8: Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand.	47	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					
BIO-22: BIO-DT 1: Agency Notification & Reporting Requirements: Any worker	47	Natural Environment Study	District Design / District Biological	Constru ction	SSP					

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							Date / Initials	Date / Initials	YES	NO
who observes desert tortoises within or near the job site found alive, injured, or dead during the implementation of the Project must provide immediate notification to the Resident Engineer and Caltrans biologist. The Caltrans biologist must then notify USFWS and CDFW. Veterinary treatment and/or final deposition must follow USFWS and CDFW approval.		(Minimal Impacts) Dec. 12, 2023	Studies / Resident Engineer / Contractor							
BIO-23: BIO-DT 2: Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due	47	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

Date of ECR: 6/24/2024

Project Phase:

- ☒ PA/ED (DED/FED)
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PM R121.0 / 144.0

EA 08-1L150
PN 0819000152
Generalist:
ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementati on of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in the PA&ED phase to determine if desert tortoise is active in the project area. Measures will be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert tortoise is confirmed, additional measures may be needed, and must be										

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							Date / Initials	Date / Initials	YES	NO
authorized by appropriate CESA authorization.										
BIO-24: BIO-DT-6: Biological Monitoring: An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for desert tortoise and Mojave fringed-toed lizard, desert bighorn sheep, burrowing owl, Townsend's big-eared bat, fringed myotis, pallid bat, and spotted bat.	48	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					
BIO 25: BIO-General-PSM 1: Vehicle Washing: Comply with 2022 SSP or latest version. It would be required that the contractor would wash equipment prior to entering the project site. The biologist	34	Natural Environment Study (Minimal Impacts)	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

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							Date / Initials	Date / Initials	YES	NO
would coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation work to verify that they have been washed.		Dec. 12, 2023								
BIO 26: BIO-General-PSM 2: Agency Notification & Reporting Requirements: Any listed species within or near the job site, or as specified in BIO-General-6, found alive, injured, or dead during the implementation of the Project must be immediately reported to the Resident Engineer and Caltrans Biologist. The Caltrans Biologist must then notify the Resource Agencies. Veterinary treatment and/or	39	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

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							Date / Initials	Date / Initials	YES	NO
final deposition must follow Resource Agencies' approval. Monitoring reports must include WEAP Training and be submitted to the Resources Agencies on a timeframe to be determined.										
BIO-27: BIO-Avian 1: Pre-Construction Nesting Bird Survey: If project activities cannot avoid the nesting bird season, February 1 – September 30, then preconstruction nesting bird surveys must be conducted by a qualified biologist in areas of suitable habitat within the projects limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and	43	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction						

Date of ECR: 6/24/2024

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							Date / Initials	Date / Initials	YES	NO
avoid nesting birds. If an active avian nest is located, a no-construction buffer (100 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) would be established and Monitored by a qualified biologist.										
BIO-28: BIO-Avian 2: Pre-Construction Burrowing Owl Survey: Two burrowing owl pre-construction surveys must be performed by a qualified biologist: one survey 14-30 days prior to project activities, and one survey 24 hours prior to project activities. The surveys will be conducted within the area of suitable BUOW habitat within State right-of-way and within the		IS/MND June 2024	District Design / District Biological Studies / Resident Engineer / Contractor	Pre-Construction	SSP					

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							Date / Initials	Date / Initials	YES	NO
project limits, as identified in the Burrowing owl Habitat Assessment. If pre-construction surveys confirm occupied burrowing owl habitat within this area, the qualified biologist will coordinate with CDFW on additional measures that may be needed to ensure that no take of burrowing owl occurs.										
BIO-29: BIO-Arthropod 1: Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing: No more than 30 days prior to project activities, a qualified biologist must perform a preconstruction survey for rare insect host plants (milkweed) at PM	49	Natural Environment Study (Minimal Impacts) Dec. 12, 2023	District Design / District Biological Studies / Resident Engineer / Contractor	Constru ction	SSP					

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							Date / Initials	Date / Initials	YES	NO
142.97, R133.27, R130.31, R133.94, R126.11, R122.23 and R137.67 within the PIA and a 50-foot buffer. Should any rare insect host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and host plants must be flagged by the qualified biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the groupings must be fenced with Environmentally Sensitive Area (ESA) temporary fencing.										
BIO-30: BIO-BAT 1: Bat Management & Mitigation Plan. A bat habitat	14	IS/MND June 2024	District Design / District Biological	Constru ction	SSP					

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							Date / Initials	Date / Initials	YES	NO
assessment of the Project Impact Area will be conducted by a qualified biologist. Should the bat habitat assessment warrant further surveys and require a BMMP, then a BMMP will be developed and implemented in accordance with CDFW guidelines.			Studies / Resident Engineer / Contractor							
<u>STORM WATER QUALITY</u>										
SWQ 1: Order No. 2022-0033-DWQ, NPDES No. CAS000003, NPDES Statewide Storm Water Permit for the State of California, Department of Transportation (Caltrans Permit) issued by the California State Water	1	Memorandu m to File Nov. 28, 2023	Storm Water Quality / Resident Engineer / Contractor	Constru ction						

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							Date / Initials	Date / Initials	YES	NO
Resources Control Board (SWRCB). This permit regulates stormwater and non-stormwater discharges from Caltrans properties and facilities, and discharges associated with operations and maintenance of the statewide State highway system.										
SWQ 2: Caltrans Statewide Stormwater Management Plan (SWMP).The SWMP is the document that describes how Caltrans plans to implement the “Caltrans Permit” requirements.	1	Memorandum to File Nov. 28, 2023	Storm Water Quality / Resident Engineer / Contractor	Construction						
SWQ 3: During phases “0” and “1”, a Storm Water Data Report (SWDR) would be developed for each phase.	1	Memorandum to File	Storm Water Quality / Resident	Construction						

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							Date / Initials	Date / Initials	YES	NO
The SWDR is a planning document prepared by the Project Engineer that documents stormwater design information associated with the project. It is used to document stormwater-related decisions to assure compliance throughout all phases of project delivery.		Nov. 28, 2023	Engineer / Contractor							
SWQ 4: During the construction phase, a Water Pollution Control Document (WPCD) would be developed by the contractor. The WPCP is a project-specific plan that includes a site map(s), identifies construction and contractor activities that could cause pollutants in stormwater, and a description	1	Memorandum to File Nov. 28, 2023	Storm Water Quality / Resident Engineer / Contractor	Construction						

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							Date / Initials	Date / Initials	YES	NO
of measures or practices to control these pollutants.										
CLIMATE CHANGE/ GHG										
GHG 1: Limit idling to 5 minutes for delivery and dump trucks and other diesel- powered equipment.	45	IS/MND Section 2.3	District Environmental Planning / Resident Engineer / Contractor	Constru ction						
GHG 2: Maximize use of recycled materials.	45	IS/MND Section 2.3	District Environmental Planning / Resident Engineer / Contractor	Constru ction						
GHG 3: Recycle existing project features on-site.	45	IS/MND Section 2.3	District Environmental Planning / Resident	Constru ction						

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							Date / Initials	Date / Initials	YES	NO
			Engineer / Contractor							
GHG 4: Use recycled water or reduce consumption of potable water for construction.	45	IS/MND Section 2.3	District Environmental Planning / Resident Engineer / Contractor	Constru ction						
GHG 5: Use Partial Depth Recycling as the construction method to rehabilitate the pavement.	45	IS/MND Section 2.3	District Environmental Planning / Resident Engineer / Contractor	Constru ction						
HAZARDOUS WASTE / MATERIALS										
HAZ-1: Include 84-9.03B Non-Hazardous Striping/ Marker.	1	Initial Site Assessment Checklist (ISA Checklist)	District Environmental Engineering / Resident Engineer / Contractor	Final Design, Constru ction	SSP 84- 9.03B					

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							Date / Initials	Date / Initials	YES	NO
		Oct. 23, 2023								

Appendix C Federal Transportation Improvement Program

SBDLS02			Exempt Grouped Projects for Pavement Resurfacing and/or Pavement Rehabilitation - SHOPP Roadway Preservation Program				2023 FTIP Amendment #23-12		
Agency	County	DistrictEA	Notes	Project Description	Program Year(FFY)	Federal Funds	State Funds	Total Project Cost (in \$1000's)	
Caltrans	SBd	1J270	PCR.2022SHOPP Amendment#22H- OnSR-247 inandnearYuccaValley, from Route62 tonorthofGin Road. Rehabilittate 009. CTC June28-29, pavementand widen shoulders. RW Cap and CONCap/Sup Only. 2023 annroval.		2023/24	\$34,026	\$0	\$34,026	
Caltrans	SBd	1J310	PCR: SHOPP Amendment #22H- On SR-18 nearBig Bear Lake, from Arrowbear Drive to Route 38. Rehabilitate culverts 002, CTC June 29-30, and install Changeable Message Sign (CMS). RW Cap and CON Cap/Sup Only. 2022approval.		2023/24	\$7.253	\$0	\$7,253	
Caltrans	SBd	1LI50	New.2022 SHOPP approved by CTC March 17, 2022.	On 1-15 near Baker, from south of Basin Road to 7.4 miles north of Route 127. Rehabilitate pavement, drainage systems, and lighting, upgrade guardrail, and replace sign panels. PS&E and RW Sup Only.	2023/24	\$2,568	\$0	\$2,568	
Caltrans	SBd	1L420	New. 2022 SHOPP approved by CTC March 17, 2022.	OnSR-18 nearBig Bear Lake, from 1.4miles south of Baldwin Lake Road to Camp Rock Road. Rehabilitate pavement and drainage systems, upgrade guardrail, and replace sign panels. PS&E and RW Sup Only.	2023/24	\$2,586	\$0	\$2,586	
Caltrans	SBd	1LI40	New. 2022SHOPP approved by CTC March17, 2022.	OnSR-18 near LucerneValley, from CampRock Road to CusterAvenue. Rehabilitate pavement, upgrade guardrail andTransportation Management System (TMS) elements, andconstructshoulders and rumblestrips.PS&E andRW Sup Only.	2023/24	\$6.459	\$0	\$6.459	
Caltrans	SBd	IK940	New. 2022 SHOPP approved by CTC March 17, 2022.	OnSR-38in Redlands, from RouteIO to Occidental Drive; also on spurs from Orange Street to Pearl Avenue (PM S0.372/S0.597) and from Eureka Street to Route I0 (PM S0.598/S0.855). Rehabilitate pavement, upgrade Transportation Management System (TMS)elements, and upgrade facilities toAmericanswithDisabilitiesAct (ADA) standards. PS&E and RW Sup Only.	2023/24	\$3,676	\$0	\$3,676	

Appendix D List of Technical Studies

The following studies and/or technical analyses have been prepared and are incorporated into this Initial Study:

Air Quality Memorandum, October 23, 2023

Hazardous Waste Initial Site Assessment Checklist, October 23, 2023

Historic Property Survey Report, December 6, 2023

Natural Environment Study – Minimal Impacts, December 12, 2023

Noise Memorandum, November 27, 2023

Questionnaire to Determine Visual Impact Assessment Level, June 19, 2023

Right of Way Data Sheets, June 2023

Storm Water Quality Memorandum, November 28, 2023

Summary Floodplain Encroachment Report, June 6, 2023

Appendix E List of Acronyms and Abbreviations

ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
ADT	Average Daily Traffic
APE	Area of Potential Effects
ARB	California Air Resources Board
BMPs	Best Management Practices
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	Methane
CHP	California Highway Patrol
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
County	San Bernardino County
COZEPP	Construction Zone Enhanced Enforcement Program
CTP	California Transportation Plan
CWA	Clean Water Act
dBA	A-weighted decibels
DSA	Disturbed Soil Area
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Areas
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse Gas
H ₂ S	Hydrogen Sulfide
I-15	Interstate 15

IS	Initial Study
ISA	Initial Site Assessment
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
mph	Miles per Hour
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
MVP	Maintenance Vehicle Pullout
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NNL	National Natural Landmarks
NO _x	Nitrogen Oxides
NO ₂	Nitrogen Dioxide
N ₂ O	Nitrous Oxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
O ₃	Ozone
PA	Programmatic Agreement
PAC	Public Awareness Campaign
Pb	Lead
PB	Proposed Barrier
PCB	Polychlorinated Biphenyl
PM	Post Mile
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
PRC	Public Resources Code
RAP	Relocation Assistance Program
RCRA	Resource Conservation and Recovery Act
RSA	Resources Study Area
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF ₆	Sulfur Hexafluoride
SHPO	State Historic Preservation Officer

SIP	State Implementation Plan
SO _x	Sulfur Oxides
SO ₂	Sulfur Dioxide
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TASAS	Traffic Accident Surveillance and Analysis System
TDM	Transportation Demand Management
TMDL	Total Maximum Daily Load
TSM	Transportation System Management
USC	United States Code
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USFWS	United State Fish and Wildlife Service
WDR	Waste Discharge Requirements
WPCP	Water Pollution Control Program
WRCC	Western Regional Climate Center
VHT	Vehicle Hours Traveled
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled

Appendix F References

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