SBD I-15 Replace Rock Slope Protection (RSP) for 6 Bridges

SAN BERNARDINO COUNTY, CALIFORNIA
DISTRICT 08-SBD-15 - Post Miles (PM) R110.4 to PM 179.4
EA 08-1L530 / PN 0820000092

Initial Study [with Proposed] Mitigated Negative Declaration

Prepared by the
State of California, Department of Transportation

April 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 spot locations from Post Miles (PM) from R110.4 to PM 179.4. 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.

What you should do:

- Please read this document.
- We welcome your comments. If you have any concerns about the proposed project, please send your written comments to Caltrans by the deadline.
- Send comments via U.S. mail or email to Caltrans at the following address:

  Malisa Lieng, Senior Environmental Planner
  California Department of Transportation
  464 W. 4th Street, 6th Floor - MS 823
  San Bernardino, CA. 92401-1400
  Email: I-15ReplaceRSP@dot.ca.gov

- Be sure to send comments by the deadline: May 17, 2024.

What happens next:
After comments are received from the public and reviewing agencies, Caltrans may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans District 8 could design and construct all or part of the project.

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, Attn: Malisa Lieng, Senior Environmental Planner, 464 W. 4th Street MS 823, San Bernardino, CA 92401; (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#
08-SBD-15-PM R110.4/179.4
EA 08-1L530
PN 0820000092

Replace Rock Slope Protection (RSP) at Telephone Wash Bridge, Mescal Ditch Bridge, Cenda Ditch Bridge and Ivanpah Ditch Bridge on Interstate 15 from PM R110.4, 1.2 miles south of Afton Canyon Road Overcrossing to PM 179.4, 2.9 miles north of Nipton Road Overcrossing in San Bernardino County.

INITIAL STUDY with (Proposed) Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

4/10/2024
Date

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

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

SCH:

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to remove the existing rock slope protection (RSP) and installing partially grouted RSP underneath the Mescal Ditch Bridge (Left & Right) Br. No. 54-0303 L&R at PM 166.8, and Ivanpah Ditch Bridge (Left & Right) Br. No. 54-0316 L&R at PM 179.4. Traditional RSP would be installed underneath Telephone Wash Bridge (Left) Br. No. 54-0233 L at PM R110.4, and Cenda Ditch Bridge (Left) Br. No. 54-1308 L at PM 172.1L on Interstate 15 (I-15) between post mile (PM) R110.4 and PM 179.4 in San Bernardino County. The project would also include the upgrading of Metal Beam Guardrail (MBGR) to Midwest Guardrail System (MGS) and constructing vegetation control underneath the guardrail. The existing bridge rail at Mescal Ditch Bridge and Telephone Wash Bridge would be replaced to concrete barrier and sign panels would be upgraded at Mescal Ditch Bridge. In addition, re-striping would occur from Mescal Ditch Bridge to Ivanpah Bridge.

Determination

This proposed Mitigated Negative Declaration [MND] is included to give notice to interested agencies and the public that it is the Department's intent to adopt a MND for this project. This does not mean that the Department's decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

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

The proposed project would have no effect on: aesthetics, agriculture and forestry resources, air quality, cultural resources, energy, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise paleontology, population and housing, recreation, traffic and transportation, tribal cultural resources, utilities and service systems, public services, and wildfires.

In addition, the proposed project would have less than significant effects to greenhouse gas emissions and hydrology and water quality.

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

BIO-General-1: Equipment Staging, Storing, and Borrow Sites. All staging, storing, and borrow sites require the approval of the Caltrans Biologist.

BIO-Plant-1: Rare Plant Surveys, Flagging, and Fencing. Within 14-days prior to construction, a preconstruction survey must be conducted by a qualified biologist during the typical rare plant blooming season (March-June) for all off pavement work areas, as well as any construction staging areas prior to use. Special-status plants must be flagged for visual identification to construction personnel for work avoidance. Special-status plants detected featuring multiple plants in a single location must be fenced with Temporary High Visibility Fencing (THVF) as an Environmentally Sensitive Area (ESA).

BIO-Arthropod-1: Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing. No more than 3 days prior to project activities, a Caltrans-approved Biologist must perform a preconstruction survey for Monarch butterfly host plants. Should any Monarch butterfly host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and host plants must be flagged by the Contractor-supplied 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 Temporary High Visibility Fencing (THVF) as an Environmentally Sensitive Area (ESA).

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 desert tortoise before operating equipment at any time.

Bio-Reptile-2: Injured or Dead Desert Tortoise. The qualified biologist must inform USFWS and CDFW of any injured or dead desert tortoises (and other special status species) found on site (verbal notification within 24 hours and written notification within 5 days).

Bio-General-4: Preconstruction Surveys. Preconstruction desert tortoise surveys must be conducted by a qualified biologist within 7-days and immediately prior to project activities. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.

Bio-Reptile-4: Speed Limits in Desert Tortoise Habitat. Except on maintained public roads designated for higher speeds or within desert tortoise proof fenced areas, driving speeds must not exceed 20 miles per hour through potential desert tortoise habitat on unpaved roads.

Bio-Reptile-5: Desert Tortoise Predation Prevention. To preclude attracting predators, such as the common raven (Corvus corax) and coyotes (Canis latrans), food-related trash items must be placed in covered refuse cans and removed daily from the work sites and disposed of at an appropriate refuse disposal site. Workers are prohibited from feeding all wildlife.

Bio-Reptile 6: Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be established following the most recent USFWS protocol for construction of fencing at bridges as shown on the plans prior to construction to exclude desert tortoise. All temporary demarcation materials must be removed once construction has been completed.

Bio-Reptile 7: Permanent Fencing: Permanent fencing for desert tortoise must be re-installed following the most recent USFWS protocol for construction of fencing to replace previous fencing damaged or removed during construction activities, to ensure connectivity (tie-ins to culverts, etc.).Changes in location of fencing will be decided by Caltrans qualified biologist and design.

Bio-General-7: Worker Environmental Awareness Program (WEAP). A Contractor supplied biologist must present a biological resource information program/WEAP for desert tortoise prior to project activities to all personnel that will be present within the project limits for longer than 30 minutes at any given time.

Bio-General-8: Biological Monitor. The qualified biologist must monitor project activities weekly to ensure measures are being implemented and documented.

Bio-General-9: Environmentally Sensitive Area (ESA). To address impacts to desert tortoise, desert tortoise designated critical habitat, and other special-status species delineate the project impact area as an ESA as shown on the plans and/or described in the specifications.

Bio-General-10: Environmentally Sensitive Area (ESA) Fence Monitoring. Integrity inspections of desert tortoise fencing must occur throughout the duration of the project daily 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 temporary fencing 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-Avian-1: Preconstruction Nesting Bird Survey. If project activities cannot avoid the nesting season, generally regarded as Feb. 1 – Sept 30, then preconstruction nesting bird surveys must be conducted 3-days prior to construction by a qualified biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer may be established and monitored by the qualified biologist and/or monitored until the young have fledged or the nest is no longer active.

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Kurt Heidelberg Date
Deputy District Director
District 8, Division of Environmental Planning
California Department of Transportation

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Chapter 1 – Proposed Project

Introduction

Caltrans proposes to maintain bridge stability, functionality, and improve the safety of the traveling public. The proposed project is on Interstate 15 (I-15) at post mile (PM) R110.4, PM 166.8, PM 172.1L and PM 179.4 in San Bernardino County. The work includes removing the existing rock slope protection (RSP) and installing partially grouted or traditional RSP, upgrading four Metal Beam Guardrail (MBGR) to Midwest Guardrail System (MGS) and constructing vegetation control underneath those guardrails. In addition, re-striping would occur from Mescal Ditch Bridge to Ivanpah Bridge.

This project is included in the 2023 Federal Transportation Improvement Program (FTIP) and is proposed for funding from the SHOPP Bridge Preservation Program 201.111/HA21 for delivery in the 2026/2027 fiscal year.

Purpose and Need

Purpose

The purpose of the proposed project is to maintain bridge stability, functionality, and improve the safety of the traveling public by restoring the scour protection and upgrading the existing MBGR to MGS, upgrading barriers and refreshing the striping.

Need

The need for the proposed project is to protect the abutments and foundations of the bridges at Mescal Ditch, Ivanpah Ditch, Telephone Wash and Cenda Ditch. Proper protection from erosion and sediment build up at the bridges' abutments and foundations are necessary to maintain the stability and functionality of the bridges.

Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are the Build Alternative and the "No-Build Alternative."

The project is located in San Bernardino County on I-15 from PM R110.4, 1.2 miles south of Afton Canyon Road Overcrossing to PM 179.4, 2.9 miles north of Nipton Road Overcrossing. The proposed project occurs at 6 spot locations to address the deteriorating facilities. This portion of I-15 is a north-south, two to three-lane highway with 12-foot lanes and 10 to 32 foot outside shoulders and 5 to 10-foot inside shoulders in each direction of traffic. The purpose of the project is to upgrade the deteriorating facilities by replacing and/or installing RSP.

Alternatives

No-Build Alternative

Under the No-Build, the existing facilities would remain in their current condition and the existing RSP will continue to deteriorate. This alternative does not meet the purpose and need.

Proposed Build Alternative

The Build Alternative consists of removing the existing RSP and installing partially grouted or traditional RSP at the following six locations on Interstate 15 in San Bernardino County:

- Telephone Wash Bridge (Left) Br. No. 54-0233L at PM R110.4
- Mescal Ditch Bridge (Left and Right) Br. No 54-0303 at PM 166.8
- Cenda Ditch Bridge (Left) Br. No. 54-1308L at PM 172.1L
- Ivanpah Ditch Bridge (Left and Right) Br. No. 54-0316 at PM 179.4

In addition to the RSP work, existing MBGR would be upgraded to MGS at the following four locations:

- Telephone Wash – Southbound, left side
- Mescal Bridge – Northbound, right side
- Mescal Bridge – Southbound, left side
- Ivanpah Bridge – Northbound, right side

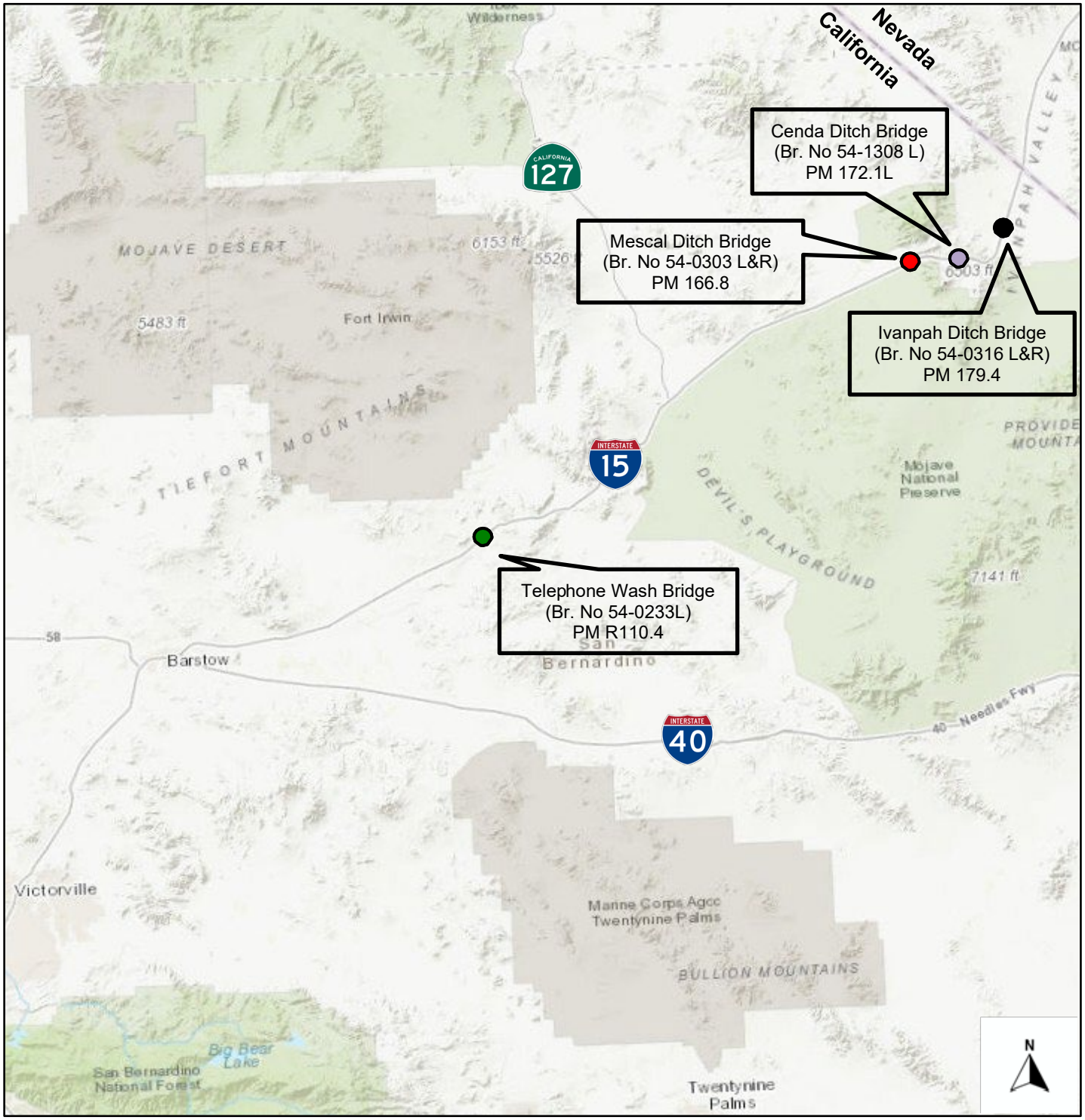
Vegetation control would be constructed underneath the guardrails. The existing bridge rails at Mescal Ditch Bridge (Left) and Telephone Wash Bridge (Left) would be replaced by concrete barriers. In addition, sign panels would be upgraded at Mescal Ditch Bridge. In addition, striping would be updated between Mescal Bridge and Ivanpah Bridge.

Temporary construction easements (TCE) would be needed to construct temporary access roads during construction. Five of the six bridges (Mescal, Cenda, and Ivanpah Ditch Bridge) are located within the Bureau of Land Management's (BLM) jurisdiction.

Further stage construction and traffic handling plans would be developed during the Design phase. It is currently proposed for the one of the shoulders to be closed during the replacement of the bridge railing and for traffic to be shifted to the other shoulder. Temporary barrier systems would be installed during the replacement of the bridge rail and the lane would be closed for the installation and removal of this system. The lanes are proposed to be open at all times and no detours are needed.

The capital cost for this alternative is estimated at $11,951,687. The estimated number of working days is 360. 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.

1L530 Project Vicinity Map



December 18, 2023

0 5 10 20 Miles

- Telephone Wash Bridge PM R110.4
- Mescal Ditch Bridge PM 166.8
- Cenda Ditch Bridge PM 172.1L
- Ivanpah Ditch Bridge PM 179.4

Caltrans

Division of Environmental Analysis

Permits and Approvals Needed

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

Agency	PLAC	Status
United States Fish and Wildlife Service (USFWS)	Programmatic Biological Opinion (PBO)	The Programmatic Biological Opinion has been submitted to the USFWS and is pending concurrence.
United States Army Corps of Engineers (USACE)	Approved Jurisdictional Determination (JD)	The AJD will be determined during the Final Design phase of the project. The project will not proceed to construction before receiving the AJD.
California Department of Fish and Wildlife (CDFW)	1602 Agreement for Streambed Alteration	Application for the 1602 Agreement will occur during the Final Design phase of the project. The project will not proceed to construction before receiving these permits.
Regional Water Quality Control Board	Water Discharge Requirement (WDR)	The WDR will be determined during the Final Design phase of the project. The project will not proceed to construction before receiving the WDR.

Chapter 2 – California Environmental Quality Act (CEQA) Evaluation

CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed 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; see Chapter 1 for a detailed discussion of these features.

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 October 16, 2023, the proposed project would have no or negligible visual changes to the environment. In addition, the project limits are not identified as a scenic highway. Therefore, the project would not have an 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. The proposed project areas are classified as Resource Conservation (RC), General Commercial (CG), and Regional Industrial (IR) areas. The proposed project site would not damage any scenic resources or historic buildings. As such, there would be no impact.

c) No Impact: The existing visual character or quality of the site and its surroundings would remain the same as existing conditions; therefore, the project would not substantially degrade the area.

d) No Impact: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for aesthetics.

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) <u>No Impact:</u> According to the California Department of Conservation Map, there are no farmlands or vacant land mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance or Farmlands of Local Importance within the project limits.

b) <u>No Impact:</u> There are no Williamson Act parcels located within the project area.

c) <u>No Impact:</u> There are no forest lands, timberlands, or timberland production areas adjacent to or within the project site. The project area would not conflict with existing zoning for, or cause rezoning or forest land, timberland, or timberland zoned Timberland Production.

d) No Impact: The proposed project would not result in the loss or conversion of forest land.

e) No Impact: The project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for agriculture and forest resources.

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 proposed project is located in the western portion of the Mojave Desert Air Basin (MDAB). The Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over the project area and is responsible for bringing the Basin into attainment for federal and state air quality standards. To achieve this goal, MDAQMD prepares plans for the attainment of air quality standards, as well as maintenance of those standards once achieved. This project is not a capacity-increasing transportation project. It will have no impact on traffic volumes and would generate a less than significant amount of pollutants during construction due to the very short duration of project construction. The project is categorized as an exempt project per Table 1 of Caltrans CO (Carbon Monoxide) Protocol - "*Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes"* and *"Guardrails, median barriers, crash cushion; and Directional and informational signs"* and is exempt from all air emissions analysis. Therefore, the proposed project would not conflict with the Air Quality Management Plan (AQMP), violate any air quality standard, result in a net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Impacts will be less than significant. No mitigation is required.

The proposed project is included in the 2023 Federal Transportation Improvement Program (FTIP) from the *2023 Grouped Project Detailed Backup Listings* on the Southern California Associated of Governments (SCAG) website.

As such, the proposed project would have no impacts.

b) No Impact: During project construction, emissions would be short term and transitory, and fugitive dust would be limited. No net increase in operational emissions would occur, traffic volumes would be the same under the Project Alternative and No-Build Alternative. The project

would result in short-term generation of emissions, but no increases would occur for project operation and no impacts related to a cumulatively considerable net increase of any criteria pollutant.

c) No Impact: No impacts related to exposure of sensitive receptors to substantial pollutant concentration would occur. California Air Resources Board (CARB) characterizes sensitive land uses as simply as possible by using the example of residences, playgrounds, and medical facilities. However, there are none of these sensitive receptors in the nearby vicinities.

d) No Impact: According to the CARB, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. Because the project would not include any of these types of uses, and no sensitive land uses are located along the alignment, no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for air quality.

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) <u>Less Than Significant Impact:</u> A Natural Environment Study [Minimal Impacts] (NESMI) was approved in December 2023. Caltrans has determined, in accordance with the California Endangered Species Act (CESA), that the project would have "No Take" of State-listed or Candidate species for the gilded flicker (*Colaptes chrysoides),* desert tortoise *(Gopherus agassizii),* and Mohave tui chub *(Siphateles bicolor mohavensis)*. There would also be "No Effect" on NOAA Fisheries listed species of Essential Fish Habitat.

Special-Status Plant Species

No special-status plants were observed in the Biological Study Area (BSA) during the general habitat assessment survey. With the exception of desert wash work areas (RSP replacement and temporary access roads), the Project Impact Area (PIA) primarily consists of the existing paved travel way and previously disturbed shoulder areas with compacted or barren soils or areas dominated by nonnative ruderal species void of suitable habitat for special-status plants. Special-status plants would not be impacted but to avoid the potential for adverse impacts, Compensatory mitigation would not be required. Caltrans proposes avoidance and minimization measures Bio-General-1, Bio-Plant-1, and Bio-General-7.

Special-Status Animal Species

No special status animal(s) was/were observed within the BSA.

Special-Status Reptiles

The desert tortoise *(Gopherus agassizii)* is both a federally-listed and State-listed *threatened* species. Desert tortoises inhabit the Mojave, Colorado, and Sonoran Deserts in the southwestern United States and adjacent Mexico. The desert tortoise is primarily active between March and June and in late summer months in the eastern Mojave Desert but may also be active outside these months when the temperature is below 104 degrees Fahrenheit. Desert tortoise spend November through February in dormant states inside their burrows. The BSA has been affected by previous highway maintenance activities and is routinely used by the public. There are several areas within the BSA exhibiting high disturbance levels and do not feature ideal habitat conditions for desert tortoise. However, areas of native Mojavean desert scrub with minimal disturbance and natural plant communities found within the BSA are suitable habitat for desert tortoise, including the wash areas requiring RSP replacement.

The database searches identified critical desert tortoise habitat and several records of desert tortoise in the BSA. Suitable desert tortoise habitat such as native desert scrub plant communities, flat terrain and sandy, fine soils were observed in the BSA. No live desert tortoise or signs (burrows, scat, tracks, shell fragments, etc.) were observed in the BSA during the general habitat assessment survey. Project Impact Areas containing the Primary constituent elements (PCE) for desert tortoise are confined to the off pavement RSP work areas containing Mojavean desert scrub with minimal disturbance and natural plant communities. The existing RSP does not constitute suitable desert tortoise habitat and is therefore not considered a PCE for desert tortoise.

Desert tortoise Critical Habitat overlaps three of the four bridge BSA locations which includes the portions from approximately PM R110.4 to PM R116.85 (Telephone Wash), PM 142.9 to PM 167.8 (Mescal Ditch), and PM 176.3 to PM 177.7 (Ivanpah Ditch). Only Cenda Ditch (PM 172.1L) is not within a designated Critical Habitat but remains within suitable habitat. The total temporary impact area for desert tortoise Critical Habitat (DTCH) within the PIA, excluding the lanes of I-15 (paved areas), center median, shoulders, and RSP, is 0.47 acres, and a total 1.23 acres of temporary impacts to suitable desert tortoise habitat (DTSH) respectively. Within the PIA, the primary constituent elements which comprise DTCH are present beyond paved and maintained shoulder and center median areas. Due to the Project's location within desert tortoise historic range, USFWS DTCH within the BSA, and suitable habitat, Caltrans presumes desert tortoises are present in the Project vicinity.

With the exception of desert wash work areas (RSP replacement work), the PIA primarily consists of the existing paved travel way and previously disturbed shoulder areas with compacted or barren soils or areas dominated by nonnative ruderal species void of suitable habitat for desert tortoise. Temporary impacts such as construction activities, vegetation removal, ground disturbance, noise, and equipment staging will occur, possibly resulting in temporary avoidance of the immediate area of disturbance. Permanent impacts are not anticipated to occur as all work consist of replacement of existing structures. Furthermore, the existing structures are not considered PCE's for desert tortoise and is therefore not suitable habitat (RSP, paved roadway). Although some removal of suitable habitat consisting of creosote bush scrub may occur, the Project is not anticipated to impact desert tortoise directly or permanently based on the scope of work and with the implementation of avoidance and minimization measures as described below. Due to the lack of final design plans at the time of the Draft JD and Final NESMI, temporary impacts are only approximate and will be finalized during the Design phase. With these findings Caltrans has determined the proposed project "May Affect" desert tortoise and its designated critical habitat and will require USFWS Section 7 Consultation utilizing the DTPBO. Final impacts both temporary and permanent, will be determined later in the project after design has been finalized.

Compensatory mitigation would not be required. To avoid the potential for adverse impacts to desert tortoise, Caltrans proposes the following avoidance and minimization measures: Bio-General-1, Bio-Reptile-1, Bio-Reptile-2, Bio-General-4, Bio-Reptile-4, Bio-Reptile-5, Bio-General-7, Bio-General-8, Bio-General-9, Bio-General-11, and Bio-General-12.

Special Status Birds

Bendire's Thrasher, *Toxostoma benderei*, is a vulnerable bird found in thorny bushes in desert, cholla, and various kinds of dry, semi-open habitats, including farmland. Potential habitat features were identified during the Google Earth Pro virtual "windshield survey" conducted on October 1, 2021. These special-status birds have suitable habitat in the BSA consisting of Mojavean Desert scrub. There are no other special-status bird species documented in the BSA. No special-status birds were observed during the general habitat assessment survey (June 14, 2021) which was conducted during the nesting bird season (February 1 to September 30, 2021).

With the exception of desert wash work areas (RSP replacement and temporary access roads), the PIA primarily consists of the existing paved travel way and previously disturbed shoulder areas with compacted or barren soils or areas dominated by nonnative ruderal species void of suitable habitat for special-status birds. Therefore, the Project is not anticipated to directly impact these species. However, indirect Project related impacts such as noise, ground vibrations from heavy equipment, potential night work, and human presence could lead to temporary avoidance of the immediate area of disturbance and nest abandonment could occur where Project activities occur adjacent to suitable habitat.

To avoid the potential for adverse impacts to special-status and other regulated birds, Caltrans proposes avoidance and minimization measure Bio-Avian-1. No compensatory mitigation would be required.

Special Status Mammals

The following mammal species have suitable habitat in the BSA.

Pallid bat

Inhabits chaparral; coastal scrub; desert wash; Great Basin grassland; Great Basin scrub; Mojavean Desert scrub; riparian woodland; Sonoran Desert scrub; upper montane coniferous forest; and valley & foothill grassland habitats. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.

Townsend's big-eared bat

Townsend's big-eared bat (Corynorhinus townsendii) is a State-designated Species of Special Concern and is BLM Sensitive. Found throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.

Fringed myotis

Found in a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Species uses caves, mines, buildings or crevices for maternity colonies and roosts.

These special-status mammals have suitable habitat in the BSA consisting of Mojavean Desert scrub and desert washes which can serve as potential movement corridors. Bat presence was detected on survey dated December 14, 2022. Species of bats, and nature of their roosts (day roosting, night roosting, or maternity colony roost, needs to be identified to conclude the best course of action for the protection of the resident bat population. As bats commonly use the same roosts, but are not always dedicated to them, the possibility of transient populations is also possible. Emergence surveys prior to the start of project activities will be conducted to identify the species presence and nature of their roosts.

The bridges offer suitable potential roosting habitat for bats which may be temporarily and/or permanently impacted by the Project. The project will be mostly replacing rock slope protection, which runs under the bridges, which may impact bat species. Maternity colonies will be especially susceptible to disturbance and many bat species will abandon the colony upon disturbance. It is necessary to identify the nature and species of bats present in the PIA to properly implement avoidance and minimization measures for bat habitat protection.

To avoid the potential for adverse impacts to special-status mammals, Caltrans proposes the following avoidance and minimization measures, no compensatory mitigation would be required: Bio-General-1, Bio-General-7, and Bio-General-8.

In conclusion, the proposed project would have less than significant impact on a candidate, sensitive, or special status species.

b) No Impact: The proposed project would not affect any riparian habitat or natural communities of special concern since the areas are disturbed and developed. Therefore, there would be no impact to riparian habitat and natural communities within the BSA.

c) Less Than Significant with Mitigation Incorporated: No potentially jurisdictional wetlands/wetland indicator features were identified during the Jurisdictional Delineation (JD) and database searches. Caltrans has determined that no wetlands or Waters of the U.S. would be impacted. The BSA doesn't contain regulated jurisdictional features by the U.S. Army Corps of Engineers (USACE). The JD report prepared for the project is considered tentative pending

concurrence by respective agencies including USACE, CA Dept. of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB).

Four Jurisdictional drainage features were identified in the BSA/Potential Impact Area (PIA) pursuant to the Porter Cologne Water Quality Control Act and Section 1602 of the CA Fish and Game Code. This evaluation is considered tentative pending concurrence by respective agencies including USACE, CA Dept. of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB). For the proposed scope of work occurring within Telephone Wash, Mescal Ditch, Cenda Ditch and Ivanpah Ditch, the Waste Discharge Requirements and a Section 1602 Streambed Alteration Agreement from CDFW and an Approved JD is anticipated.

d) No Impact: Perennial waters necessary for obligate-aquatic fish species, fish passage, and/or spawning habitat are absent from the BSA. The project would have no impact to the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

e) Less Than Significant Impact with Mitigation Incorporated: The proposed project would not conflict with any local policies or ordinances protecting biological resources. During the Design phase, Caltrans would be consulting and coordinating with CDFW. Therefore, the proposed project would have less than significant impact with mitigation incorporated.

f) No Impact: This project 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.

Avoidance, Minimization, and/or Mitigation Measures

BIO-General-1: Equipment Staging, Storing, and Borrow Sites. All staging, storing, and borrow sites require the approval of the Caltrans Biologist.

BIO-Plant-1: Rare Plant Surveys, Flagging, and Fencing. Within 14-days prior to construction, a preconstruction survey must be conducted by a qualified biologist during the typical rare plant blooming season (March-June) for all off pavement work areas, as well as any construction staging areas prior to use. Special-status plants must be flagged for visual identification to construction personnel for work avoidance. Special-status plants detected featuring multiple plants in a single location must be fenced with Temporary High Visibility Fencing (THVF) as an Environmentally Sensitive Area (ESA).

BIO-Arthropod-1: Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing. No more than 3 days prior to project activities, a Caltrans-approved Biologist must perform a preconstruction survey for Monarch butterfly host plants. Should any Monarch butterfly host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and host plants must be flagged by the Contractor-supplied 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 Temporary High Visibility Fencing (THVF) as an Environmentally Sensitive Area (ESA).

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 desert tortoise before operating equipment at any time.

Bio-Reptile-2: Injured or Dead Desert Tortoise. The qualified biologist must inform USFWS and CDFW of any injured or dead desert tortoises (and other special status species) found on site (verbal notification within 24 hours and written notification within 5 days).

Bio-General-4: Preconstruction Surveys. Preconstruction desert tortoise surveys must be conducted by a qualified biologist within 7-days and immediately prior to project activities. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.

Bio-Reptile-4: Speed Limits in Desert Tortoise Habitat. Except on maintained public roads designated for higher speeds or within desert tortoise proof fenced areas, driving speeds must not exceed 20 miles per hour through potential desert tortoise habitat on unpaved roads.

Bio-Reptile-5: Desert Tortoise Predation Prevention. To preclude attracting predators, such as the common raven (Corvus corax) and coyotes (Canis latrans), food-related trash items must be placed in covered refuse cans and removed daily from the work sites and disposed of at an appropriate refuse disposal site. Workers are prohibited from feeding all wildlife.

Bio-Reptile 6: Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be established following the most recent USFWS protocol for construction of fencing at bridges as shown on the plans prior to construction to exclude desert tortoise. All temporary demarcation materials must be removed once construction has been completed.

Bio-Reptile 7: Permanent Fencing: Permanent fencing for desert tortoise must be re-installed following the most recent USFWS protocol for construction of fencing to replace previous fencing damaged or removed during construction activities, to ensure connectivity (tie-ins to culverts, etc.).Changes in location of fencing will be decided by Caltrans qualified biologist and design.

Bio-General-7: Worker Environmental Awareness Program (WEAP). A Contractor supplied biologist must present a biological resource information program/WEAP for desert tortoise prior to project activities to all personnel that will be present within the project limits for longer than 30 minutes at any given time.

Bio-General-8: Biological Monitor. The qualified biologist must monitor project activities weekly to ensure measures are being implemented and documented.

Bio-General-9: Environmentally Sensitive Area (ESA). To address impacts to desert tortoise, desert tortoise designated critical habitat, and other special-status species delineate the project impact area as an ESA as shown on the plans and/or described in the specifications.

Bio-General-10: Environmentally Sensitive Area (ESA) Fence Monitoring. Integrity inspections of desert tortoise fencing must occur throughout the duration of the project daily 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 temporary fencing 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-Avian-1: Preconstruction Nesting Bird Survey. If project activities cannot avoid the nesting season, generally regarded as Feb. 1 – Sept 30, then preconstruction nesting bird surveys must be conducted 3-days prior to construction by a qualified biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer may be established and monitored by the qualified biologist and/or monitored until the young have fledged or the nest is no longer active.

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 Historical Property Survey Report (HPSR) for the proposed project was approved on Feb. 5, 2024. The Area of Potential Effect (APE) was developed from the Project Footprint, including horizontal and vertical construction impacts, plus a buffer to include potential indirect effects that may develop as a result of the undertaking. The APE was established to include temporary access roads, staging and storage areas, utility relocations, plus a buffer to include potential indirect effects that may develop as a result of the undertaking. The APE is expected to extend 3-6 feet into the ground as needed for locating buried utility line and for grading access roads during construction. There are no vertical concerns for the vertical APE. In addition, the APE includes the additional space for new ramps and the limit for work around Telephone Wash has been extended 500 feet to the west.

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 within the APE. Therefore, the project is not expected to cause a substantial adverse change and would result in no impact.

b) No Impact: Caltrans Cultural Resources Database (CCRD), As-Built Files and other resources were used to identify six previously recorded archaeological sites within a quarter-mile radius of the project footprint. Of the six, five are located within or pass through the limits of the APE, and one is adjacent to, but outside of the APE boundary. Caltrans, in accordance with Section 106 PA Stipulation VIII.C.5 has determined there are cultural resources within the APE that were previously determined not eligible for inclusion in the National Register of Historic Places (NRHP) with State Historic Preservation Officer (SHPO) concurrence and the determinations remain valid. As such, the proposed project would not cause a substantial change in significance of an archaeological resource.

c) No Impact: Human remains are not expected to be encountered. Caltrans standard specifications will be implemented in the event human remains are found during construction activities.

Avoidance, Minimization, and/or Mitigation Measures

CR-1: If cultural materials are discovered during construction, all earth-moving activity within sixty feet (60') around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

CR-2: In the event that human remains are found, the county coroner should be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to California PRC 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 Descendant (MLD). The person who discovered the remains will notify District 8 Division of Environmental Planning; Gary Jones, District Native American Coordinator (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: Caltrans implements best management practices (BMP's) to prevent wasteful consumption of resources during construction or operation. The proposed project would have no impact.

b) No Impact: The proposed project does not conflict with any known state or local plan for renewable energy or energy efficiency. Therefore, there would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for energy.

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 waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

CEQA Significance Determinations for Geology and Soils

a i), aiii) <u>No Impact</u>: According to the California Department of Conservation Earthquake Zones of Required Investigation Maps, the proposed 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. The purpose and need of the project are to restore scour protection,

upgrade guardrails and sign panels, and re-stripe. which would not directly or indirectly cause potential adverse effects. No impacts would occur.

a ii) No Impact: According to the Southern California Earthquake Data Center, Manix Fault's most recent surface rupture was April 10, 1947. All Caltrans projects follow the Standard procedures regarding seismic design to avoid or minimize any significant impacts related to seismic ground shaking. The proposed project would result in no impact because project construction and operation would have no opportunity to rupture a known earthquake fault to cause seismic shaking.

a iii) No Impact: The San Bernardino County Geologic Hazard Overlay Map – Regional Index Map for the Northeast portion (map CJDJ C) does not identify any geologic hazards for the project. The area does not have a potential for liquefaction hazards. There would be no impacts.

a iv) No Impact: Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. Based on a review of the San Bernardino County Geologic Hazard Overlay Map - Regional Index Map for the Northeast portion (map CJDJ C), landslide susceptibility is not identified. Therefore, there would be no impacts.

b) No Impact: Project does not anticipate any substantial loss of soil erosion or topsoil. No impacts would occur.

c) No Impact: The San Bernardino County Land Use Plan General Plan Geologic Hazard Overlay Map does not identify any geologic hazards for the project. It also does not identify any land within the project limits as susceptible to landslides or liquefaction. Therefore, there are no impacts.

d) No Impact: The San Bernardino County Land Use Plan General Plan Geologic Hazard Overlay Map does not identify any geologic hazards for the project. It also does not identify any land within the project limits as susceptible to landslides or liquefaction, which implies the absence of expansive soil. Therefore, there would be no impacts.

e) No Impact: Septic tanks or alternative wastewater disposal systems would not be part of the proposed project. Therefore, there would be no impacts.

f) No Impact: The proposed project locations are occurring at existing structures and abutments and would not destroy a unique paleontological resource or site or unique geologic feature. Therefore, there would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for geology and soils.

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 would result in 466 Tons of CO2e (CO2 equivalent) during the 360 days of construction. The project is not a capacity increasing project, it is anticipated that it would not result in an increase in operational GHG emissions. With implementation of construction GHG-reduction measures (GHG-1 through GHG-4), the impact would be less than significant.

b) No Impact: The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases. Therefore, there would be no impact.

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: Schedule truck trips outside of peak morning and evening commute hours.

GHG-3:

- Maintain equipment in proper tune and working condition
- Use right sized equipment for the job
- Use equipment with new technologies.

GHG-4: Reduce the need for transport of earthen materials by balancing cut and fill quantities.

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: Implementation of the proposed project is not expected to result in the creation of any new hazards or expose people to potential new health hazards. No storage of toxic materials or chemicals would occur, and the project is not anticipated to increase the potential hazardous materials in the project area. The Initial Site Assessment Checklist completed for the project determined the hazardous waste involvement to be low.

b) No Impact: The proposed project is not anticipated to result in a release of hazardous materials into the environment. Standard construction practices would be observed such that any materials released are appropriately contained as required by local and state law. Therefore, the proposed project is expected to result in no impacts.

c) No Impact: There are no schools located within one-quarter mile of each of the proposed bridges. Therefore, the project would not emit hazardous emissions or handle hazardous waste within one-quarter mile of a school and would have no impacts.

d) No Impact: No potentially hazardous waste sites were listed on the GeoTracker, Envirostor and Mineral Hazards Info Maps databases on or near the project location. No underground storage tanks, surface tanks, sumps, ponds, drums, basins, transformers, or landfills were identified. Furthermore, no surface staining, oil sheen, odors, or vegetation damage was identified on the Initial Site Assessment (ISA) Checklist. The project would result in no impacts.

e) No Impact: The proposed project is not within two miles of a public airport or public use airport. Nor would the project result in a safety hazard 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. The proposed project would result in no impacts.

g) No Impact: The proposed project areas are not located within a fire hazard zone. The scope of the project would have low potential of exposing people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. There would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures

HAZ-1: SSP 6-1.03 - Conditions for use of local material from non-commercial source.

HAZ-2: SSP 14-11.14 - Specifications for Treated Wood Waste will be included.

HAZ-3: SSP 14-9.02 National Emissions Standard for Hazardous Air Pollutants (NESHAP) Notification.

A Site Investigation to assess the concentrations of Aerially Deposited Lead (ADL) in soil and Asbestos in Construction Material (ACM) in bridges is currently pending. Based on the findings in the Site Investigation, proper measures may be added to the project to protect construction worker and the public from exposure to hazardous materials.

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: According to the Scoping Questionnaire of Water Quality Issues (SQWQI) prepared for the project, the proposed project would not violate any water quality standards or waste discharge requirements. In addition, the scope of work would not impact the groundwater. Therefore, the proposed project would have no impacts on water quality standards or waste discharge requirements nor degrade surface or ground water quality.

b) No Impact: According to the SQWQI, there are no municipal or domestic water supply reservoirs or groundwater percolation facilities within the project limits. Implementation of the project would not deplete groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or a lowering of the groundwater table

level. The scope of the project would not affect the amount of water consumed regionally through increased withdrawals from ground water sources. As such, the proposed project would have no impacts.

According to the Lahontan Region Basin Plan, Telephone Wash Bridge is located within the Cave Hydrologic Subarea Hydrologic Unit (628.71). The beneficial uses of surface waters are Municipal and Domestic Supply (MUN), Agriculture Supply (AGR), Groundwater Recharge (GWR), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Warm Freshwater Habitat (WAR), Cold Freshwater Habitat (COLD), and Wildlife Habitat (WILD).

Mescal Ditch Bridge is located within the Amargosa Hydrologic Unit (609.10). The beneficial uses of surface waters are MUN, GWR, REC-1, REC-2, WAR, and Rare (RARE).

Cenda Ditch Bridge and Ivanpah Ditch Bridge are in the Ivanpah Hydrologic Unit (612.00). The beneficial uses of surface waters are MUN, AGR, GWR, REC-1 REC-2, Commercial and Sportfishing (COMM), WAR, COLD, and WILD.

c) i), Less Than Significant Impact: The soil-erodibility factor K factor value for the project is 0.32 which indicates that the project locations have medium-textured soils, such as silt loam. The soil is moderately susceptible to particle detachment and produce runoff at moderate rates. Erosion Control is proposed for the Disturbed Soil Area (DSA). The DSA is 4 acres and includes all areas of disturbed soil caused by the scope of work, construction staging/storage areas, excavation for vegetation control, and areas of soil disturbance caused by construction vehicle access. Therefore, the project would have less than significant impact.

c) ii) No Impact: The proposed project has a potential for surface runoff offsite. Silt Fence, fiber rolls and gravel bag berms are proposed to reduce any runoff. In addition, the Rock Slope Protection (RSP) would not increase the volume of water under the bridge because the RSP would be placed/replaced at the current locations. Additional spurs/guide banks would not be needed. Therefore, changes in alignment downstream is not anticipated. The project would have no impact.

c) iii) No Impact: According to the Scoping Questionnaire for Water Quality Issues, the proposed project would not create or contribute runoff. The scope of the proposed project does not propose any new drainage systems. If work is determined to occur close to a drainage system, then the system, inlets and culverts would require protection. The project would also have minimal hydraulic changes in runoff volume since NIS area is not proposed. As a result, the project would have no impact.

c) iv) No Impact: Since the proposed project would not have any NIS, the project would not impede or redirect flood flows. There would be no impacts.

d) No Impact: According to the Flood Insurance Rate Map (FIRM), provided by the Federal Emergency Management Agency (FEMA), Telephone Wash Bridge (Firm map 06071C3425H), Mescal Ditch Bridge (Firm map 06071C1875H), Cenda Ditch Bridge (Firm map 06071C1900H) and Ivanpah Ditch Bridge (Firm map 06071C1400H) are in the San Bernardino County Unincorporated Areas. These FIRM map panels are “Not Printed” and are classified as Zone D. FEMA classifies Zone D as an area where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted. The proposed construction within Zone D is incidental, minor in nature, and would not have any significant adverse effect on the floodplain. The proposed project would not risk the release of pollutants due to project inundation. Therefore, the project would have no impacts.

e) <u>No Impact</u>: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The following “NPDES permits” would apply: The California Statewide Permit (Order No. 2022-0033-DWQ, NPDES No. CAS 000003, National Pollutant Discharge Elimination System Permit, Statewide Stormwater Permit, and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans). Construction activities would also comply with NPDES General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activities (Order WQ 2022-0057-DWQ-NPDES No. CAS000002). Therefore, there would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for hydrology and water quality.

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: Implementation of the proposed project locations would not divide an established community, as the location is already disturbed and located on the Interstate. 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 scope of work for the proposed project would not conflict with any applicable land use, plan, policy, or regulation. The project would have no impacts.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for land use and planning.

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 proposed project locations are located within the North Desert Region where approximately 6.2 percent of the region is designated as MRZ-2 or MRZ-3. MRZ-2 is classified as "Identified Significant Resources" and MRZ-3 as "Potential Significant Resources." These designations are scattered widely but are somewhat more common in the eastern part of the region than the western part. Mescal Ditch Bridge and Cenda Ditch Bridge are located within both MRZ-2 and MRZ-3. Telephone Wash Bridge and Ivanpah Ditch Bridge are not located within a designated zone.

Additionally, Caltrans HQ Division of Environmental Analysis GIS Library map identifies Mescal Ditch Bridge and Cenda Ditch Bridge to be located within the Clark-Ivanpah Mining District. This region is notable for its extensive and diverse mineralization and mining history. It has been a major source of gold, copper, and rare-earth elements.

The scope of the proposed project is to remove the existing RSP and install partially grouted or traditional RSP underneath the bridge locations in San Bernardino County. Since these locations are existing and pre-disturbed, the project would not result in the loss of availability of the known mineral resources in the region or to the residents of the state.

b) No Impact: The San Bernardino County General Plan, *Mineral Resources*, identifies the Valley Region as an area of concern due to population growth and development. Since the project locations are outside of the Valley Region and is not a development project, there would be no loss of availability of locally-important mineral resources as identified on the local general plan, specific plan, or other land use plan.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for land use and planning.

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

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 nearest airport is Baker Airport, by State Route 127 and Interstate 15, located approximately 50 miles from the Nevada border. This airport is not within two miles of the proposed project locations and would not expose people residing or working in the project area to excessive noise levels. Therefore, no noise impacts related to air traffic would occur.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for noise.

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 scope of the project is to remove the existing RSP and replace it with partially grouted or traditional RSP, upgrade the guardrails and construct vegetation control underneath, replace bridge rails and sign panels, along with restriping. The proposed project would not induce substantial population growth in the area, either directly or indirectly. There would be no impacts.

b) **No Impact:** The scope of work would not result in the displacement of existing people or housing as the proposed locations are occurring at the bridge locations. Therefore, there would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for population and housing.

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) Response to Fire protection and Police protection: No Impact. The San Bernardino County Fire Stations 52, in Harvard, and 53, in the town of Baker, are located near the project vicinity and along I-15. 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 Sherriff'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. There are no schools located within a 0.5 mile of the proposed project improvements. The proposed project would not result in accessibility problems to existing schools and is not expected to result in any other impacts on school services. As such, there are no impacts.

Response to Parks: No Impact. There are no parks near the project vicinity; therefore, the proposed project would have no impacts.

Response to Other Public Facilities: No Impact. There are no 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.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Public Services.

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) <u>No Impact</u>: The proposed project does not have the capacity to generate a substantial increase to use of any existing neighborhood parks, regional parks, or other recreational facilities such that physical deterioration would occur. Therefore, there are no impacts.

b) <u>No Impact</u>: The project would not require the construction or expansion of recreational facilities. As such, no impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Recreation.

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 proposed project would not conflict or be inconsistent with CEQA guidelines section 15064.3, subdivision (b). The project is not a capacity increasing project and would not increase the “vehicle miles traveled.” Therefore, there would be no impacts.

c) No Impact: Due to the nature and scope, the proposed project would not substantially increase hazards due to geometric design features or incompatible uses. As such, the proposed project would have no impacts.

d) No Impact: Construction activities have the potential to result in temporary, localized, site-specific disruptions during the construction period. However, it is currently proposed for all lanes to remain open, except during the installation and removal of the temporary barrier systems, and there would be no detours. This could lead to an increase in delay times for emergency response vehicles during construction. The completion of the project would not result in inadequate emergency access.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Transportation.

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 cause a substantial adverse change in the significance of tribal cultural resource or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k).

A request was made to the Native American Heritage Commission (NAHC) for a Sacred Land File (SLF) search on July 20, 2022. The NAHC responded with negative SLF results for any cultural resources.

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

- Twenty-Nine Palms Band of Mission Indians, Sarah Bliss, Cultural Resource Manager. Initial consultation letter was sent on July 20, 2022, and follow-up tribal consultation attempts were made on September 26, 2022 and January 12, 2023. To date, a response has not been received.

- San Manuel Band of Mission Indians, Jessica Mauck, Cultural Resources Management. Initial consultation letter was sent on July 20, 2022. On August 19, 2022, Ryan Nordness replied on behalf of the tribe to request project documents and continued consultation pursuant to AB 52. A draft ASR was provided on February 8, 2023. No comments were received.

b) No Impact: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency. 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 within the APE.

Avoidance, Minimization, and/or Mitigation Measures

Implementation of measures **CR-1**, and **CR-2**, as described in the Cultural Resources Section above will reduce any potentially significant impacts from the proposed project to tribal cultural resources that may be inadvertently discovered during construction.

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: Construction of the project would not require or result in the need for new water or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities. There would be no impacts.

b) No Impact: The project would not require a water supply to serve the project and reasonably foreseeable future development since the scope of the project is to remove the existing RSP and replace it with partially grouted or traditional RSP, upgrade the guardrails and construct vegetation control underneath, replace bridge rails and sign panels, along with restriping. There would be no impacts.

c) No Impact: The project would not require wastewater treatment. As a result, there would be no impact.

d) No Impact: The project would not generate solid waste in excess of State or local standards or impair the attainment of solid waste reduction goals. There would be no impacts.

e) <u>No Impact</u>: The proposed project would be in compliance with all federal, state, and local solid waste statutes and regulations; therefore, there would be no impact.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for Utilities and Service Systems.

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

According to the map by CalFire's Fire and Resource Assessment Program (FRAP) (https://egis.fire.ca.gov/FHSZ/), the proposed bridges are located within a Federal Responsibility Area (FRA) and Local Responsibility Area (LRA). The proposed project locations are not identified to be within a fire-hazard zone.

a) No Impact: Due to the scope and nature of the project, it would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, there are no impacts.

b) No Impact: The proposed project would not exacerbate wildfire risks or expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a fire. Therefore, there are no impacts.

c) No Impact: The scope of the project would not require the installation or maintenance of associated infrastructure as part of the project. The project scope is to remove the existing RSP and replace it with partially grouted or traditional RSP, upgrade the guardrails and construct vegetation control underneath, replace bridge rails and sign panels, along with restriping. Therefore, there are no impacts.

d) No Impact: The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides. As mentioned under Section VII, Geology and Soils, the project locations are not within a landslide area and the probability is low.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for wildfires.

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 proposed project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal species. 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 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 would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, the proposed project would have no impacts.

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 (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 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 CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

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 will 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 proposed project is in a rural area of San Bernardino County along Interstate 15 (I-15) at Postmiles R110.4, 166.8, 172.1L and 179.4. This segment of I-15 is the main route of travel between for Southern California to and from the City of Las Vegas. It is primarily used for recreational/travel purposes. An alternate route would be approximately 30 miles east of I-15, via Nipton Rd. to US Route 95 to I-40. Peak travel days for I-15 are Fridays and Sundays. The Connect SoCal 2020 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), guides transportation

development in the project area. The San Bernardino Council of Governments (SBCOG) compiled an inventory of GHG emissions and developed reduction measures for the jurisdictions in San Bernardino County, referred to as "San Bernardino County Regional Greenhouse Gas Reduction Plan." This regional GHG reduction plan would serve as the basis for cities to develop a more detailed community level climate action plan.

GHG Inventories

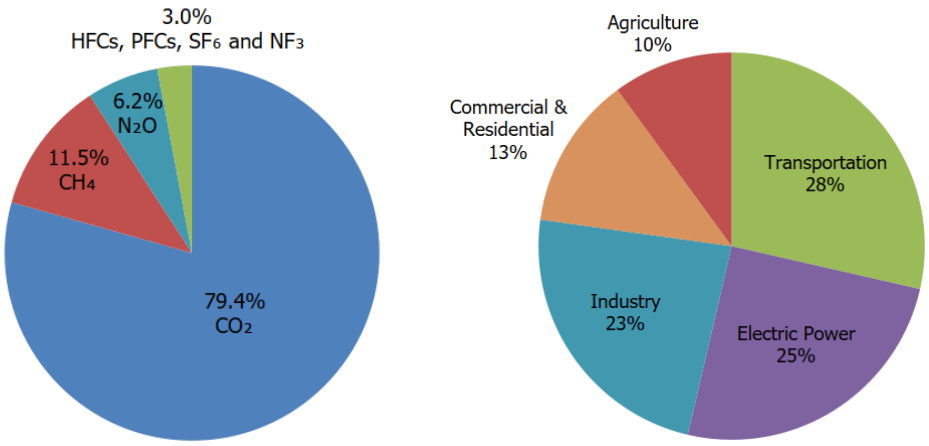
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission 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 CO_2, 11.5% were CH_4, and 6.2% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2021, CO_2 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). Transportation fossil fuel combustion accounted for 92% of all CO_2 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. U.S. 2021 Greenhouse Gas Emissions

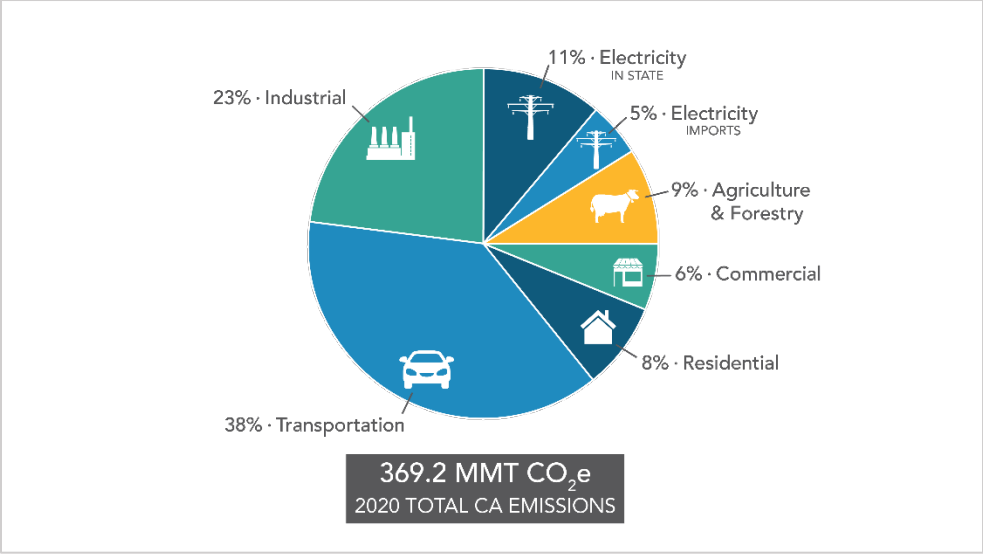


(Source: U.S. EPA 2023b)

STATE GHG INVENTORY

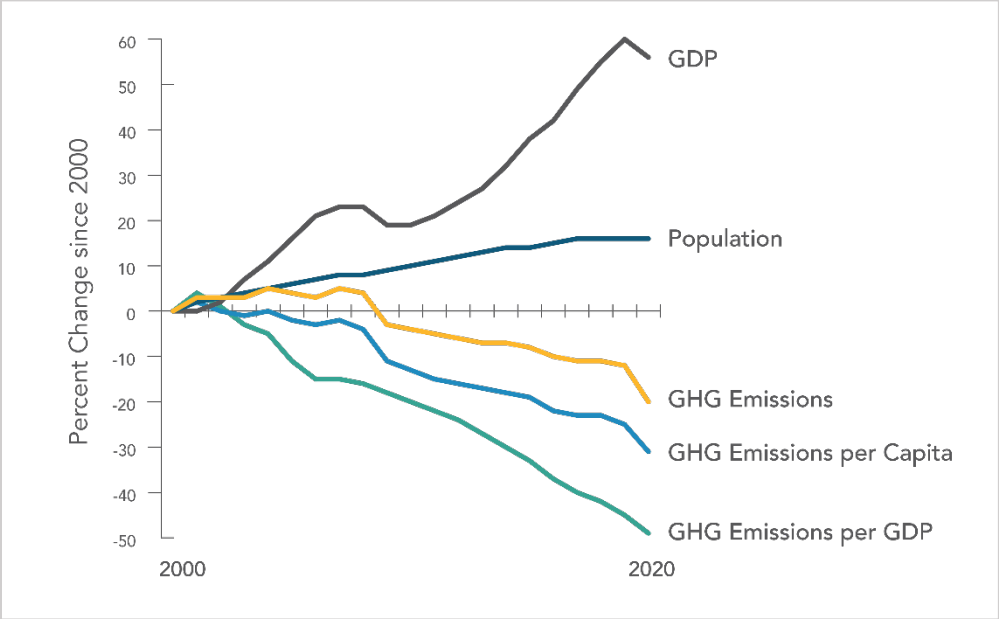
ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2020 despite growth in population and state economic output (Figure 4) (ARB 2022a).

Figure 3. California 2020 Greenhouse Gas Emissions by Economic Sector



(Source: ARB 2022a)

Figure 4. Change in California GDP, Population, and GHG Emissions since 2000



(Source: ARB 2022a)

AB 32 required ARB to develop a Scoping Plan that describes the approach California will 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 will 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 will cumulatively achieve those goals, and reporting how they will 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 Southern California Association of Governments (SCAG). The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021).

Table 1. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
2024 Regional Transportation Plan/Sustainable Communities Strategy (2024 RTP/SCS)	• Improve mobility, accessibility, reliability, and travel safety for people and goods • Enhance the preservation, security, and resilience of the regional transportation system

	• Increase person and goods movement and travel choices within the transportation system • Reduce greenhouse gas emissions and improve air quality • Adapt to a changing climate and support an integrated regional development pattern and transportation network • Leverage new transportation technologies and data-driven solutions that result in more efficient travel
San Bernardino County Regional Greenhouse Gas Reduction Plan (adopted September 2021)	• OnRoad-1 Alternative Fueled Transit Fleets • OnRoad-2 Encourage 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 CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. 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. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent", or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

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 proposed project is to maintain bridge stability, functionality, and improve the safety of the traveling public by restoring the scour protection and upgrading the existing MBGR to MGS, upgrading barriers and refreshing the striping. 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 will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. 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.

Construction of the proposed project would result in GHG emissions from fuel combustion associated with off-road and on-road construction equipment and vehicles. The anticipated GHG construction activity emissions were calculated using the Caltrans Construction Emissions Tool (CAL-CET). Construction of the proposed project is expected to last 360 days and would result in 466 Tons of CO_2e for the duration of project construction.

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 will 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 proposed 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 will 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, will 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 will 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 will 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 will 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: Schedule truck trips outside of peak morning and evening commute hours.

GHG-3:

- Maintain equipment in proper tune and working condition.
- Use right sized equipment for the job.
- Use equipment with new technologies.

GHG-4: Reduce the need for transport of earthen materials by balancing cut and fill quantities.

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 will 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 will 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 will 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 will triple to 370 by 2100, and 3,750 miles will 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 proposed 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 proposed project locations lie within the Mojave Watershed, the Death Valley Lower Amargosa, and Ivanpah Pahrump Valley Watershed. According to CA Department of Water Resources Best Available Map (BAM) and FEMA's flood maps, Telephone Wash Bridge, Cenda Ditch Bridge, Mescal Ditch Bridge and Ivanpah do not have data available. Telephone Wash Bridge (Firm map 06071C3425H), Mescal Ditch Bridge (Firm map 06071C1875H), Cenda Ditch Bridge (Firm map 06071C1900H) and Ivanpah Ditch Bridge (Firm map 06071C1400H) are in the San Bernardino County Unincorporated Areas. These FIRM map panels are "Not Printed" and are classified as Zone D, which is an area with possible but undetermined flood hazards. 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 is expected to increase by 2.9% by 2055 and 2.2% by 2085 at Mescal Ditch Bridge. At Cenda Ditch Bridge, it is expected to increase by 2.9% by 2055 and 2.3% by 2085. At Ivanpah Ditch Bridge, it is expected to increase by 1.8% in 2055 and 1.5% by 2085. Telephone Wash is expected to increase by 1.5% by 2055 and 1.3% 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 are not likely to adversely affect the project. The replacement of the RSP would protect the bridges from further erosion and sediment build up at the abutments and foundations which is necessary to maintain the stability and functionality of the bridges.

WILDFIRE

A climate-change risk analysis for wildfires and associated impacts to transportation facilities involves uncertainties related to the timing and intensity of potential risks. In addition, climate stressors, such as extreme temperatures, are also factors to consider when determining wildfire disruptions to the State Highway System. Climate change models predict that temperatures will continue to increase, thereby leading to longer heat waves and potentially more severe drought events.

According to the map by CalFire's Fire and Resource Assessment Program (FRAP), the proposed bridges are located within a Federal Responsibility Area (FRA) and Local Responsibility Area (LRA). The proposed project locations are not identified to be within a fire-hazard zone. The Caltrans Climate Change Vulnerability Assessment mapping tool does not identify the project area to have a level of concern 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

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 3.9 degrees Fahrenheit at Telephone Wash, 4.2 degrees Fahrenheit at Mescal, 4.3 degrees at Cenda, and 4.2 degrees at Ivanpah Ditch Bridge. The average seven-day maximum temperature in 2055 is anticipated to increase by 5.82 degrees at Telephone Wash, 5.44 degrees Fahrenheit at Mescal, 5.41 degrees at Cenda, and 5.41 degrees at Ivanpah Ditch Bridge. In 2085, the average seven-day maximum anticipated an increase of 9 degrees at Telephone Wash, 9.3 degrees at Mescal, 9.3 degrees at Cenda and 9.3 degrees at Ivanpah Ditch Bridge. In 2085, the average minimum temperature change is anticipated to increase by 7.2 degrees Fahrenheit at Telephone Wash, 7.9 degrees at Mescal, 8.2 degrees at Cenda, and 8.1 degrees at Ivanpah.

Chapter 4 – 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.

Consultation and coordination with several agencies occurred in conjunction with preparation of the proposed project technical reports and this IS. These agencies are identified in the various technical reports and include the Bureau of Land Management, United States Fish and Wildlife Service, California Department of Fish and Wildlife Service, Regional Water Quality Control Board, United States Army Corp of Engineers.

4.1 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.

4.1.1 AB 52 Consultation

A request was made to the Native American Heritage Commission (NAHC) for a Sacred Land File (SLF) search on July 20, 2022. The NAHC responded with negative SLF results for any cultural resources.

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

- Twenty-Nine Palms Band of Mission Indians, Sarah Bliss, Cultural Resource Manager. Initial consultation letter was sent on July 20, 2022, and follow-up tribal consultation attempts were made on September 26, 2022 and January 12, 2023. To date, a response has not been received.

- San Manuel Band of Mission Indians, Jessica Mauck, Cultural Resources Management. Initial consultation letter was sent on July 20, 2022. On August 19, 2022, Ryan Nordness replied on behalf of the tribe to request project documents and continued consultation pursuant to AB 52. A draft ASR was provided on February 8, 2023. No comments were received.

4.1.2 Bureau of Land Management (BLM)

Alexic Francois, Barstow Field Office, and Chris Dalu, Needles Field Office, were contacted on March 16, 2023, and asked if the BLM had any additional cultural resource information for the project locations. No reply received to date.

4.1.3 California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and US Army Corps of Engineers (USACE)

Based on the results of the Jurisdictional Delineation (JD), consultation with USACE, CDFW, and RWQCB may be required to discuss the JD and whether permits are required. No formal agency coordination was conducted prior to Project survey efforts. Caltrans may request and Approved JD from the USACE during the Design phase.

4.1.4 US Fish and Wildlife Service (USFWS)

An official USFWS species list (generated through IPaC) was requested and received on December 27, 2022, August 24, 2023 and January 10, 2024. The Project is located within desert tortoise critical habitat; suitable desert tortoise habitat is present within the Biological Study Area (BSA) and Project Impact Area (PIA). Therefore, the project would require Section 7 Consultation utilizing the Caltrans Desert Tortoise Programmatic Biological Opinion (DTPBO). The Programmatic Biological Opinion has been submitted to the USFWS and is pending concurrence. No formal coordination with the USFWS was conducted prior to the Project survey efforts.

Chapter 5 – List of Preparers

Almabeth Anderson, Senior Landscape Architecture

Neil Azzu, Transportation Engineer, Hazardous Waste Specialist

Gabriela Cardenas, Landscape Architecture

Meenu Chandan, Transportation Engineer, Noise Specialist

Adam Compton, Senior of Biological Regulatory Permits

Sarah Ball, Environmental Planner, Natural Sciences

Ferry Fard, Project Manager

Gary Jones, Associate Environmental Planner, Archaeologist

Sarah Gallimore, Associate Environmental Planner, Biological Regulatory Permits

Kourtney Graves, Environmental Scientist

Kurt Heidelberg, Deputy District Director

Michael Huynh, Design - Hydraulics

Edison Jaffery, Transportation Engineer, Air Specialist

Bahram Karimi, Associate Environmental Planner, Paleontology Coordinator

Nazek Kayali, Storm Water Quality

Amy Lee, Environmental Scientist, Climate Change

Malisa Lieng, Senior Environmental Planner, Generalist

Paul Phan, Senior Transportation Engineer

Rambod Sufipur, Project Engineer

Antonia Toledo, Senior Environmental Planner, Climate Change

Chapter 6 – Distribution List

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

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

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

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

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

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

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

Office of Historic Preservation
1725 23rd St
Sacramento, CA 95816

California Highway Patrol
604 North 7th Street
Sacramento, CA 95811

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

Dr. James Hart
City Manager, City of Barstow
220 East Mountain View St., Suite A
Barstow, CA 92311

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

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

California Transportation Commission
1120 N Street
Sacramento, CA 95814

California Air Resources Board
1011 I Street
Sacramento, CA 95814

Billy Shott, Regional Director National Park Service, Region 8 333 Bush Street, Suite 500
San Francisco, CA 94104-2828

APPENDICES

Appendix A. Title VI Policy Statement

California Department of Transportation

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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.

TONY TAVARES
Director

Appendix B. Avoidance, Minimization and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Permit Type	Agency	Date Received	Expiration	Notes
1602	CA Dept. of Fish and Wildlife (CDFW)			
401	State Water Resources Control Board (SWRCB)			
WDR	Regional Water Quality Control Board (RWQCB)			

Date of ECR: 3/27/2024
CEQA Initial Study
NEPA Categorical Exclusion

Project Phase:
☒ PA/ED (*DED*)
☐ PS&E Submittal_____ %
☐ Construction

ENVIRONMENTAL COMMITMENTS RECORD
(SBD-15 Replace RSP for 6 Bridges)

08-SBD-015
PM Various

EA 08-1L530
PN 0820000092
Generalist: Kourtney Graves
ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation 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
CULTURAL RESOURCES										
CUL-1: If cultural materials are discovered during construction, all earth-moving activity within sixty feet (60') around the immediate discovery area	N/A	District Environmental Cultural Resources	District Cultural Studies/ District Design/ Resident	Design/ Construction						

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08-SBD-015
PM Various

EA 08-1L530
PN 0820000092
Generalist: Kourtney Graves
ECL:

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							Date / Initials	Date / Initials	YES	NO
will be diverted until a qualified archaeologist can assess the nature and significance of the find.			Engineer/ Contractor							
CUL-2: In the event that human remains are found, the county coroner should be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to California PRC 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 Descendant (MLD).	N/A	District Environmental Cultural Resources	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Final Design, Construction						

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							Date / Initials	Date / Initials	YES	NO
The person who discovered the remains will notify District 8 Division of Environmental Planning; Gary Jones, District Native American Coordinator (DNAC) [(909) 261-8157]. Further provisions of PRC 5097.98 are to be followed as applicable.										
BIOLOGICAL RESOURCES										
BIO-1: Bio-General-1: **Equipment Staging, Storing, and Borrow Sites**: All staging, storing, and borrow sites require the approval of the Caltrans Biologist.	51	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A					

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							Date / Initials	Date / Initials	YES	NO
BIO-Plant-1: Rare Plant Surveys, Flagging, and Fencing. Within 14-days prior to construction, a preconstruction survey must be conducted by a qualified biologist during the typical rare plant blooming season (March-June) for all off pavement work areas, as well as any construction staging areas prior to use. Special-status plants must be flagged for visual identification to construction personnel for work avoidance. Special-status plants detected featuring multiple plants in a single location must be fenced with Temporary High Visibility	41	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP 8-1.04C					

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							Date / Initials	Date / Initials	YES	NO
Fencing (THVF) as an Environmentally Sensitive Area (ESA).										
BIO-Arthropod-1: Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing. No more than 3 days prior to project activities, a Caltrans-approved Biologist must perform a preconstruction survey for or Monarch butterfly host plants. Should any Monarch butterfly host plants be found, the Resident Engineer and Caltrans biologist must be	42	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, 14-6.03D, 8-1.04C					

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							Date / Initials	Date / Initials	YES	NO
contacted, and host plants must be flagged by the Contractor-supplied 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 Temporary High Visibility Fencing (THVF) as an Environmentally Sensitive Area (ESA).										
Bio-Reptile-1: Equipment Flagging. Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to	46	NESMI Dec.12, 2023	District Design / District Biological Studies Planning /	Final Design, Construction	2023 SSP 14-6.03A					

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							Date / Initials	Date / Initials	YES	NO
remind the operator to check under the equipment for desert tortoise before operating equipment at any time.			Resident Engineer / Contractor							
Bio-Reptile-2: Injured or Dead Desert Tortoise. The qualified biologist must inform USFWS and CDFW of any injured or dead desert tortoises (and other special status species) found on site (verbal notification within 24 hours and written notification within 5 days).	46	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP 8-1.04C					

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							Date / Initials	Date / Initials	YES	NO
Bio-General-4: Preconstruction Surveys. Preconstruction desert tortoise surveys must be conducted by a qualified biologist within 7-days and immediately prior to project activities. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.	46	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, 14-6.03D, 8-1.04C					
Bio-Reptile-4: Speed Limits in Desert Tortoise Habitat. Except on maintained public roads designated for higher speeds or within desert tortoise proof fenced areas,	46	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-					

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							Date / Initials	Date / Initials	YES	NO
driving speeds must not exceed 20 miles per hour through potential desert tortoise habitat on unpaved roads.			Engineer / Contractor		6.03D, SSP 14-1.02, SSP 8-1.04C					
Bio-Reptile-5: Desert Tortoise Predation Prevention. To preclude attracting predators, such as the common raven (Corvus corax) and coyotes (Canis latrans), food-related trash items must be placed in covered refuse cans and removed daily from the work	47	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, 14-10.01					

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							Date / Initials	Date / Initials	YES	NO
sites and disposed of at an appropriate refuse disposal site. Workers are prohibited from feeding all wildlife.										
Bio-Reptile-6: Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be established following the most recent USFWS protocol for construction of fencing at bridges as shown on the plans prior to construction to exclude desert tortoise. All temporary demarcation materials must be removed once construction has been completed.			District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, 14-6.03D, 14-10.01					
Bio-Reptile-7: Permanent Fencing: Permanent fencing		NESMI	District Design / District	Final Design,	2023 SSP					

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							Date / Initials	Date / Initials	YES	NO
for desert tortoise must be re-installed following the most recent USFWS protocol for construction of fencing to replace previous fencing damaged or removed during construction activities, to ensure connectivity (tie-ins to culverts, etc.).Changes in location of fencing will be decided by Caltrans qualified biologist and design.		Dec.12, 2023	Biological Studies Planning / Resident Engineer / Contractor	Construction	14-6.03A, 14-6.03D, 14-1.02, 8-1.04C					
BIO-General-7: Worker Environmental Awareness Program (WEAP). A Qualified Biologist must present a biological resource information program/WEAP for desert tortoise and other special-status plant species/habitat found within the BSA prior to project	41	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design/ Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP					

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activities to all personnel that will be present within the project limits for longer than 30 minutes at any given time.					8-1.04C					
Bio-General-8: Biological Monitor. The qualified biologist must monitor project activities weekly to ensure measures are being implemented and documented.	47	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP 8-1.04C					
Bio-General-9: Environmentally Sensitive Area (ESA). To address impacts to desert tortoise,	47	NESMI Dec.12, 2023	District Design / District Biological Studies	Final Design, Construction	2023 SSP 14-6.03A,					

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							Date / Initials	Date / Initials	YES	NO
desert tortoise designated critical habitat, and other special-status species delineate the project impact area as an ESA as shown on the plans and/or described in the specifications.			Planning / Resident Engineer / Contractor		SSP 14-1.02,					
Bio-General-10: Environmentally Sensitive Area (ESA) Fence Monitoring. Integrity inspections of desert tortoise fencing must occur throughout the duration of the project daily 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			District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP 14-1.02, SSP					

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							Date / Initials	Date / Initials	YES	NO
biologist inspects (and clears) the job site.					8-1.04C					
Bio-General-11: Environmentally Sensitive Area (ESA) Fence Removal. All temporary fencing must be removed as a last order of work. During removal, a qualified biologist must be present.	47	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP 14-1.02, SSP 8-1.04C					

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							Date / Initials	Date / Initials	YES	NO
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	47	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, SSP 14-6.03D, SSP 8-1.04C					

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trapped animals. Trapped animals must be released by the qualified biologist.										
Bio-Avian-1: Preconstruction Nesting Bird Survey. If project activities cannot avoid the nesting season, generally regarded as Feb. 1 – Sept 30, then preconstruction nesting bird surveys must be conducted 3-days prior to construction by a qualified biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer may be established and monitored by	49	NESMI Dec.12, 2023	District Design / District Biological Studies Planning / Resident Engineer / Contractor	Final Design, Construction	2023 SSP 14-6.03A, 14-6.03D, SSP 8-1.04C					

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the qualified biologist and/or monitored until the young have fledged or the nest is no longer active.										
HAZARDOUS WASTE / MATERIALS										
HAZ-1: Conditions for use of local material from non-commercial source	1	ISA Checklist Jan. 22, 2024	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 6-1.03					
HAZ-2: Management of Treated Wood Waste (TWW) from guardrail posts, add item 141120 for TWW.	1	ISA Checklist Jan. 22, 2024	District Design / District Environmental Engineering / Resident	Final Design, Construction	SSP 14-11.14					

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			Engineer / Contractor							
HAZ-3: NESHAP Notification	1	ISA Checklist Jan. 22, 2024	District Design / District Environmental Engineering / Resident Engineer / Contractor		SSP 14-9.02					
GREENHOUSE GAS										
GHG-1: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.		CEQA IS	District Design / District Environmental / Resident Engineer / Contractor	Final Design, Construction						

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GHG-2: Schedule truck trips outside of peak morning and evening commute hours.		CEQA IS	District Design / District Environmental / Resident Engineer / Contractor	Final Design, Construction						
GHG-3: - Maintain equipment in proper tune and working condition. - Use right sized equipment for the job. - Use equipment with new technologies.		CEQA IS	District Design / District Environmental / Resident Engineer / Contractor	Final Design, Construction						
GHG-4: Reduce the need for transport of earthen materials		CEQA IS	District Design / District Environmental / Resident	Final Design, Construction						

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by balancing cut and fill quantities.			Engineer / Contractor							

Appendix C. Federal Transportation Improvement Program

SBDLS07				Exempt Grouped Projects for Bridge Rehabilitation and Reconstruction - SHOPP Bridge Preservation Program				2023 FTIP Amendment #23-12
Agency	**County**	**District EA**	**Notes**	**Project Description**	**Program Year (FFY)**	**Federal Funds**	**State Funds**	**Total Project Cost (in $1000's)**
Caltrans	SBd	1L800	New. 2022 SHOPP approved by CTC March 17, 2022.	On I-15 near Needles, from Woods Wash Bridge to Homer Wash Bridge at various locations. Restore rock slope protection at eight bridges to mitigate scour. PS&E and RW Sup Only.	2023/24	$2,031	$0	$2,031
Caltrans	SBd	1L510	New. 2022 SHOPP approved by CTC March 17, 2022.	On I-15 near the city of San Bernardino, at Devore Overhead Right Bridge No. 54 -0818R, Devore Overhead Left Bridge No. 54-0818L, and Cajon Creek Right Bridge No. 54-0781R. Place polyester concrete on bridge decks, treat approach and departure slabs with methacrylate, and replace bridge joint seals. PS&E and RW Sup Only.	2023/24	$1,328	$0	$1,328
				FY 2023-24 100% SHOPP AC funded	**Subtotal**	**$30,773**	**$0**	**$30,773**
Caltrans	SBd	1L510	New. 2022 SHOPP approved by CTC March 17, 2022.	On I-15 near the city of San Bernardino, at Devore Overhead Right Bridge No. 54 -0818R, Devore Overhead Left Bridge No. 54-0818L, and Cajon Creek Right Bridge No. 54-0781R. Place polyester concrete on bridge decks, treat approach and departure slabs with methacrylate, and replace bridge joint seals. RW Cap and CON Cap/Sup Only.	2024/25	$4,599	$0	$4,599
				FY 2024-25 100% SHOPP AC funded	**Subtotal**	**$4,599**	**$0**	**$4,599**
Caltrans	SBd	0R380	2022 SHOPP Carryover from 2020 SHOPP, approved by CTC March 17, 2022.	On I-40 near Needles, from Park Moabi Road to Topock Road at the Colorado River Bridge No. 54-0415. Bridge rehabilitation and/or replacement. Caltrans will be the lead agency and will share half of all costs with Arizona Department of Transportation (ADOT) as indicated via a signed Letter of Intent. RW Cap and CON Cap/Sup Only.	2025/26	$37,301	$0	$37,301
Caltrans	SBd	1L530	New. 2022 SHOPP approved by CTC March 17, 2022.	On I-15 near Zzyzx and Mountain Pass, from Telephone Wash Bridge to Ivanpah Ditch Bridge at various locations. Restore rock slope protection at six bridges to mitigate scour. RW Cap and CON Cap/Sup Only.	2025/26	$11,880	$0	$11,880
Caltrans	SBd	1L800	New. 2022 SHOPP approved by CTC March 17, 2022.	On I-15 near Needles, from Woods Wash Bridge to Homer Wash Bridge at various locations. Restore rock slope protection at eight bridges to mitigate scour. RW Cap and CON Cap/Sup Only.	2025/26	$9,187	$0	$9,187

List of Technical Studies

- Historic Property Survey Report March 23, 2023
- ISA Checklist January 22, 2024
- Natural Environment Study (Minimal Impacts) December 12, 2023
- Storm Water December 8, 2023
- Supplemental HPSR February 5, 2024
- Questionnaire to Determine Visual Impact Assessment October 16, 2023

Appendix E. References

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