State Route 142 S-Curve

08-SBD-142-PM 2.2/2.5
Project ID: 0822000041 EA: 08-1M780

Draft Initial Study with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

April 2026

General Information About This Document

What's in this document:

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

What you should do:

- Please read the document. To request an electronic version of this document, please send an email to: D8.1M780.Comments@dot.ca.gov
- We welcome your comments. If you have any comments about the proposed project, send your written comments to Caltrans by the deadline.
- Submit comments via U.S. mail to:

  Caltrans District 8
  Division of Environmental Planning
  Attn: Hannah Duarte, Branch Chief
  464 W. 4th Street, 6th Floor, MS 820
  San Bernardino, CA 92401-1400

- Submit comments by the deadline: May 10, 2026

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 appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Eric Dionne, Chief, Public and Media Affairs, 464 W. 4th Street, San Bernardino, CA 92401, or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

SCH Number: _____
08-SBd-142-PM 2.2/2.5
EA: 1M780/Project ID: 0822000041

In San Bernardino County in Chino Hills from 0.34 mile east of Carriage Hill Lane to Azurite Drive.

DRAFT INITIAL STUDY
with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Antonia Toledo
Deputy District Director
Division of Environmental Planning
California Department of Transportation, District 8
CEQA Lead Agency

4/6/2026
Date

The following individual can be contacted for more information about this document: Hannah Duarte, Branch Chief, Caltrans, District 8 464 W. 4th Street, 6th Floor, MS 820, San Bernardino, CA 92410-1400 (909) 472-5756

State Clearinghouse #:_____

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

It is proposed to widen the highway S-curve between Carriage Hill Lane and Azurite Drive from Post Mile (PM) 2.2 to PM 2.5 on State Route 142 (SR-142) in the City of Chino Hills, in San Bernardino County. The scope of work includes widening of existing pavement, constructing retaining walls, replacing existing culverts, drainage improvements, and constructing guardrail as needed. Also included in the scope of work is removing existing street lighting and adding new lighting to improve visibility through the S-curve.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a MND for this project. This does not mean that Caltrans' 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: Agriculture and Forest Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources and Wildfire.

The proposed project would have less than significant effects to: Air Quality, Greenhouse Gas (GHG) Emissions.

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

Bio-Plant-PSM-1 – Habitat Restoration:

Caltrans Landscape Architecture will review all proposed tree removals and replacements with the City of Chino Hills. Giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.

On-site habitat restoration for temporary impacts to Sensitive Natural Communities through revegetation and reseeding with vegetation native to the impacted area will be conducted where feasible, immediately following completion of construction

activities, or with written approval from California Department of Fish and Wildlife (CDFW), and/or United States Fish and Wildlife Service (USFWS), at the beginning of the next growing season after project completion. On-site habitat restoration would consist of the following:

- Grading the slopes back to natural contours where feasible;
- Reseeding with vegetation native to the impacted area where feasible;
- Replanting replacement trees where feasible, at a ratio to be determined in consultation with the resource agencies;
- For restoration areas on slopes, BMP's/erosion control measures should be included to prevent soil erosion until plants become established.

Where on-site habitat restoration is not feasible due to limitations of the project site, Caltrans will discuss appropriate mitigation measures and tree replacement ratios and planting locations with the resource agencies.

BIO-Plant-PSM-2 - Existing Resource Protection:

Caltrans will protect-in-place where possible mature special-status plant species currently within the Project Impact Area, including California black walnut (*Juglans californica*) and coast live oak (*Quercus agrifolia*). Any mature California black walnut and coast live oak tree to be protected-in-place will be surrounded by temporary high visibility fence and barriers sufficient to protect-in-place from construction equipment and construction personnel. Temporary high visibility fence will be identified on the plans and described in the specifications. Construction personnel will be instructed during the WEAP training to avoid this resource (California black walnut and coast live oak).

Where existing resources cannot be protected-in-place, Caltrans Landscape Architecture will review all proposed tree removals and replacements giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.

Replacement will occur on site where possible, or at a nearby restoration site. Removal of any mature California black walnut or coast live oak tree, and protection-in-place of any mature California black walnut or coast live oak trees tree will be supervised by a Caltrans staff biologist.

BIO-Plant PSM-3 - Habitat Mitigation and Monitoring Plan:

A Habitat Mitigation and Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species will be developed by a contractor-supplied biologist and provided to Caltrans and the resource agencies for review and approval prior to construction. The plan will include replacement of special status tree species to be removed at a ratio of 2:1. Replacement will occur on site where feasible, or as close to the project location as possible – as determined by the District Landscape Architect in conjunction with the project biologist.

Compensatory Mitigation:

Anticipated mitigation requirements include restoration of compensatory habitat within the watershed associated with the project area. Compensatory mitigation measures intended to satisfy CDFW and Regional Water Quality Control Board (RWQCB) requirements for anticipated project impacts to Waters of the State (WOS) are described below.

BIO-Waters 1:

Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.

BIO-Waters 2:

On-site habitat restoration for temporary impacts for native plant communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.

BIO-Waters 3:

Permanent impacts will be mitigated for and decided upon with coordination from regulatory agencies.

BIO-Waters 4:

Compensatory Mitigation: Any additional permanent impacts to jurisdictional areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.

Final permanent impacts related to WOS will be mitigated in consultation with the regulatory agencies.

_____ _____

Antonia Toledo
Deputy District Director
Division of Environmental Planning
California Department of Transportation, District 8
CEQA Lead Agency

Date

Table of Contents

Chapter 1 Proposed Project

1.1 Introduction

It is proposed to widen the highway S-curve between Carriage Hill Lane and Azurite Drive from PM 2.2 to PM 2.5 on SR-142 in the City of Chino Hills, in San Bernardino County. The scope of work includes widening of existing pavement, constructing retaining walls, replacing existing culverts and guardrail as needed, drainage improvements and new lighting.

1.2 Purpose and Need

Purpose:

The purpose of this project is to improve transportation system performance by reducing delay, addressing operational deficiencies, and therefore improving reliability and efficiency of people and goods movement.

Need:

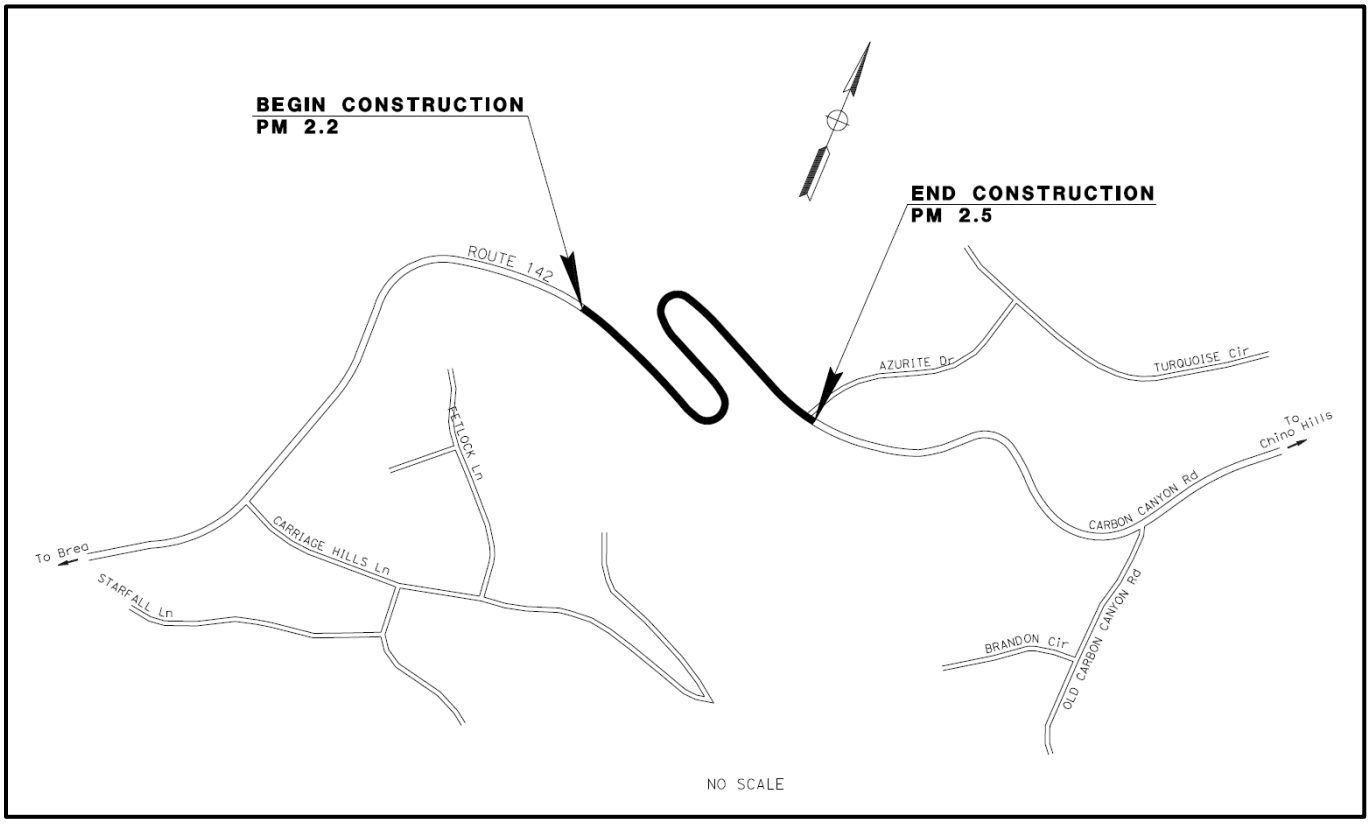
Geometry of the roadway within the project limits include two 50-foot radius reversing curves and a non-standard tangent between the two curves. The combination of steep grades and restricted-turning curves results in off-tracking of vehicles' wheels beyond the pavement. Due to slow-turning trucks, delay to the road users has been observed at 10-20 minutes per user per trip according to the Truck Restriction Study. The recurring traffic queuing has significant negative impacts on local communities.

1.3 Project Description

The scope of work includes the following:

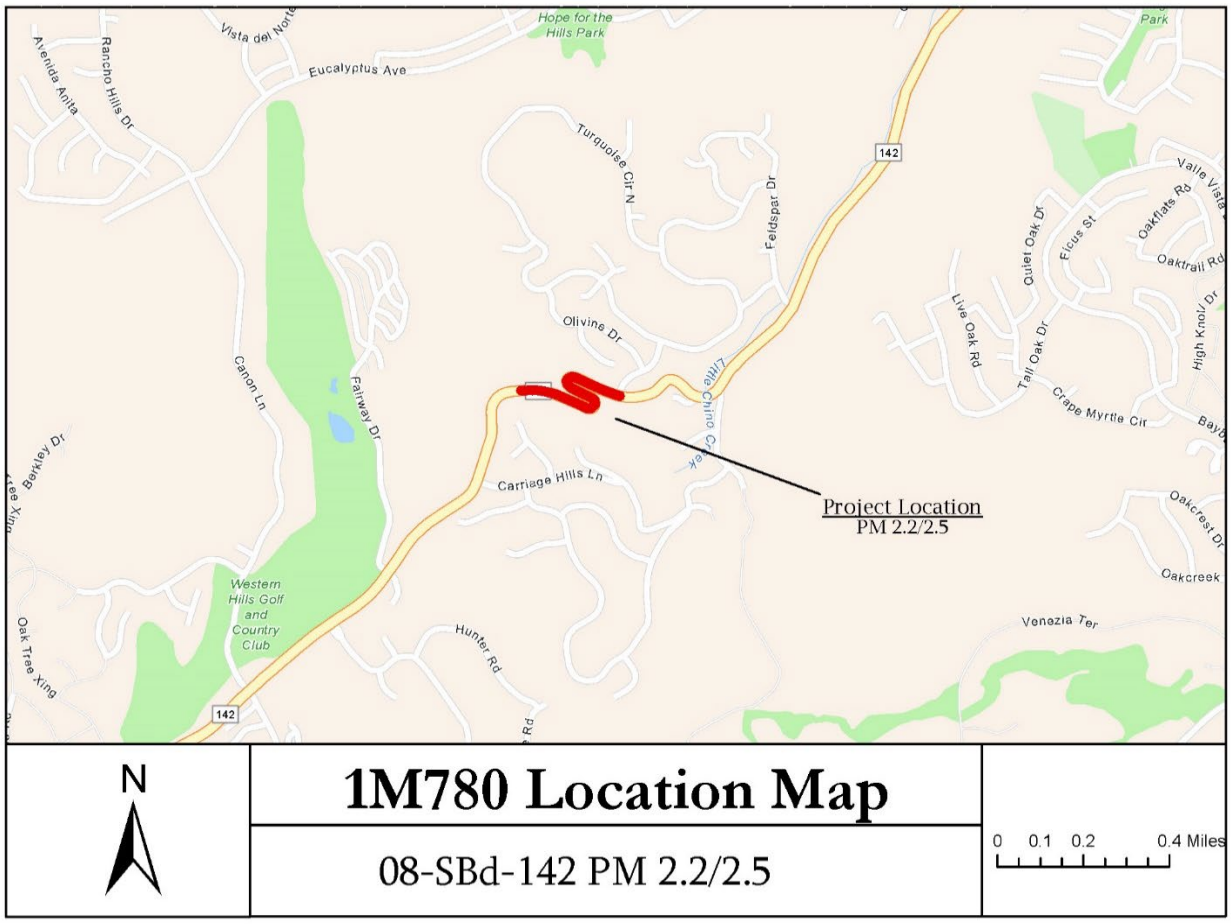
- Widening existing pavement on both sides of the highway at the two curves.
- Constructing retaining walls, which include temporary construction easements (TCE).
- Replacing and upgrading existing culverts and guardrail as needed.
- Drainage improvements, which include a permanent drainage easement and TCEs.
- Removing and adding new street lighting.

Figure 1-1: Project Vicinity Map



In San Bernardino County on SR-142 in Chino Hills
from 0.3 mile east of Carriage Hills Lane to Azurite Drive

Figure 1-2: Project Location Map



1.4 Project Alternatives

A No-Build Alternative and one Build Alternative are being considered.

1.4.1 Build Alternative

This alternative proposes to construct the following improvements:

- Widen existing flexible pavement on EB and WB SR-142 at both curves of the S-curve. The width and structural section of pavement widening would accommodate the truck turning movements of the design vehicle. Pavement work within the limits of widening would include cold plane and overlay of existing pavement to seal the joint between existing and new pavement and to extend the pavement life.
- Construct three retaining walls to accommodate the proposed pavement widening. Two retaining walls (modified Type 1A) along WB SR-142 would be in cut sections, and one retaining wall (soldier pile) along EB SR-142 in a fill section. Detailed design of the retaining walls would be prepared in the next phase of the project, including modifications to bury the ends of the cut walls into the existing slopes.
- Reconstruct existing drainage systems and construct additional drainage systems. Existing drainage systems along WB SR-142 would be removed and reconstructed to avoid conflicts with the proposed retaining walls. The proposed system includes a concrete lined channel to intercept off-site flow. Two additional drainage systems upstream and downstream of the S-curve are proposed to capture runoff along SR-142 at superelevation reversal locations.
- Replace existing guardrail. Guardrail along WB SR-142 would be removed for construction of a retaining wall and reconstructed to meet the minimum required length of need.
- Install safety lighting along the S-curve. The existing lighting system consists of a single wood pole mounted street light at each curve, which would be removed and replaced with three lighting standards at each curve to improve visibility throughout the S-curve.

This project contains a number of standardized project measures that are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

1.4.2 No-Build (No-Action) Alternative

This alternative would leave the highway in its current condition and no improvements or modifications are implemented at this time. The No-Build alternative would not meet the purpose and need of the project.

1.5 Identification of a Preferred Alternative

After the public circulation period, all comments received will be considered, and then Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, if no unmitigable, significant, adverse impacts are identified, Caltrans will prepare a Mitigated Negative Declaration.

1.6 Discussion of the NEPA Categorical Exclusion

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

1.7 Permits and Approvals Needed

The proposed project may require coordination with CDFW for a Lake and Streambed Alteration Agreement (LSAA) pursuant to Section 1602 of the California Fish and Game Code, which would be expected after final environmental document approval. Also, the project may require a RWQCB Waste Discharge Requirement (WDR) permit per the Porter-Cologne Water Quality Control Act, which would be expected after final environmental document approval.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Potentially Significant Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (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.

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

2.1.1 Aesthetics

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?	☐	☐	☒	☐

Response to Items a), c), and d): Less Than Significant Impact. The proposed project is in a rural area adjacent to suburban homes. Additionally, the project is within an area of SR-142 that is eligible for designation as a State Scenic route. Highway 142 is used as an alternative route during heavy traffic times for the community traveling back and forth from San Bernardino, Orange and Los Angeles counties.

During the design phase of the project, designers will coordinate with the District Landscape Architect to achieve the following:

- Provide retaining walls with sculpted shotcrete, stained to match existing site conditions, and designed to integrate into the surrounding environment.
- Replace any removed trees.
- Protect and/or replace endangered and rare plant species in coordination with district Environmental Planning team.

Response to Item b): Less Than Significant with Mitigation Incorporated. As an eligible Scenic highway, the protection of existing visual resources is of high importance and provides a sense of place for the rural community.

Permanent impacts to California Walnut Woodland Sensitive Natural Community may occur as a result of the proposed project. Temporary impacts to California Walnut Woodland may also occur as a result of project activities.

The exact amount of permanent and temporary impacts will be determined in final design preparations during the Plans Specifications, and Estimates (PS&E) phase of the project. Potential impacts to these resources will be avoided, minimized, and/or mitigated in accordance with the measures listed below.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization and/or mitigation measures would be implemented to protect the location's aesthetics.

VIS-1: Caltrans Landscape Architect to work with Caltrans Design to minimize impacts to natural, scenic, and visual resources.

VIS-2: Salvage (as possible) and replace-in-kind any visual resource impacted by project scope.

VIS-3: Replace trees removed at a 1:1 ratio, in coordination with the District Landscape Architect.

VIS-4: Protect and/or replace, at a 2:1 ratio, endangered and rare plant species in coordination with district Environmental Planning team.

Mitigation Measures

Bio-Plant-PSM-1 – Habitat Restoration:

Caltrans Landscape Architecture will review all proposed tree removals and replacements with the City of Chino Hills, giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.

On-site habitat restoration for temporary impacts to Sensitive Natural Communities through revegetation and reseeding with vegetation native to the impacted area will be conducted where feasible, immediately following completion of construction activities, or with written approval from California Department of Fish and Wildlife (CDFW), and/or United States Fish and Wildlife Service (USFWS), at the beginning of the next growing season after project completion. On-site habitat restoration would consist of the following:

- Grading the slopes back to natural contours where feasible;
- Reseeding with vegetation native to the impacted area where feasible;
- Replanting replacement trees where feasible, at a ratio to be determined in consultation with the resource agencies;
- For restoration areas on slopes, BMP's/erosion control measures should be included to prevent soil erosion until plants become established.

Where on-site habitat restoration is not feasible due to limitations of the project site, Caltrans will discuss appropriate mitigation measures and tree replacement ratios and planting locations with the resource agencies.

BIO-Plant-PSM-2 - Existing Resource Protection:

Caltrans will protect-in-place where possible mature special-status plant species currently within the Project Impact Area, including California black walnut (*Juglans californica*) and coast live oak (*Quercus agrifolia*). Any mature California black walnut and coast live oak tree to be protected-in-place will be surrounded by temporary high visibility fence and barriers sufficient to protect-in-place from construction equipment and construction personnel. Temporary high visibility fence will be identified on the plans and described in the specifications. Construction personnel will be instructed during the WEAP training to avoid this resource (California black walnut and coast live oak).

Where existing resources cannot be protected-in-place, Caltrans Landscape Architecture will review all proposed tree removals and replacements giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.

Replacement will occur on site where possible, or at a nearby restoration site. Removal of any mature California black walnut or coast live oak tree, and protection-in-place of any mature California black walnut or coast live oak trees tree will be supervised by a Caltrans staff biologist.

BIO-Plant PSM-3 - Habitat Mitigation and Monitoring Plan:

A Habitat Mitigation and Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species will be developed by a contractor-supplied biologist and provided to Caltrans and the resource agencies for review and approval prior to construction. The plan will include replacement of special status tree species to be removed at a ratio of 2:1. Replacement will occur on site where feasible, or as close to the project location as possible – as determined by the District Landscape Architect in conjunction with the project biologist.

2.1.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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?	☐	☐	☐	☒

Response to Item a): No Impact. According to the California Department of Conservation Farmland Mapping and Monitoring Program, there are no farmlands or vacant lands that are mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance within the project site; as such, the proposed project is anticipated to have no effect on farmlands.

Response to Item b): No Impact. The project would not conflict with agricultural use zoning. There are no areas within the project area under a Williamson Act contract.

Response to Item c): No Impact. The proposed scope of work will occur within the existing, disturbed Caltrans right of way (ROW) so it is not expected to conflict with

existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

Response to Item d): No Impact. The proposed Project is not expected to result in the loss or conversion of forest lands.

Response to Item e): No Impact. The proposed Project is not expected to involve changes that could result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Agriculture and Forest Resources.

2.1.3 Air Quality

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?	☐	☐	☒	☐

Responses to Item a), b), and c): Less Than Significant Impact. The project is not anticipated to conflict with or obstruct with air quality plans because the project would not increase capacity or result in additional traffic lanes that would result in long-term air quality impacts. The project would result in operational improvements which is not expected to conflict with air quality plans.

Caltrans evaluated the project for the need for an air quality study and identify this project as one that matches one of the exempt project types listed under one of the exempt project types listed under Table 1 of Caltrans Carbon Monoxide (CO) Protocol or that is listed under Table 2 of 40 CFR 93.126. All projects listed there under Tables 2 & Table 1 are exempt from all emissions analyses. Thus, no air quality study is needed.

Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by construction-related activities. Emissions from construction equipment are also expected. However, these emissions would be temporary, lasting only during the duration of construction, and limited to the immediate area surrounding the construction site.

The estimated Greenhouse Gas (GHG) emissions resulting from construction-related on-road and offsite operations were measured in terms of Carbon Dioxide Equivalent (CO2e). These emissions were calculated using the Cal-CET Rev. 1.0.4. Based on the total activity that occurred over a 200-day construction period, project construction GHG as CO_2=216 metric tons. See tables below:

Table 2-1. Summary of Project Emissions and Fuel Consumption

	CO_2	CH_4	N2O	BC	HFC	CO2e
Daily Average (lbs/day; metric tons CO2e/day; gal fuel/day; kWh electricity/day)	2102	0.051	0.103	0.382	0.046	1.08
Maximum Daily Average (lbs/day; metric tons CO2e/day; gal fuel/day; kWh electricity/day)	4377	0.121	0.180	0.885	0.079	2.24
Annual Average (lbs/day; metric tons CO2e/day; gal fuel/day; kWh electricity/day)	105	0.003	0.005	0.019	0.002	108

Table 2-2. Total Emissions and Consumption by Year (tons; metric tons CO2e; gal fuel; kWh electricity

Summary By Year	CO_2	CH_4	N2O	BC	HFC	CO2e
2028	23	0.001	0.001	0.004	0.000	23
2029	187	0.004	0.009	0.034	0.004	192
TOTAL	210	0.005	0.010	0.038	0.005	216

Operation

The proposed project involves improving operation of the s-curve. As such, long-term operations would not result in impacts to air quality.

Response to Item d): Less Than Significant Impact.

Construction

Some phases of construction are expected to result in short-term odors in the immediate area surrounding the construction site. Such odors are anticipated to be quickly dispersed below detectable thresholds as distance from the site increases.

Operation

Project operation is not expected to create objectionable odors. Potential impacts from objectionable odors are expected to be less than significant.

Avoidance, Minimization, and/or Mitigation Measures

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 California Air Resources Board (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.

2.1.4 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?	☐	☒	☐	☐

The information from this section is based on the Natural Environment Study (Minimal Impacts) (NES(MI)) approved for the project by Caltrans in February 2026. The study results presented in the NES (MI) are based on literature search and field surveys that include the Biological Study Area (BSA), which are all areas that could potentially be impacted by the project, plus a 500-foot buffer to account for any changes to the project limits and design that may occur during project development. The Project Impact Area (PIA) includes the project footprint of the proposed project activities throughout the project limits (PM 2.0/2.5), with a 30-60 foot buffer to allow for construction machinery and workspace.

Response to Item a): Less Than Significant Impact. Caltrans has determined the proposed project will result in “No Take” of State-listed as Threatened, Endangered, or Candidate Endangered species due to the lack of species presence or suitable

habitat within the PIA and BSA, or with implementation of the avoidance and minimization measures specified below.

The proposed project activities may impact Sensitive Natural Community habitat that is known to be suitable for rare plant species California black walnut (*juglans californica*). This may include the removal of up to 25 mature California black walnut and coast live oak trees. Approximately 20-25 California black walnut trees and 20-25 coast live oak trees that are within the PIA will be protected-in-place. Potential impacts to these species will be avoided, minimized, and/or mitigated with the implementation of the measures described below.

Response to Item b), c), e), and f): Less Than Significant With Mitigation Incorporated. There may be permanent and temporary impacts to Waters of the State (WOS) as a result of the proposed project. The impacts to WOS will be determined during final design, in the PS&E phase of the project. These impacts may require mitigation to comply with the CDFW "No Net Loss" policy. A Lake and Streambed Alteration Agreement (LSAA) and a RWQCB WDR permit may be required. Mitigation measures to satisfy CDFW and RWQCB requirements for any project impacts to WOS are described below. Waters of the U.S. are not expected to be impacted the proposed project.

Permanent impacts to California Walnut Woodland Sensitive Natural Community may occur as a result of the proposed project. Temporary impacts to California Walnut Woodland may also occur as a result of project activities.

The exact amount of permanent and temporary impacts will be determined in final design preparations during the PS&E phase of the project.

Response to Item d): No Impact. The project would not impact National Oceanic Atmospheric Administration (NOAA) Fisheries jurisdiction, as no NOAA Fisheries species have the potential to occur in the BSA. Therefore, no effects to NOAA Fisheries species are anticipated. Furthermore, the project would not affect any migratory wildlife corridors or the movement of any native resident or migratory fish or wildlife species.

Avoidance, Minimization, and/or Mitigation Measures

To avoid and minimize potential impacts Caltrans will implement the most current BMP's during construction as well as the avoidance, minimization, and mitigation measures outlined below.

Avoidance and Minimization Measures

Bio-General 1 - Equipment Staging, Storing & Borrow Sites:

Caltrans will confine all equipment maintenance, storage, and parking during construction activities to the designated construction area or to previously disturbed

graded or paved areas, or level areas where grading and vegetation clearing are not required and that are not habitat for special status species, as determined in coordination with the Approved Biologist (BIO-General 8). All staging areas would be located at least 150 feet from sensitive habitat areas, including streams/drainages and other aquatic habitat.

Bio-General 2 - Temporary Artificial Lighting Restrictions:

To address impacts to special status bat species, artificial lighting must be directed at the job site to minimize light spillover onto habitat and roosting areas if project activities occur at night.

Bio-General 3 - Permanent Artificial Lighting Restrictions:

To address impacts to special status bat species, new artificial lighting designs must avoid the use of high mast lighting and tall lighting and must incorporate methods, such as shielding, to minimize light spillover and ensure ambient lighting in the project area is not increased.

BIO-General 7 - Worker Environmental Awareness Program (WEAP):

A contractor-supplied biologist must present a Caltrans-approved biological resource information program/WEAP for special-status mammal, avian, reptile, invertebrate and rare plants prior to project activities, to all personnel that will be present within the project limits for longer than 30 minutes at any given time. Caltrans will require all construction personnel to participate in the WEAP training prior to participating in work activities. The training will be led by an approved contractor-supplied biologist and delivered to all construction personnel and new field-based personnel before engaging in construction activities.

BIO-General 8 - Biological Monitor:

A qualified contractor-supplied biologist must monitor project activities weekly to ensure that measures intended to protect special status bat species, special status bird species, migratory birds, special status reptile species, special status invertebrate species, Southern California black walnut, and California walnut woodland during construction are being implemented and documented. This will include ensuring that work equipment, vehicles, and personnel do not enter habitat areas, and stopping work if a federal- or State-listed species enters the work area.

Bio-General 9 - Environmentally Sensitive Area (ESA):

To address potential impacts to Southern California black walnut, California walnut woodland, and other environmentally sensitive areas, delineate these habitat areas as an ESA as shown on the plans and/or described in the specifications.

Bio-General 10 - ESA Fence Monitoring:

Integrity inspections of ESA fencing and enclosures must occur throughout the duration of the project, 3 days prior to commencing project activities and weekly during project activities. 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 - ESA Fence Removal:

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

BIO-General - PSM-4 - Environmentally Sensitive Areas and Ground Disturbance:

No ground disturbing or fill activity of any type will be permitted within environmentally sensitive areas outside the Project footprint. All construction equipment shall be operated in a manner to prevent accidental damage to nearby preserved areas outside the PIA. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected areas. Where appropriate, temporary high visibility fence will be installed at the environmentally sensitive area boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned ground disturbing activities.

Bio-Plant-2 - Rare Plant Pre-Construction Surveys:

Within 1 week prior to construction, a preconstruction survey must be conducted by a contractor-supplied biologist for special-status plants within the Project Impact Area. Any rare plant species identified must be flagged for visual identification to construction personnel for work avoidance. Rare plant species detected that feature multiple plants in a single location must be fenced with temporary high-visibility fencing.

Bio- Invertebrate 1 - Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing:

No more than 1 week prior to project activities, a contractor-supplied biologist must perform a preconstruction survey within the PIA for rare insect host plants, including but not necessarily limited to milkweed (*Asclepias sp*.). Should any rare insect host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and the host plants must be flagged by the contactor-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.

Bio-Invertebrate 2 - PSM-5 – Preconstruction Invertebrate Species Survey:

A preconstruction Crotch's bumble bee survey must be conducted by a qualified contractor-supplied biologist no more than 1 week prior to construction activities within areas of appropriate nesting and foraging habitat. The habitat assessment for Crotch's bumble bee shall be performed according to the 2023 CDFW Survey Considerations for Candidate Bumble Bee. The surveys shall include a minimum 50-foot buffer outside the PIA in adjacent habitat. If an active Crotch's bumble bee nest is located, a no construction buffer shall be established and monitored by the contractor-supplied biologist; the Resident Engineer must be contacted and additional measures and/or agency coordination may be required.

Bio-Reptile 3 - PSM-6 – Special Status Reptile Pre-Construction Survey:

A preconstruction survey for red diamond rattlesnake, coast horned lizard, and coast patch-nosed snake must be conducted by a qualified contractor-supplied biologist within the Project Impact Area within 14 days prior to project activities using established CDFW Survey Protocols. The special status reptile presence/ absence survey should be conducted when air temperature is between 77 F and 95 F (USFWS 1985, 1998). If one of the species listed above or other special status species is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.

BIO-Avian 1 - Pre-Construction Nesting Bird Survey:

If project activities cannot avoid the nesting bird season, February 1 – September 30, then preconstruction nesting bird surveys shall be conducted by a qualified contractor-supplied biologist in areas of suitable habitat within the project limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and avoid nesting birds. If an active avian nest is located, a no-construction buffer (100 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) shall be established and monitored by a qualified contractor-supplied biologist.

BIO-Bat-1 - PSM-7 - Preconstruction Bat Surveys:

Prior to work activities, a pre-construction survey within the Project Impact Area, focusing on culverts and trees within the PIA, with an appropriate survey buffer shall be conducted for the presence of bat roosts by a qualified contractor-supplied bat biologist. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of work within or adjacent to the culverts and any trees to be removed in conjunction with the project scope, ideally during the maternity season (typically April 1 to August 31), to allow time to prepare mitigation, and/or exclusion plans if needed in accordance with CDFW guidelines. If the pre-construction survey determines that no active roosts are present, then work activities shall commence within two weeks following the pre-construction survey.

BIO-Bat-2 - PSM-8 - Work Restriction Hours:

Work activities should be restricted to daylight hours at work locations with suitable bat habitat (culverts and trees within the PIA). This would reduce the potential of direct or indirect impacts to bat species that may be foraging in the vicinity of the BSA. Should work activities be required at night, night lighting should be focused on the direct area of work.

Mitigation Measures

Bio-Plant-PSM-1 – Habitat Restoration:

Caltrans Landscape Architecture will review all proposed tree removals and replacements with the City of Chino Hills, giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.

On-site habitat restoration for temporary impacts to Sensitive Natural Communities through revegetation and reseeding with vegetation native to the impacted area will be conducted where feasible, immediately following completion of construction activities, or with written approval from California Department of Fish and Wildlife (CDFW), and/or United States Fish and Wildlife Service (USFWS), at the beginning of the next growing season after project completion. On-site habitat restoration would consist of the following:

- Grading the slopes back to natural contours where feasible;
- Reseeding with vegetation native to the impacted area where feasible;
- Replanting replacement trees where feasible, at a ratio to be determined in consultation with the resource agencies;
- For restoration areas on slopes, BMP's/erosion control measures should be included to prevent soil erosion until plants become established.

Where on-site habitat restoration is not feasible due to limitations of the project site, Caltrans will discuss appropriate mitigation measures and tree replacement ratios and planting locations with the resource agencies.

BIO-Plant-PSM-2 - Existing Resource Protection:

Caltrans will protect-in-place where possible mature special-status plant species currently within the Project Impact Area, including California black walnut (*Juglans californica*) and coast live oak (*Quercus agrifolia*). Any mature California black walnut and coast live oak tree to be protected-in-place will be surrounded by temporary high visibility fence and barriers sufficient to protect-in-place from construction equipment and construction personnel. Temporary high visibility fence will be identified on the plans and described in the specifications. Construction personnel will be instructed

during the WEAP training to avoid this resource (California black walnut and coast live oak).

Where existing resources cannot be protected-in-place, Caltrans Landscape Architecture will review all proposed tree removals and replacements giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.

Replacement will occur on site where possible, or at a nearby restoration site. Removal of any mature California black walnut or coast live oak tree, and protection-in-place of any mature California black walnut or coast live oak trees tree will be supervised by a Caltrans staff biologist.

BIO-Plant PSM-3 - Habitat Mitigation and Monitoring Plan:

A Habitat Mitigation and Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species will be developed by a contractor-supplied biologist and provided to Caltrans and the resource agencies for review and approval prior to construction. The plan will include replacement of special status tree species to be removed at a ratio of 2:1. Replacement will occur on site where feasible, or as close to the project location as possible – as determined by the District Landscape Architect in conjunction with the project biologist.

Compensatory Mitigation:

Anticipated mitigation requirements include restoration of compensatory habitat within the watershed associated with the project area. Compensatory mitigation measures intended to satisfy CDFW and Regional Water Quality Control Board (RWQCB) requirements for anticipated project impacts to Waters of the State (WOS) are described below.

BIO-Waters 1:

Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.

BIO-Waters 2:

On-site habitat restoration for temporary impacts for native plant communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.

BIO-Waters 3:

Permanent impacts will be mitigated for and decided upon with coordination from regulatory agencies.

BIO-Waters 4:

Compensatory Mitigation: Any additional permanent impacts to jurisdictional areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.

Final permanent impacts related to WOS will be mitigated in consultation with the regulatory agencies.

2.1.5 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?	☐	☐	☐	☒

Response to Item a), b), c): No Impact. Information for this section was taken from the Screened Undertaking Memorandum prepared for the project. The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the December 2024 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, the United States Army Corps of Engineers' Sacramento District, San Francisco District, and Los Angeles District, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

The provisions of the Section 106 PA, Attachment 2, have been applied to this project. This project falls under:

- Class 1, "Pavement reconstruction, resurfacing, shoulder backing, or placement of seal coats."
- Class 2, "Minor widening of less than one-half-lane width, adding lanes in the median, or adding paved shoulders."
- Class 6, "Minor utility installation or relocation."
- Class 7, "Installation of noise barriers or retaining walls."
- Class 11," Modification of existing features, such as slopes, ditches, curbs, sidewalks, driveways, dikes, or headwalls, within or adjacent to the right of way."
- Class 12, "Minor operational improvements, such as culvert replacements and median or side-ditch paving."
- Class 13, "Addition or replacement of devices, such as glare screens, median barriers, fencing, guardrails, safety barriers, energy attenuators, guide posts, markers, safety cables, ladders, lighting, hoists, or signs."

- Class 14, “Installation, removal or replacement of roadway markings, such as painted stripes, raised pavement markers, thermoplastic tape, or raised bars, or installation of sensors in existing pavements.”
- Class 28, “Joint or multiple use permits with other agencies or encroachment permits.”

Screening Process:
The cultural resources review was performed by Professionally Qualified Staff (PQS) Ashley Bowman, Co-Principal Investigator Pre-Historic Archaeology, and included a review of the Environmental Study Request, location maps, CCRD, aerial photography, historic topographic maps, and the conceptual design footprint. Based on this review, the undertaking, as currently proposed, has no potential to affect Historic Properties eligible for or listed on the National Register of Historic Places.

Conclusion: As a result, this undertaking is exempt from further review, no additional archaeological or built environment studies are required at this time and the Section 106 compliance process, CEQA cultural resources component, and PRC 5024 compliance are complete. The Screened Undertaking memorandum documents compliance with the agreed-upon historic preservation procedures.

Please note that this assessment could change, and additional studies may be required if the project changes and ensure the following measures found in the Caltrans 2024 Standard Specifications in the Plans, Specifications, and Estimates apply to this project and are to be included in the Environmental Commitments Record (ECR) and Resident Engineer File.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required. However, the following avoidance and/or minimization measures would be implemented to minimize potential impacts during construction.

CR-1: If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Gabrielle Duff, DEBC: (909) 501-5142 and Julie Scrivner, DNAC: (909) 260-8265. Further provisions of PRC 5097.98 are to be followed as applicable.

CR-3: Cultural sensitivity training will be provided prior to start of construction.

2.1.6 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?	☐	☐	☐	☒

Response to Items a) and b): No Impact. Construction activities are expected to be short-term in duration and, therefore, not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction. The project proposes to replace current lighting with LED lighting which aligns with State goals for energy efficiency.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Energy.

2.1.7 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?	☐	☐	☐	☒

Response to Item a i), a ii), a iii), a iv): No Impact. Caltrans does not propose the construction of habitable structures and therefore, would not expose people or structures to strong seismic ground shaking greater than what currently exists. The project alignment does not lie within an Alquist Priolo Earthquake Fault Zone or within 1,000 feet of a Holocene or younger fault. No known active faults transect the project site. Construction and operation of the proposed project has no potential to cause or exacerbate rupture of an earthquake fault, strong ground shaking, or seismic-related ground failure, including liquefaction and/or landslides.

Response to Item b): Less Than Significant Impact. Erosion control measures would be used to address site soil stabilization during construction. These include erosion control Best Management Practices (BMPs) as part of the Stormwater Pollution Prevention Plan (SWPPP). With implementation of these standardized measures, no short-term direct or indirect adverse impacts related to soil compaction or erosion would occur during construction of the build alternative.

Response to Item c): No Impact. The potential for impacts related to unstable geological unit or soil resulting in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is very low.

Response to Item d): No Impact. The proposed project is not in area of expansive soils or liquefaction. Impacts are not anticipated in this regard.

Response to Item e): No Impact. The project does not propose septic tanks or alternative waste water disposal systems. No impact would occur.

Response to Item f): No Impact Due to the fact that this project is within a previously disturbed area, no paleontological studies were required and no paleontological resources would be disturbed. Furthermore, there are no unique geological features that are expected to be impacted by the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

The following Caltrans Standard Measures would be implemented to minimize soil erosion:

WQ-1: Treatment control BMPs will be implemented to the maximum extent practicable, consistent with the requirements of the NPDES permit and Waste Discharge requirements.

WQ-2: The proposed Project will comply with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Order No. 2022-0033-DWQ, NPDES No. CAS000003, and any subsequent permits in effect at the time of construction.

The proposed Project will comply with the Construction General Permit by preparing and implementing a SWPPP to address issues related to construction-related activities, equipment, and materials that have the potential to affect water quality. The SWPPP is a project-specific document which includes the site's risk level during construction, includes guidelines for monitoring and reporting, and provides Erosion Control Plan and BMPs details for the construction site. The SWPPP also includes Construction Site BMPs, which are implemented to minimize sediment and erosion

during construction. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants, such as sediment control measures, catch basin inlet protection, construction materials management, and non-stormwater BMPs.

2.1.8 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?	☐	☐	☐	☒

Response for Item a): Less Than Significant Impact. Considering the project will not increase the vehicle capacity on SR-142, no impacts to operational GHG emissions are anticipated. However, project construction would result in temporary, short-term increases of GHG emissions from construction vehicles and machinery.

Construction activities would generate 216 metric tons of CO2e over the 200-day construction period. Environmental impacts resulting from project GHG emissions are considered to be less than significant.

The measures listed below would be implemented to minimize construction emissions.

Response for Item b): No Impact. The project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required. However, the following measures would be implemented in the project to reduce GHG emissions during construction.

GHG-1: The project will use cold in-place recycling which extends the pavement service life and recycles natural resources. The treatment also reduces emissions and energy use associated with processing and hauling these materials.

GHG-2: During construction, implement Caltrans' Standard Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction; which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations.

GHG-3: The project will maintain equipment in proper tune and working condition.

GHG-4: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions).

2.1.9 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?	☐	☐	☐	☒

Response to Item a) and b): No Impact. Based on the Initial Site Assessment (ISA) Checklist done in December of 2025, it was found that non-hazardous lead concentrations are in soil within the project limits. No special handling, management, or disposal requirements are necessary for excavated or disturbed soil; excess soil may be released to the contractor for disposal. Still, a Lead Compliance Plan (LCP) would be required to protect workers and the public.

The project would require asbestos investigation for reinforced concrete pipes (RCP) and any existing concrete structures to be disturbed or removed by construction activities. Additionally, an Initial Site Assessment (ISA) would be required for the

permanent easement/acquisition. Appropriate SSPs would be incorporated in the PS&E package following the completion of these investigations.

The proposed project has a low risk of potentially hazardous waste involvement.

Response to Item c): No Impact. There are no schools within one-quarter of the project site; therefore, no impacts would occur.

Response to Item d): No Impact The project is not on a site included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which is also known as the Cortese List.

Response to Item e): No Impact. The project site is not within an airport land use plan and it is not within two miles of a public airport or public use airport.

Response to Item f): Less Than Significant Impact. According to the San Bernardino County Countywide Plan, State Route 142 is a designated evacuation route. The project would result in operational improvements which would benefit the existing route and any evacuation plan, and not impair or interfere with it.

Implementation of a Transportation Management Plan (TMP) in compliance with Caltrans and local policies would involve planning with emergency service providers throughout the project construction to avoid emergency service delays.

Response to Item g): No Impact. The project would not require installation of infrastructure that would exacerbate wildfire risks.

Avoidance, Minimization, and/or Mitigation Measures

In effort to avoid and/or minimize potential impacts, the following measures would be implemented:

HAZ-1: Should any previously unknown hazardous waste/material be encountered during construction, Caltrans Hazards Procedures for Construction will be followed.

HAZ-2: SSP 6-1.03 for conditions for use of local material from non-commercial source would be included in the PS&E package.

HAZ-3: SSP 14-11.14 for management of treated wood waste would be included in the PS&E package.

HAZ-4: SSP 7-1.02K(6)(j)(iii) for earth material containing lead would be included in the PS&E package and would require a lead compliance plan (LCP).

HAZ-5: SSP 36-4 for residue from grinding or cold planning containing lead from paint and thermoplastic would be included in the PS&E package and would require a LCP.

HAZ-6: SSP 14-11.12 for removal of yellow traffic stripes and pavement marking with hazardous residue would be included in the PS&E package and would require a LCP.

2.1.10 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?	☐	☐	☐	☒

Response to Item a): Less Than Significant Impact. The potential temporary effects of the proposed project on water quality in the area are anticipated to come

from runoff during construction, including erosion. The National Pollutant Discharge Elimination System (NPDES) permits issued by State Water Resources Control Board (SWRCB) set limits on discharges, schedules for compliance, special conditions, and monitoring programs. These permits also limit discharges, set water quality standards, and establish a monitoring program of the waste discharge. Potential impacts of the proposed project on existing water quality include temporary increases in sediments, oil, grease, and chemical pollutants that collect in stormwater runoff.

Short-term or temporary construction impacts on water quality have the potential to occur during ground disturbance activities, material and equipment use and storage at staging areas, and other construction activities. Because the project would be constructed entirely within existing State ROW, the California Statewide Order No. 2022-0033-DWQ, NPDES Permit No. CAS000003 would apply to this project. Coverage under the Construction General Permit (CGP) for stormwater discharges associated with construction activities and land disturbance activities, Order No. WQ 2022-0057-DWQ, NPDES No. CAS 000002, would also be required during the construction phase of the project. Temporary impacts are anticipated to be minimized with the implementation of construction Best Management Practices (BMPs) to minimize construction runoff and protect water quality.

A SWPPP will be prepared for the project to control pollutants, and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction. Temporary construction site BMPs would be implemented to reduce or eliminate pollutants in stormwater discharges. A site-specific Construction Site Monitoring Program would be developed as part of the SWPPP, prior to the start of construction, and revised as necessary to reflect project revisions.

Compliance with the NPDES requirements would further reduce such polluting impacts during construction. Projects within State ROW are obligated to comply with the latest Caltrans and RWQCB water quality standards relative to the treatment of post-construction stormwater runoff. Determination and implementation of BMPs within the ROW are defined based on the evaluation of existing site constraints, constituents of concern at the receiving waters, soil conditions, and hydraulics conditions. Prior to approval of the final design of the project, applicable post-construction BMPs would be identified to ensure that applicable Caltrans selection and siting criteria have been achieved. Deployment of BMPs would reduce long-term water quality impacts due to implementation of the proposed project. Therefore, less than significant water quality impacts are anticipated.

Response to Item b): No Impact. Ground disturbance is anticipated to be shallow and as such, groundwater is not anticipated to be affected by the proposed project.

Response to Item c) (i), (ii), (iii), and (iv): No Impact. The project would not alter the alignment of a stream or the configuration of a water body. Temporary impacts

are anticipated to be minimized with the implementation of construction BMPs to minimize construction runoff and a SWPPP would be prepared and approved prior to construction in order to protect disturbed surface area.

Response to Item d): No Impact. Due to the distance from the Pacific Ocean and other large bodies of water, potential for inundation by seiche, tsunami, or mudflow is considered very unlikely. The project is not expected to risk the release of pollutants due to project inundation.

Response to Item e): No Impact. The proposed project would not conflict with or obstruct implementation of a Water Quality Control Plan nor a groundwater management plan.

Avoidance, Minimization, and/or Mitigation Measures

The following Caltrans Standard Measures will be included for Hydrology and Water Quality.

WQ-1: Treatment control BMPs will be implemented to the maximum extent practicable, consistent with the requirements of the NPDES permit and Waste Discharge requirements.

WQ-2: The proposed Project will comply with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Order No. 2022-0033-DWQ, NPDES No. CAS000003, and any subsequent permits in effect at the time of construction.

The proposed Project will comply with the Construction General Permit by preparing and implementing a SWPPP to address issues related to construction-related activities, equipment, and materials that have the potential to affect water quality. The SWPPP is a project-specific document which includes the site's risk level during construction, includes guidelines for monitoring and reporting, and provides Erosion Control Plan and BMPs details for the construction site. The SWPPP also includes Construction Site BMPs, which are implemented to minimize sediment and erosion during construction. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants, such as sediment control measures, catch basin inlet protection, construction materials management, and non-stormwater BMPs.

2.1.11 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?	☐	☐	☐	☒

Response to Item a) and b): No Impact. The project does not propose any new land uses or to alter any existing land uses. The project would be consistent with the existing land use. SR-142 serves as a main connector between Orange County and Chino Hills. The route provides an alternative to SR-91 to the south and SR-57 and SR-60 to the north for residents in the area. SR-142 connects SR-71 to SR-90. SR-142 serves the communities of Sleepy Hollow, Chino Hills Estates, Litel/Ayala, and Summit Ranch. The route allows residents access to shopping centers, schools, entertainment, SR-71, SR-90, Orange County, the Western Hills Country Club, and Chino Hills State Park. As such, the proposed work would not divide an established community it would continue to keep it connected while improving traffic conditions.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Land Use and Planning.

2.1.12 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?	☐	☐	☐	☒

Response to Item a), b): No Impact. No known mineral resources are within the proposed project area. The proposed project would not result in a loss of locally-important mineral resource.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Mineral Resources.

2.1.13 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?	☐	☐	☐	☒

Response to Item a): No Impact. The proposed project is to widen the existing S-curve. Implementation of the project would not result in noise impacts greater than what currently exists. Construction noise would be short term and intermittent during the construction period; therefore, noise impacts would last only during the duration of construction.

Response to Item b): No Impact. Any groundborne noise or vibration would be limited to the construction period and would be short term in duration and would occur in an area that experiences noise levels consistent with an active interstate highway.

Response to Item c): No Impact. The proposed project is not located within two miles of an airport. Therefore, no noise impacts related to air traffic would occur.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Noise.

2.1.14 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?	☐	☐	☐	☒

Response to Item a) and b): No Impact. The nature of the project would not induce population growth in the area and no impacts on population and housing would occur as a result of the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Population and Housing.

2.1.15 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?	☐	☐	☐	☒

Response to Fire and Police Protection): Less Than Significant Impact. No fire or police stations would be acquired or displaced and the proposed project would not affect the level of service along SR 142. Implementation of a construction-period Transportation Management Plan (TMP) (measure TRA-1; refer to Section 2.1.17

Transportation), which is prepared for all Caltrans highway projects, would ensure that access is maintained to and from the project area and that the police service providers are notified prior to the start of construction activities; therefore, less than significant impacts are anticipated.

Response to Schools, Parks, and Other Public Facilities: No Impact. There are no schools, parks, nor other public facilities within the project vicinity. State Route 142 is a two-lane, rural highway that traverses the Chino Hills and connects the City of Chino Hills to the east with the City of Brea to the west. The project would widen the existing s-curve to better accommodate truck turns which would decrease vehicle conflicts and enhance safety on this route. Implementation of a construction-period TMP (measure TRA-1) would ensure that access is maintained to and from the project area.

Avoidance, Minimization, and/or Mitigation Measures

TRA-1: Prior to construction, a TMP will be prepared to minimize potential impacts on emergency services and commuters during construction.

2.1.16 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?	☐	☐	☐	☒

Response to Items a) and b): No Impact. Implementation of the project does not have the capacity to generate a substantial increase in the use of any existing neighborhood or regional parks, or other recreational facilities such that substantial physical deterioration could occur, nor would it require the construction or expansion of existing recreational facilities.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Recreation.

2.1.17 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?	☐	☐	☒	☐

Response to Item a) No Impact. State Route 142 is not a Priority Interregional Highway nor within a Strategic Interregional Corrido Area (ITSP). SR-142 serves as a main connector between Orange County and Chino Hills. The route provides an alternative to SR-91 to the south and SR-57 and SR-60 to the north for residents in the area. SR-142 connects SR-71 to SR-90. SR-142 serves the communities of Sleepy Hollow, Chino Hills Estates, Litel/Ayala, and Summit Ranch. The route allows residents access to shopping centers, schools, entertainment, SR-71, SR-90, Orange County, the Western Hills Country Club, and Chino Hills State Park.

Class III bike route designation in project area is identified in San Bernardino County Transportation Authority's (SBCTA's) Active Transportation Plan and will be replaced in-kind.

There are no existing sidewalks or pedestrian facilities along this segment of SR-142.

State Route 142 within project limits is designated an Advisory Truck Route. The project is in alignment with priorities and goals set by the California Sustainable Freight Action Plan to preserve and enhance freight infrastructure; increase system efficiency; and improve safety and security. The proposed project is in alignment with the goals and objectives outlined in the California Freight Mobility Plan 2020, including the goal for Connectivity and Accessibility and the objective for improving truck trip planning, coordination, operational, and management.

The proposed project scope also addresses the goals outlined in the California Transportation Plan (CTP) 2040 including improving public safety and security, improving multimodal mobility. These goals are supported by objectives within the Strategic Highway Safety Plan.

The proposed project to have operational improvements is consistent with and furthers the SCAG's Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) 2020 goals to ensure travel safety and reliability for all people and goods in the region and maximize mobility and accessibility for all people and goods in the region.

Response to Item b): Less Than Significant Impact. As the project involves operational improvements to accommodate freight trucks traveling through the S-curve, it does not involve any capacity increasing elements and therefore, the project is unlikely to induce measurable and substantial increases in VMT and a VMT analysis is not required. Under CEQA guidelines, as indicated in Section 15064.3 (b)(2), transportation projects that reduce, or have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact. As such, less than significant impacts are anticipated in this regard.

Response to Item c): No Impact. Due to the nature of the scope of work it would not substantially increase hazards because of a design feature or incompatible uses. In general, the proposed project would improve highway functionality. Therefore, no impacts are anticipated in this regard.

Response to Item d): Less Than Significant Impact. Construction activities have the potential to result in temporary, localized, and site-specific disruptions during the construction period. This could lead to an increase in delay times for emergency response vehicles during construction; however, the proposed project would include the Caltrans Standard Measure for preparation and implementation of a TMP (measure TRA-1, below), which would avoid or minimize any potential impacts.

Avoidance, Minimization, and/or Mitigation Measures

TRA-1: Prior to construction, traffic handling plans for emergency service providers and public traveling, including bicycle and pedestrian, would be developed.

2.1.18 Tribal Cultural Resources

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

Response to Items a) and b): No Impact. All work would be conducted within the existing, disturbed Caltrans right of way. A cultural resources review was also performed which included reviews of location maps, aerial photography, historic topographic maps, and the conceptual design footprint. Based on the reviews, the project would have no potential to affect historic properties nor have any impacts on Tribal Cultural Resources.

Tribal Outreach and Consultation Log is as follows:

Date	Type of Communication	Agency and/or Consultant Representative(s) (name, title, affiliation)	Tribal Representative(s) (name, title, affiliation)	Description/Summary of Communication
01/08/26	Letter/email	Ashley Bowman, Caltrans Co-Primary Investigator, Prehistoric Archaeology	Andrew Salas, Chairperson Gabrieleno Band of Mission Indians – Kizh Nation	Initial consultation letter sent to Tribe for Project document elevation to a CEQA IS. Consultation window timed out on February 23, 2026. No response received to date.
01/08/26	Letter/email	Ashley Bowman, Caltrans Co-Primary Investigator, Prehistoric Archaeology	Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	Initial consultation letter sent to Tribe for Project document elevation to a CEQA IS. Consultation window timed out on February 23, 2026. No response received to date.
01/08/26	Letter/email	Ashley Bowman, Caltrans Co-Primary Investigator Prehistoric Archaeology	Sandonne Goad, Chairperson, Gabrielino/Tongva Nation	Initial consultation letter sent to Tribe for Project document elevation to CEQA IS. Consultation window timed out on February 23, 2026. No response received to date.
01/08/26	Letter/email	Ashley Bowman, Caltrans Co-Primary Investigator Prehistoric Archaeology	Anthony Madrigal Sr, Cahuilla Band of Indians	Initial consultation letter sent to Tribe for Project document elevation to CEQA IS. Consultation window timed out on February 23, 2026. No response received to date.
01/08/26	Letter/email	Ashley Bowman, Caltrans Co-Primary Investigator Prehistoric Archaeology	Joseph Ontiveros, Soboba Band of Luiseno Indians	Initial consultation letter sent to Tribe for Project document elevation to CEQA IS. Consultation window timed out on February 23, 2026. No response received to date.
01/08/26	Letter/email	Ashley Bowman Caltrans Co-Primary Investigator Prehistoric Archaeology	Heidi Lucero, THPO/MLD Juaneño Band of Mission Indians Acjachemen Nation 84A	Initial consultation letter sent to Tribe for Project document elevation to CEQA IS. Consultation window timed out on February 23, 2026. No response received to date.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required. However, the following avoidance and/or minimization measures would be implemented to minimize potential impacts during construction.

CR-1: If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning;

Julie Scrivner, DNAC (909) 260-8265. Further provisions of PRC 5097.98 are to be followed as applicable.

CR-3: Cultural sensitivity training will be provided prior to start of construction.

2.1.19 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?	☐	☐	☐	☒

Response to Item a): Less Than Significant Impact. The proposed project is not expected to require or result in new construction of utilities, or any expansions; however, the following utilities would possibly require relocation to accommodate the proposed project improvements:

- Removal of two (2) Southern California Edison wood poles and overhead lines for street lighting.
- Relocation of an 8-inch high pressure gas line and a 2-inch gas line.
- Relocation of a 4-inch and four 1 ½-inch underground communication lines.

Also located within the project area is an existing private groundwater well, which connects to a private underground water line that crosses SR-142 to the southwest. Based on field investigation of the well, and attempts to locate the water line using ground-penetrating radar, it was determined that the water line is abandoned and no longer in service.

If the project is approved, coordination with the utility companies would take place during final design (PS&E), and construction phases of the project. Protection

measures would also be identified at that time. Relocation of the existing utilities would not cause significant environmental effects.

Response to Item b): No Impact. The proposed project would not construct any new residential or non-residential structures that would induce population or employment growth that would require a new water supply. Due to the nature and scope of the proposed project, no impacts are anticipated on water supplies.

Response to Item c): No Impact. Construction of the project would not generate the need for additional wastewater treatment. No impacts would occur.

Response to Item d): No Impact. Implementation of the project would generate a minimal amount of solid waste. During operation of the facility, the project would not generate solid waste. Furthermore, it is Caltrans' policy to recycle construction materials whenever possible. Opportunities to salvage and recycle items would also be considered. As such, the project is not expected to impair the attainment of the state's solid waste reduction goals.

Response to Item e): No Impact. 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 measures are required for Utility and Service Systems.

2.1.20 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?	☐	☐	☐	☒

Response to Items a), b), c) and d): No Impact. The proposed project is not in a State Responsibility Area, but is located in between a High and Very High Fire Hazard Severity Zone in a Local Responsibility Area. Due to the nature of the scope of work, construction or operation would not expose persons or structures to wildlife spread, or require installation or maintenance of infrastructure that may exacerbate fire risk.

Avoidance, Minimization, and/or Mitigation Measures

No measures are proposed.

2.1.21 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?	☐	☐	☐	☒

Response to Item a): No Impact. The 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.

Response to Item b): No Impact. There are no other Caltrans projects in the vicinity. The proposed project is not anticipated to result in any cumulative impacts to any resources. It is expected that no standalone cumulative impact analysis would be required.

Although the project may potentially impact biological resources, avoidance, minimization and mitigation measures would be implemented. With implementation of

the proposed measures, the project would not result in substantial cumulative environmental impacts.

Response to Item C): No Impact. The project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Avoidance, Minimization, and/or Mitigation Measures

No additional measures are proposed.

Chapter 3 Climate Change

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.

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 (CAFE) standards for on-road motor vehicles sold in the United States. 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 on SR-142, in San Bernardino County. SR-142 is a two-lane, rural highway which traverses the Chino Hills and connects the City of Chino Hills to the east with the City of Brea to the west. The section of highway within the project limits traverses an approximate 60-foot high, moderately steep, north facing native slope.

SR-142 serves as a main connector between Orange County and Chino Hills. The route provides an alternative to SR-91 to the south and SR-57 and SR-60 to the north for residents in the area. SR-142 connects SR-71 to SR-90. SR-142 serves the

communities of Sleepy Hollow, Chino Hills Estates, Litel/Ayala, and Summit Ranch. The route allows residents access to shopping centers, schools, entertainment, SR-71, SR-90, Orange County, the Western Hills Country Club, and Chino Hills State Park.

A regional transportation plan (RTP) by the Southern California Association of Governments guides transportation development in the project area. The San Bernardino Countywide Plan addresses GHGs in the project area.

GHG Inventories

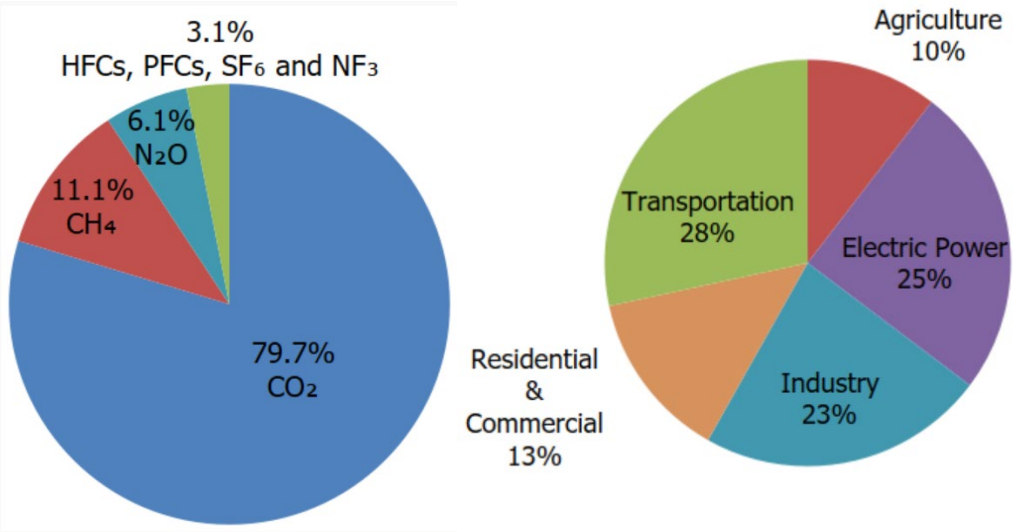
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission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

National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2022 were 5,489.0 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 15% of total U.S. emissions in 2022 [U.S. EPA 2024a].) While total GHG emissions in 2022 were 17% below 2005 levels, they increased by 1% over 2021 levels. Of these, 80% were CO_2, 11% were CH_4, and 6% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2022, CO_2 emissions decreased by only 2% (U.S. EPA 2024a).

The transportation sector's share of total GHG emissions remained at 28% in 2022 and continues to be the largest contributing sector (Figure 3-1). Transportation activities accounted for 37% of U.S. CO_2 emissions from fossil fuel combustion in 2022. This is a decrease of 0.5% from 2021 (U.S. EPA 2024a, 2024b).

Figure 3-1: U.S. 2022 Greenhouse Gas Emissions

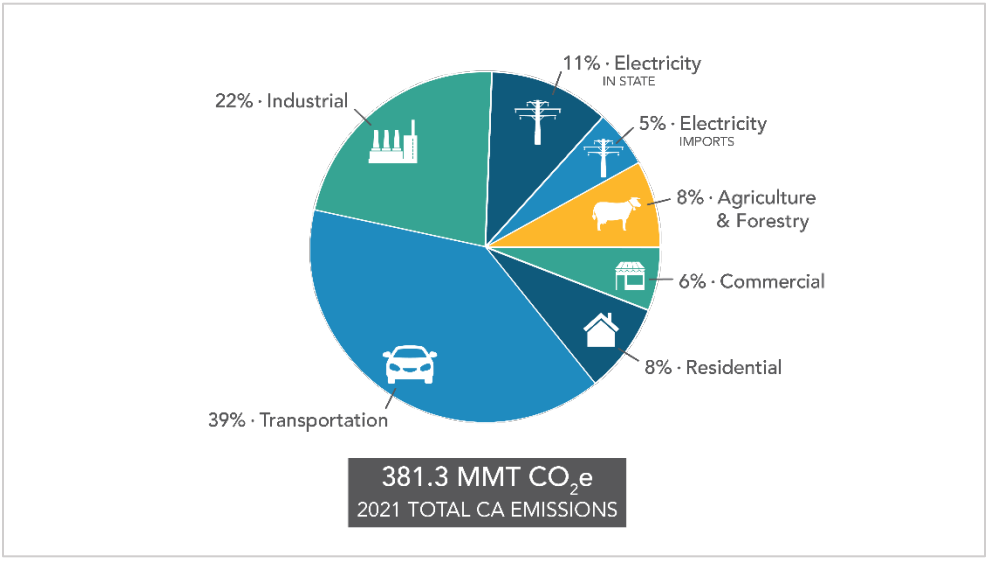


(Source: U.S. EPA 2024b)

State GHG Inventory

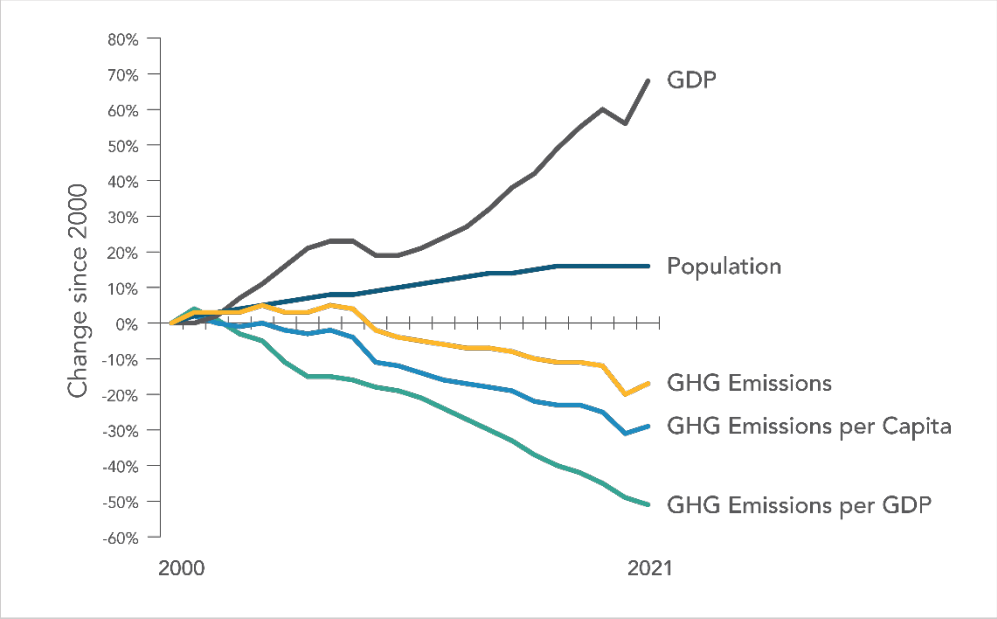
ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2021 despite growth in population and state economic output (Figure 3-3). Transportation emissions remain the largest contributor to GHG emissions in the state (Figure 3-2) (ARB 2023).

Figure 3-2: California 2021 Greenhouse Gas Emissions by Economic Sector



(Source: ARB 2023)

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



(Source: ARB 2023)

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 sue 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 B30-15 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 2022a).

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 SCAG. The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021).

Table 3-1: Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (May 2024)	• Complete Streets • Transit and Multimodal Integration • Transportation System Management • Transportation Demand Management • Air Quality • Clean Transportation • Goods Movement
San Bernardino Countywide Plan (September 2022)	• Policy NR-1.7: Greenhouse gas reduction targets. We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law. • Policy NR-1.8: Construction and operations. We invest in County facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage County contractors and other builders and developers to use low-emission construction vehicles and equipment to improve air quality and reduce emissions. • Policy TM-3.1 VMT Reduction: We promote new development that will reduce household and employment VMT relative to existing conditions. • Policy TM-3.2 Trip Reduction Strategies: We support the implementation of transportation demand management techniques, mixed use strategies, and the placement of development in proximity to job and activity centers to reduce the number and length of vehicular trips. • Policy TM-3.3 First Mile/Last Mile Connectivity: We support strategies that strengthen first/last mile connectivity to enhance the viability and expand the utility of public transit in unincorporated areas and countywide. • Policy TM-4.1 Complete Streets Network: We maintain a network of complete streets within mobility focus areas that provide for the mobility of all users of all ages and all abilities, while reflecting the local context. • Policy TM-4.4 Transit Access for Residents in Unincorporated Areas: We support and work with local transit agencies to generate a public transportation system, with fixed routes and on-demand service, that provide residents of unincorporated

San Bernardino Countywide Plan (September 2022) cont…	areas with access to jobs, public services, shopping, and entertainment throughout the county. • Policy TM-4.5 Transit access to job centers and tourist destinations: We support and work with local transit agencies to generate public transportation systems that provide access to job centers and reduce congestion in tourist destinations in unincorporated areas. • Policy TM-4.6 Transit access to public service, health, and wellness: In unincorporated areas where public transit is available, we prefer new public and behavioral health facilities, other public facilities and services, education facilities, grocery stores, and pharmacies to be located within one-half mile of a public transit stop. We encourage and plan to locate new County health and wellness facilities within one-half mile of a public transit stop in incorporated jurisdictions. We encourage public K-12 education and court facilities to be located within one-half mile of public transit. • Policy TM-4.7 Regional bicycle network: We work with SBCTA and other local agencies to develop and maintain a regional backbone bicycle network. • Policy TM-4.8 Local bicycle and pedestrian networks: We support local bike and pedestrian facilities that serve unincorporated areas, connect to facilities in adjacent incorporated areas, and connect to regional trails. We prioritize bicycle and pedestrian network improvements that provide safe and continuous pedestrian and bicycle access to mobility focus areas, schools, parks, and major transit stops. • Policy TM-4.9 Bike and pedestrian safety: We promote pedestrian and bicyclist safety by providing separated pedestrian and bike crossings when we construct or improve bridges over highways, freeways, rail facilities, and flood control areas. We monitor pedestrian and bicycle traffic accidents and promote safety improvements in unincorporated high-accident areas.

San Bernardino County Regional Greenhouse Gas Reduction Plan (March 2021)	• On-Road-1 Alternative Fueled Transit Fleets • On-Road-2 Encourage Use of Mass Transit • On-Road-3 Transportation Demand Management and Signal Synchronization • On-Road-4 Expand Bike Routes • On-Road-5 Community Fleet Electrification

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 proposed project will not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR-142, 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.

The Caltrans Construction Emissions Tool (CAL-CET) was used to estimate construction and greenhouse gas (GHG) emissions. Construction emissions of GHGs would be 216 metric tons CO_{2e} over the approximately 200-day construction period.

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 will address operational deficiencies. The purpose of the project is to improve transportation system performance. Construction GHG emissions would result during the construction phase at different levels, with total construction GHG emissions of 216 metric tons CO_{2e}. Furthermore, as this project would not increase the number of travel lanes on SR-142, no increase in operational GHG emissions is expected to occur. Therefore, environmental impacts resulting from project GHG emissions are considered to be less than significant. The project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.

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 2022b).

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: The project will use cold in-place recycling which extends the pavement service life and recycles natural resources. The treatment also reduces emissions and energy use associated with processing and hauling these materials.

GHG-2: During construction, implement Caltrans' Standard Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction; which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations.

GHG-3: The project will maintain equipment in proper tune and working condition.

GHG-4: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions).

Adaptation Strategies

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 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.

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

Precipitation and Flooding

According to the Federal Emergency Management Agency Flood Insurance Rate Map, the project is within Zone D, which is a designation for areas where flood hazards are undetermined but possible. The project is not within a floodplain.

Based on the Caltrans District 8 Climate Change Vulnerability Assessment Map (Caltrans 2019), the percent change projected in 100-year precipitation depth by 2055 is 6.3% and 6% by 2085 within the project area.

Wildfire
The proposed project is not in a State Responsibility Area, but is located in both High and Very High Fire Hazard Severity Zones in a Local Responsibility Area.

The Caltrans District 8 Climate Change Vulnerability Assessment identifies the project segment area as having a Wildfire Exposure region of Moderate for the 2040 to 2069 RCP 8.5, and 2070 to 2099 RCP 8.5 projections.

Temperature
The District 8 Climate Change Vulnerability Assessment states the average 7-day maximum temperature is expected to increase along project limits 5.57 degrees Fahrenheit by 2055, and 9.0 degrees Fahrenheit by 2085.

Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental review process. It helps planners determine the scope of environmental documentation and the level of analysis required and identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. This section summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Public Participation

This Draft Initial Study will be circulated and made available for public review and comment during the public review period. The Notice of Availability for this Draft Initial Study will be distributed to the federal, state, regional, and local agencies and elected officials, as well as interested groups, organizations, and individuals, as listed in Appendix C, Distribution List.

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Climate Change

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Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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September 2025

TITLE VI/NON-DISCRIMINATION POLICY STATEMENT

It is the policy of the California Department of Transportation (Caltrans), in accordance with Title VI of the Civil Rights Act of 1964 and the assurances set forth in the Caltrans' Title VI Program Plan, to ensure that no person in the United States shall on the grounds 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. Related non-discrimination authorities, remedies, and state law further those protections, including sex, disability, religion, sexual orientation, age, low income, and Limited English Proficiency (LEP).

Caltrans is committed to complying with 23 C.F.R. Part 200, 49 C.F.R. Part 21, 49 C.F.R. Part 303, and the Federal Transit Administration Circular 4702.1B. 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 (including LEP). In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

The overall responsibility for this policy is assigned to the Caltrans Director. The Caltrans Title VI Coordinator is assigned to the Caltrans Office of Civil Rights Deputy Director, who then delegates sufficient responsibility and authority to the Office of Civil Rights' managers, including the Title VI Branch Manager, to effectively implement the Caltrans Title VI Program. Individuals with questions or requiring additional information relating to the policy or the implementation of the Caltrans Title VI Program should contact the Title VI Branch Manager at title.vi@dot.ca.gov or at (916) 639-6392, or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

Dina El-Tawansy (Sep 12, 2025 16:52:12 PDT)
DINA A. EL-TAWANSY
Director

"Improving lives and communities through transportation."

Appendix B List of Preparers

The following personnel contributed to the preparation of this document.

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- Hannah Duarte, Environmental Studies, Branch Chief
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- Ronn Knox, Associate Environmental Planner/Natural Sciences
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- Carola Acurio, Hazardous Waste Specialist, Transportation Engineer/Environmental Engineering
- Rodrigo Panganiban, Air Specialist, Transportation Engineer/Environmental Engineering
- Meenu Chandan, Noise Specialist, Transportation Engineer/Environmental Engineering
- Paul Phan, Environmental Engineering Branch Chief

Appendix C Distribution List

A public notice of this IS and/or a Notice of Intent to Adopt a Mitigated Negative Declaration or ND was distributed to federal, state, regional, and local agencies, elected officials, and utilities and service providers. In addition, all property owners and occupants within a 500-foot radius of the project limits were provided the Notice of Intent. The Distribution List of Public Agencies, Elected Officials, and Service Providers is followed by the list of Interested parties, Property Owners, and Members of the Public.

State Agencies

California Dept. of Fish & Wildlife 3602 Inland Empire, Blvd., Suite C-220 Ontario, CA 91764	California Highway Patrol Inland Division 9530 Pittsburgh Avenue Rancho Cucamonga, CA 91730	Regional Water Quality Control Board 3737 Main Street, Ste. 500 Riverside, CA 92501-3348

Regional and Local Agencies

City of Chino Hills Mayor Brian Johsz 14000 City Center Drive Chino Hills, CA 91709	City of Chino Hills Vice Mayor Ray Marquez 14000 City Center Drive Chino Hills, CA 91709	City of Chino Hills Council Member Ray Marquez District 1 14000 City Center Drive Chino Hills, CA 91709
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Fire Station 64 16231 Canon Lane Chino Hills, CA 91709	Fire Station 66 13707 Peyton Avenue Chino Hills, CA 91709	Danielle O'Toole Chino Valley Independent Fire Dist. 14011 City Center Drive Chino Hills, CA 91709

Property Owners and Interested Parties

Resident 15828 Fetlock Ln Chino Hills, CA 91709	Resident 15820 Fetlock Ln Chino Hills, CA 91709	Resident 15814 Fetlock Ln Chino Hills, CA 91709
Resident 15811 Fetlock Ln Chino Hills, CA 91709	Resident 15821 Fetlock Ln Chino Hills, CA 91709	Resident 15833 Fetlock Ln Chino Hills, CA 91709

Resident 15849 Fetlock Ln Chino Hills, CA 91709	Resident 2111 Carbon Canyon Rd Chino Hills, CA 91709	Resident 2121 Carbon Canyon Rd Chino Hills, CA 91709
Resident 2131 Carbon Canyon Rd Chino Hills, CA 91709	Resident 2060 Carbon Canyon Rd Chino Hills, CA 91709	Resident 2110 Carbon Canyon Rd Chino Hills, CA 91709
Resident 2151 Carbon Canyon Rd Chino Hills, CA 91709	Resident 2222 Old Carbon Canyon Rd Chino Hills, CA 91709	Resident 2211 Carbon Canyon Rd Chino Hills, CA 91709
Resident 15727 Pyrite Ct Chino Hills, CA 91709	Resident 15721 Pyrite Ct Chino Hills, CA 91709	Resident 15717 Pyrite Ct Chino Hills, CA 91709
Resident 15711 Pyrite Ct Chino Hills, CA 91709	Resident 15703 Pyrite Ct Chino Hills, CA 91709	Resident 15697 Pyrite Ct Chino Hills, CA 91709
Resident 15693 Pyrite Ct Chino Hills, CA 91709	Resident 15681 Pyrite Ct Chino Hills, CA 91709	Resident 15669 Pyrite Ct Chino Hills, CA 91709
Resident 2233 Olivine Dr Chino Hills, CA 91709	Resident 2225 Olivine Dr Chino Hills, CA 91709	Resident 2217 Olivine Dr Chino Hills, CA 91709
Resident 2271 Carbon Canyon Rd Chino Hills, CA 91709	Resident 2301 Carbon Canyon Rd Chino Hills, CA 91709	Resident 2290 Olivine Dr Chino Hills, CA 91709
Resident 2278 Olivine Dr Chino Hills, CA 91709	Resident 2272 Olivine Dr Chino Hills, CA 91709	

Appendix D List of Technical Studies

Air Quality Comment Memo. December, 2025

Construction GHG Emissions Estimate Memorandum. January, 2026

Noise Comment Memo. December, 2025

Scenic Resource Evaluation and Visual Impact Assessment. August, 2025

Initial Site Assessment (ISA) Checklist. December, 2025

Natural Environment Study (Minimal Impacts). February, 2026

Section 106 Compliance – Screened Undertaking. In Accordance with the First Amended Section 106 Programmatic Agreement (PA), Executed January 1, 2014. Memorandum dated March, 2026.

Appendix E Environmental Commitments Record

Permit Type	Agency	Date Received	Expiration	Notes
1600	California Department of Fish and WIldlife			
WDR	Waste Discharge Requirement			

Date of ECR: April 2026

ENVIRONMENTAL COMMITMENTS RECORD (SBD-142 S-CURVE)

08-SBd-142
PM 2.200 / 2.500

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

EA 08-1M780
PN 0822000041
Generalist: JeaninePorter
ECL: TBD

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	Mitigation for significant impacts under CEQA?	
							Date / Initials	YES	NO
AIR QUALITY									
All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7-1.02C, Emissions Reduction, requires contractors to	N/A	GHG Memo dated Jan 2026	Resident Engineer, Contractor						x

Date of ECR: April 2026

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							Date / Initials	YES	NO
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.									
BIOLOGICAL RESOURCES									
Bio-General 1 - Equipment Staging, Storing & Borrow Sites: Caltrans will confine all equipment maintenance, storage, and parking during construction activities to the designated construction area or to previously disturbed graded or paved areas, or level areas where grading and vegetation clearing are		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
not required and that are not habitat for special status species, as determined in coordination with the Approved Biologist (BIO-General 8). All staging areas would be located at least 150 feet from sensitive habitat areas, including streams/drainages and other aquatic habitat.									
Bio-General 2 - Temporary Artificial Lighting Restrictions: To address impacts to special status bat species, artificial lighting must be directed at the job site to minimize light spillover onto habitat and roosting areas if project activities occur at night.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
Bio-General 3 - Permanent Artificial Lighting Restrictions:		NES(MI) Dated February, 2026	District Design / District Environmental	Final Design,					x

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							Date / Initials	YES	NO
To address impacts to special status bat species, new artificial lighting designs must avoid the use of high mast lighting and tall lighting and must incorporate methods, such as shielding, to minimize light spillover and ensure ambient lighting in the project area is not increased.			Planning / Resident Engineer / Contractor	Construction					
BIO-General 7 - Worker Environmental Awareness Program (WEAP): A contractor-supplied biologist must present a Caltrans-approved biological resource information program/WEAP for special-status mammal, avian, reptile, invertebrate and rare plants prior to project activities, to all personnel that will be present within the project limits for longer than 30 minutes at any given		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
time. Caltrans will require all construction personnel to participate in the WEAP training prior to participating in work activities. The training will be led by an approved contractor-supplied biologist and delivered to all construction personnel and new field-based personnel before engaging in construction activities.									
BIO-General 8 - Biological Monitor: A qualified contractor-supplied biologist must monitor project activities weekly to ensure that measures intended to protect special status bat species, special status bird species, migratory birds, special status reptile species, special status invertebrate species, Southern California black walnut,		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
and California walnut woodland during construction are being implemented and documented. This will include ensuring that work equipment, vehicles, and personnel do not enter habitat areas, and stopping work if a federal- or State-listed species enters the work area.									
Bio-General 9 - Environmentally Sensitive Area (ESA): To address potential impacts to Southern California black walnut, California walnut woodland, and other environmentally sensitive areas, delineate these habitat areas as an ESA as shown on the plans and/or described in the specifications.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
Bio-General 10 - ESA Fence Monitoring: Integrity inspections of ESA fencing and enclosures must occur throughout the duration of the project, 3 days prior to commencing project activities and weekly during project activities. If during construction the fence fails, work must stop until it is repaired, and the qualified biologist inspects (and clears) the job site.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
Bio-General 11 - ESA Fence Removal: All fencing must be removed as a last order of work. During removal, a qualified biologist must be present.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
Bio-Plant-PSM-1 – Habitat Restoration: Caltrans Landscape Architecture will review all proposed tree removals and replacements with the City of Chino Hills. Giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak. On-site habitat restoration for temporary impacts to Sensitive Natural Communities through revegetation and reseeding with vegetation native to the impacted area will be conducted where feasible, immediately following completion of construction activities, or with written approval from		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
California Department of Fish and Wildlife (CDFW), and/or United States Fish and Wildlife Service (USFWS), at the beginning of the next growing season after project completion. On-site habitat restoration would consist of the following: - **Grading the slopes back to natural contours where feasible;** - Reseeding with vegetation native to the impacted area where feasible; - Replanting replacement trees where feasible, at a ratio to be determined in consultation with the resource agencies; - For restoration areas on slopes,									

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							Date / Initials	YES	NO
BMP's/erosion control measures should be included to prevent soil erosion until plants become established. Where on-site habitat restoration is not feasible due to limitations of the project site, Caltrans will discuss appropriate mitigation measures and tree replacement ratios and planting locations with the resource agencies.									
BIO-Plant-PSM-2 Existing Resource Protection: Caltrans will protect-in-place where possible mature special-status plant species currently within the Project Impact Area, including California black walnut (*Juglans californica*) and coast live oak (*Quercus*		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

Date of ECR: April 2026

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							Date / Initials	YES	NO
agrifolia). Any mature California black walnut and coast live oak tree to be protected-in-place will be surrounded by temporary high visibility fence and barriers sufficient to protect-in-place from construction equipment and construction personnel. Temporary high visibility fence will be identified on the plans and described in the specifications. Construction personnel will be instructed during the WEAP training to avoid this resource (California black walnut and coast live oak). Where existing resources cannot be protected-in-place, Caltrans Landscape Architecture will review all proposed tree removals and replacements. Giving special									

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							Date / Initials	YES	NO
attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak. Replacement will occur on site where possible, or at a nearby restoration site. Removal of any mature California black walnut or coast live oak tree, and protection-in-place of any mature California black walnut or coast live oak trees tree will be supervised by a Caltrans staff biologist.									
BIO-Plant PSM-3 Habitat Mitigation and Monitoring Plan: A Habitat Mitigation and Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species will be		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

Date of ECR: April 2026

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							Date / Initials	YES	NO
developed by a contractor-supplied biologist and provided to Caltrans and the resource agencies for review and approval prior to construction. The plan will include replacement of special status tree species to be removed at a ratio of 2:1. Replacement will occur on site where feasible, or as close to the project location as possible – as determined by the District Landscape Architect in conjunction with the project biologist.									
BIO-General - PSM-4 - Environmentally Sensitive Areas and Ground Disturbance: No ground disturbing or fill activity of any type will be permitted within environmentally sensitive areas outside the Project footprint. All		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
construction equipment shall be operated in a manner to prevent accidental damage to nearby preserved areas outside the PIA. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected areas. Where appropriate, temporary high visibility fence will be installed at the environmentally sensitive area boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned ground disturbing activities.									
Bio-Plant-2 - Rare Plant Pre-Construction Surveys: Within 1 week prior to construction, a preconstruction survey must be conducted by a contractor-supplied		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident	Final Design, Construction					x

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							Date / Initials	YES	NO
biologist for special-status plants within the Project Impact Area. Any rare plant species identified must be flagged for visual identification to construction personnel for work avoidance. Rare plant species detected that feature multiple plants in a single location must be fenced with temporary high-visibility fencing.			Engineer / Contractor						
Bio- Invertebrate 1 - Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing: No more than 1 week prior to project activities, a contractor-supplied biologist must perform a preconstruction survey within the PIA for rare insect host plants, including but not necessarily limited to milkweed (*Asclepias sp.*). Should		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
any rare insect host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and the host plants must be flagged by the contactor-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.									
Bio-Invertebrate 2 - PSM-5 – Preconstruction Invertebrate Species Survey: A preconstruction Crotch's bumble bee survey must be conducted by a qualified contractor-supplied biologist no more than 1 week prior to construction activities within areas of appropriate nesting and foraging		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
habitat. The habitat assessment for Crotch's bumble bee shall be performed according to the 2023 CDFW Survey Considerations for Candidate Bumble Bee. The surveys shall include a minimum 50-foot buffer outside the PIA in adjacent habitat. If an active Crotch's bumble bee nest is located, a no construction buffer shall be established and monitored by the contractor-supplied biologist; the Resident Engineer must be contacted and additional measures and/or agency coordination may be required.									
Bio-Reptile 3 - PSM-6 – Special Status Reptile Pre-Construction Survey:		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident	Final Design, Construction					x

Date of ECR: April 2026

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A preconstruction survey for red diamond rattlesnake, coast horned lizard, and coast patch-nosed snake must be conducted by a qualified contractor-supplied biologist within the Project Impact Area within 14 days prior to project activities using established CDFW Survey Protocols. The special status reptile presence/ absence survey should be conducted when air temperature is between 77 F and 95 F (USFWS 1985, 1998). If one of the species listed above or other special status species is located, the Resident Engineer and Caltrans biologist **must be contacted and additional measures and/or agency coordination may be required.**			Engineer / Contractor						

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BIO-Avian 1 - Pre-Construction Nesting Bird Survey: If project activities cannot avoid the nesting bird season, February 1 – September 30, then preconstruction nesting bird surveys shall be conducted by a qualified contractor-supplied biologist in areas of suitable habitat within the project limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and avoid nesting birds. If an active avian nest is located, a no-construction buffer (100 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) shall be established and monitored by a qualified contractor-supplied biologist.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
BIO-Bat-1 - PSM-7 - Preconstruction Bat Surveys: Prior to work activities, a pre-construction survey within the Project Impact Area, focusing on culverts and trees within the PIA, with an appropriate survey buffer shall be conducted for the presence of bat roosts by a qualified contractor-supplied bat biologist. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of work within or adjacent to the culverts and any trees to be removed in conjunction with the project scope, ideally during the maternity season (typically April 1 to August 31), to allow time to prepare mitigation, and/or exclusion plans if needed in accordance with		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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CDFW guidelines. If the pre-construction survey determines that no active roosts are present, then work activities shall commence within two weeks following the pre-construction survey.									
BIO-Bat-2 - PSM-8 - Work Restriction Hours: Work activities should be restricted to daylight hours at work locations with suitable bat habitat (culverts and trees within the PIA). This would reduce the potential of direct or indirect impacts to bat species that may be foraging in the vicinity of **the** BSA. Should work activities be required at night, night lighting should be focused on the direct area of work.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
BIO-Waters 1: Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
BIO-Waters 2: On-site habitat restoration for temporary impacts for native plant communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
BIO-Waters 3:		NES(MI) Dated February, 2026	District Design / District	Final Design,					x

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							Date / Initials	YES	NO
Permanent impacts will be mitigated for and decided upon with coordination from regulatory agencies.			Environmental Planning / Resident Engineer / Contractor	Construction					
BIO-Waters 4: Compensatory Mitigation: Any additional permanent impacts to jurisdictional areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
CULTURAL RESOURCES									
CR-1: If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate	N/A	Screened Undertaking Memo Dated March, 2026	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/Construction					x

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							Date / Initials	YES	NO
the nature and significance of the find.									
CR-2: In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Gabrielle Duff, Environmental Branch Chief: (909) 501-5142, and Julie Scrivner, DNAC (909) 260-8265. Further	N/A	Screened Undertaking Memo Dated March, 2026	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
provisions of PRC 5097.98 are to be followed as applicable.									
CR-3: Cultural sensitivity training will be provided prior to start of construction.	N/A	Screened Undertaking Memo Dated March, 2026	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Final Design, Construction					x
TRANSPORTATION									
TRA-1: Prior to construction, traffic handling plans for emergency service providers and public traveling, including bicycle and pedestrian, would be developed.	N/A		District Design / District Traffic Management / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
VISUAL RESOURCES									
VIS-1: Caltrans Landscape Architect to work with Caltrans Design to minimize impacts to natural, scenic, and visual resources	N/A	Scenic Resource Evaluation and Visual Impact Assessment Memo (August 2025)	District Design / District Landscape Architecture /District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
VIS-2: Salvage (as possible) and replace-in-kind any visual resource impacted by project scope.	N/A	Scenic Resource Evaluation and Visual Impact Assessment Memo (August 2025)	District Design / District Landscape Architecture /District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
VIS-3: Replace trees removed per direction of the District Landscape Architect.	N/A	Scenic Resource Evaluation and Visual Impact	District Design / District Landscape Architecture /District Environmental	Final Design, Construction					x

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							Date / Initials	YES	NO
		Assessment Memo (August 2025)	Planning / Resident Engineer / Contractor						
VIS-4: Protect and/or replace endangered and rare plant species in coordination with district Environmental Planning team.	N/A	Scenic Resource Evaluation and Visual Impact Assessment Memo (August 2025)	District Design / District Landscape Architecture /District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x
Bio-Plant-PSM-1 – Habitat Restoration: Caltrans Landscape Architecture will review all proposed tree removals and replacements with the City of Chino Hills. Giving special attention		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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							Date / Initials	YES	NO
to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak. On-site habitat restoration for temporary impacts to Sensitive Natural Communities through revegetation and reseeding with vegetation native to the impacted area will be conducted where feasible, immediately following completion of construction activities, or with written approval from California Department of Fish and Wildlife (CDFW), and/or United States Fish and Wildlife Service (USFWS), at the beginning of the next growing season after project completion. On-site habitat									

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restoration would consist of the following: - **Grading the slopes back to natural contours where feasible;** - Reseeding with vegetation native to the impacted area where feasible; - Replanting replacement trees where feasible, at a ratio to be determined in consultation with the resource agencies; - For restoration areas on slopes, BMP's/erosion control measures should be included to prevent soil erosion until plants become established.									

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Where on-site habitat restoration is not feasible due to limitations of the project site, Caltrans will discuss appropriate mitigation measures and tree replacement ratios and planting locations with the resource agencies.									
BIO-Plant-PSM-2 Existing Resource Protection: Caltrans will protect-in-place where possible mature special-status plant species currently within the Project Impact Area, including California black walnut (*Juglans californica*) and coast live oak (*Quercus agrifolia*). Any mature California black walnut and coast live oak tree to be protected-in-place will be surrounded by temporary high visibility fence and barriers sufficient		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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to protect-in-place from construction equipment and construction personnel. Temporary high visibility fence will be identified on the plans and described in the specifications. Construction personnel will be instructed during the WEAP training to avoid this resource (California black walnut and coast live oak). Where existing resources cannot be protected-in-place, Caltrans Landscape Architecture will review all proposed tree removals and replacements. Giving special attention to sensitive species such as California Sycamore, Coast Live Oak, California Black Walnut, and Coastal Scrub Oak.									

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Replacement will occur on site where possible, or at a nearby restoration site. Removal of any mature California black walnut or coast live oak tree, and protection-in-place of any mature California black walnut or coast live oak trees tree will be supervised by a Caltrans staff biologist.									
BIO-Plant PSM-3 Habitat Mitigation and Monitoring Plan: A Habitat Mitigation and Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species will be developed by a contractor-supplied biologist and provided to Caltrans and the resource agencies for review and approval prior to construction. The plan will include		NES(MI) Dated February, 2026	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction					x

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replacement of special status tree species to be removed at a ratio of 2:1. Replacement will occur on site where feasible, or as close to the project location as possible – as determined by the District Landscape Architect in conjunction with the project biologist.									
WATER QUALITY									
WQ-1: Treatment control BMPs will be implemented to the maximum extent practicable, consistent with the requirements of NPDES permit and Waste Discharge requirements.			District Design / District Storm Water / Resident Engineer / Contractor	Final Design, Construction					x
WQ-2: The proposed project will comply with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land			District Design / District Storm Water / Resident Engineer / Contractor	Final Design, Construction					x

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Disturbance Activities (Construction General Permit), Order No. 2022-033-DWQ, NPDES No. CAS000003, and any subsequent permits in effect at the time of construction. The proposed project will comply with the Construction General Permit by preparing and implementing a SWPPP to address issues related to construction-related activities, equipment, and materials that have the potential to affect water quality. The SWPPP is a project-specific document which includes the site's risk level during construction, includes guidelines for monitoring and reporting, and provides Erosion Control Plan and BMPs details for the construction site. The SWPPP also includes									

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Construction Site BMPs, which are implemented to minimize sediment and erosion during construction. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants, such as sediment control measures, catch basin inlet protection, construction materials management, and non-stormwater BMPs.									
HAZARDOUS WASTE									
HAZ-1: Should any previously unknown hazardous waste/material be encountered during construction; Caltrans Hazards Procedures for Construction will be followed.	N/A	ISA Checklist dated December 2025	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction					x
HAZ-2: SSP 6-1.03 for conditions for use of local material from non-	N/A	ISA Checklist dated December 2025	District Design / District	Final Design,	SSP: 6-1.03				x

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commercial source would be included in the PS&E package.			Environmental Engineering / Resident Engineer / Contractor	Construction					
HAZ-3: SSP 14-11.14 for management of treated wood waste would be included in the PS&E package.	N/A	ISA Checklist dated December 2025	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 14-11.14				x
HAZ-4: SSP 7-1.02K(6)(j)(iii) for earth material containing lead would be included in the PS&E package and would require a lead compliance plan (LCP).	N/A	ISA Checklist dated December 2025	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 7-1.02k(6)(j)(iii)				x
HAZ-5: SSP 36-4 for residue from grinding or cold planning containing lead from paint and thermoplastic	N/A	ISA Checklist dated December 2025	District Design / District Environmental	Final Design,	SSP 36-4				x

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would be included in the PS&E package and would require a LCP.			Engineering / Resident Engineer / Contractor	Construction					
HAZ-6: SSP 14-11.12 for removal of yellow traffic stripes and pavement marking with hazardous residue would be included in the PS&E package and would require a LCP.	N/A	ISA Checklist dated December 2025	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 14-11.12				x
CLIMATE CHANGE									
GHG-1: The project will use cold in-place recycling which extends the pavement service life and recycles natural resources. The treatment also reduces emissions and energy use associated with processing and hauling these materials.			District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction					x
GHG-2: During construction, implement Caltrans' Standard			District Design / District	Final Design,					x

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Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction; which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations.			Environmental Engineering / Resident Engineer / Contractor	Construction					
GHG-3: The project will maintain equipment in proper tune and working condition.			District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction					x
GHG-4: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions).			District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction					x