

# SODA SPRINGS PAVEMENT REHABILITATION PROJECT

PLACER AND NEVADA COUNTIES, CALIFORNIA  
DISTRICT 3 – NEV/PLA – 80 (Post Miles VARIOUS)  
03-1H990 / 0317000043

## INITIAL STUDY

WITH PROPOSED MITIGATED NEGATIVE DECLARATION



Prepared by the  
State of California, Department of Transportation  
Caltrans District 3  
703 B Street  
Marysville, CA 95901



October 2021



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## General Information About This Document

### What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Mitigated Negative Declaration (IS/MND) which examines the potential environmental effects of a proposed project on State Route 80 in Placer and Nevada Counties, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

### What should you do?

- Please read this document.
- Additional copies of this document are available for review at the Caltrans District Office located at 703 B Street, Marysville, CA 95901; the Truckee Branch Library located at 10031 Levon Avenue, Truckee, CA 96161; and the Colfax Public Library located at 10 Church Street, Colfax, CA 95713.
- This document may be downloaded at the following website:  
<https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs>.
- We'd like to hear what you think. If you have any comments about the proposed project, please send them in writing to Caltrans by the deadline.
- Please send comments via U.S. mail to:

California Department of Transportation  
Attention: Bria Miller  
North Region Environmental - District 3  
703 B Street  
Marysville, CA 95901

- Send comments via e-mail to: [Bria.Miller@dot.ca.gov](mailto:Bria.Miller@dot.ca.gov)
- Be sure to send comments by the deadline: February 1, 2022

### What happens after this?

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

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For individuals with sensory disabilities, this document is available in Braille, in large print, and in a digital format. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Deanna Shoopman, North Region Environmental-District 3, 703 B Street, Marysville, CA 95501; (530) 632-0080 Voice, or use the California Relay Service TTY number, 711 or 1-800-735-2929.

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# SODA SPRINGS PAVEMENT REHABILITATION PROJECT

Rehabilitate distressed pavement on the eastbound and westbound lanes and shoulders of Interstate 80

US/State Route 80 in Nevada and Placer Counties, from Post miles 0.2 West of the Troy Undercrossing to 0.1 East of the Soda Springs Overcrossing

## INITIAL STUDY

### WITH PROPOSED MITIGATED NEGATIVE DECLARATION

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation

12/16/2021

*Mike Bartlett*

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Date of Approval

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Mike Bartlett, Office Chief  
North Region Environmental - District 3  
California Department of Transportation  
CEQA Lead Agency

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

Bria Miller, North Region Environmental - District 3  
703 B Street, Marysville, CA 95901 (530) 720-3691 or use the California Relay Service  
TTY number, 711 or 1-800-735-2929.

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# PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

***SCH Number: Pending***

## ***Project Description***

The California Department of Transportation (Caltrans) proposes to rehabilitate a portion of Interstate 80 (I-80), in both Placer and Nevada Counties, from 0.1 miles west of the Troy undercrossing to 0.1 miles east of the Soda Springs overcrossing.

## ***Determination***

This proposed Mitigated Negative Declaration (MND) is intended to give notice to interested agencies and the public that it is Caltrans' intent to adopt an 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 impact on the environment for the following reasons:

The project would have *No Effect* on aesthetics, agriculture and forestry, cultural resources, geology and soils, hazardous materials, land use planning, mineral resources, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, utilities, and wildfire.

The project would have *Less than Significant Impacts* to noise, air quality, biological resources, energy, hydrology, and greenhouse gas emissions.

*Mike Bartlett*

12/16/2021

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Mike Bartlett, Office Chief  
North Region Environmental - District 3  
California Department of Transportation

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Date

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## LIST OF ABBREVIATED TERMS

Abbreviation	Description
AB	Assembly Bill
ARB	Air Resources Board
ARZ	Absorber Root Zone
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
°C	degrees Celsius
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCC	California Coastal Commission
CCC	Central California Coast (coho salmon ESU)
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH <sub>4</sub>	methane
CIA	Cumulative Impact Analysis
CNPS	California Native Plant Society
CO <sub>2</sub>	carbon dioxide
CRPR	California Rare Plant Rank
CSP	Corrugated Steel Pipe
CTP	California Transportation Plan
CWA	Clean Water Act
dB	decibels
Department	Caltrans

<b>Abbreviation</b>	<b>Description</b>
DI	drainage inlet
DOT	Department of Transportation
DPS	Distinct Population Segment
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA(s)	Environmentally Sensitive Area(s)
ESHA	Environmentally Sensitive Habitat Area
ESL	Environmental Study Limits
°F	degrees Fahrenheit
FED	Final Environmental Document
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
G	Global: ranking for Natural Communities of Special Concern
GHG	greenhouse gas
GMP	Galvanized Metal Pipe
GWP	Global Warming Potential
H&SC	Health & Safety Code
HA	Hydrologic Area
HFCs	hydrofluorocarbons
HU	Hydrologic Unit
HVF	High-Visibility Fencing
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
LCFS	low carbon fuel standard
MBTA	Migratory Bird Treaty Act
MMTCO <sub>2e</sub>	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization

<b>Abbreviation</b>	<b>Description</b>
MSA	Magnuson-Stevens Fishery Conservation and Management Act
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission
NCSC	Natural Communities of Special Concern
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
OHWM	ordinary high-water mark
Pb	lead
PDT	Project Development Team
PM(s)	post mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
PRC	Public Resources Code
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
S	State: ranking for Natural Communities of Special Concern
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SHS	State Highway System
SLR	Sea Level Rise
SNC	Sensitive Natural Community
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SRZ	Structural Root Zone

<b>Abbreviation</b>	<b>Description</b>
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMP	Transportation Management Plan
U.S. or US	United States
U.S. 101	U.S. (United States) Highway 101
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WDRs	Waste Discharge Requirements
WQAR	Water Quality Assessment Report
WQOs	Water Quality Objectives

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# Chapter 1      **Proposed Project**

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## **1.1 Project History**

The Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA). The project is located in both Placer and Nevada Counties along Interstate 80 (I-80) from 0.2 miles west of the Troy undercrossing to 0.1 miles east of the Soda Springs overcrossing. The existing facility is a four-lane divided freeway, with 2-12 feet long lanes and 10-foot long shoulders. The project is located along a segment of I-80 where the profile of the roadway is primarily a sustained grade, with significant grade difference between the eastbound and westbound lanes are separated by a forested median. In the eastbound direction, there is a chain installation area located 0.3 miles west of the Kingvale undercrossing, where the right shoulder widens to a width of approximately 30 feet. There are two interchanges within the project limits which provide ingress and egress for the surrounding Troy, Kingvale, and Soda Springs areas.

## **1.2 Project Description**

Caltrans proposes to rehabilitate a portion of I-80, in both Placer and Nevada Counties, from 0.1 miles west of the Troy undercrossing to 0.1 miles east of the Soda Springs overcrossing. The proposed project would repair distressed pavement on the existing eastbound (EB) and westbound (WB) lanes and shoulders, construct an EB truck climbing lane, and widen/replace the EB Troy (19-106R) and Kingvale (19-107R) undercrossing (UC) structures. Existing culverts would be repaired, replaced, or extended as needed. Detector loops on the mainline and Soda Springs ramps, as well as existing overhead sign structures and sign panels, would be replaced. The existing chain installation area between the Troy Road UC and Kingvale UC would be grooved to improve tire traction during snow and icy conditions.

## 1.1.1 Purpose and Need

### Purpose

The proposed project would restore the facility to a state of good repair and provide efficient movement of people and goods through pavement and culvert rehabilitation. The provision of a truck climbing lane would improve both traffic safety and highway operation by facilitating the passing of trucks and slow-moving vehicles whose speeds drop due to the sustained grade. Safety would also be improved by upgrading signs and detector loops, and by replacing all non-standard metal beam guardrails with shoulder concrete barriers.

### Need

Due to the heavy vehicle traffic, including chain/studded tire wear during the winter months, the pavement has experienced severe rutting. The existing pavement has cracks in certain areas which indicates it is close to the end of its service life. The rutting and cracking will continue to worsen and lead to an unacceptable ride quality for the public by the construction year.

The trucks and vehicles towing trailers experience reduced speeds because of the sustained grades within the project limits and this impacts the traveling public because the freeway is not operating as efficiently as they would expect.

Existing culverts are deteriorated and need rehabilitation. According to current culvert inspection log, culverts within the project limits having an existing health rating below the threshold of 60 will have to be repaired, replaced, or extend as part of this project.

The existing overhead sign structures at the westbound Kingvale exit and eastbound Soda Springs exit are deteriorated and need to be replaced. Existing sign panels at the eastbound exit to Kingvale and the westbound exit to Soda Springs are deteriorated as well and need to be replaced with sign panels that meet current design standards.

### 1.1.2 Project Location

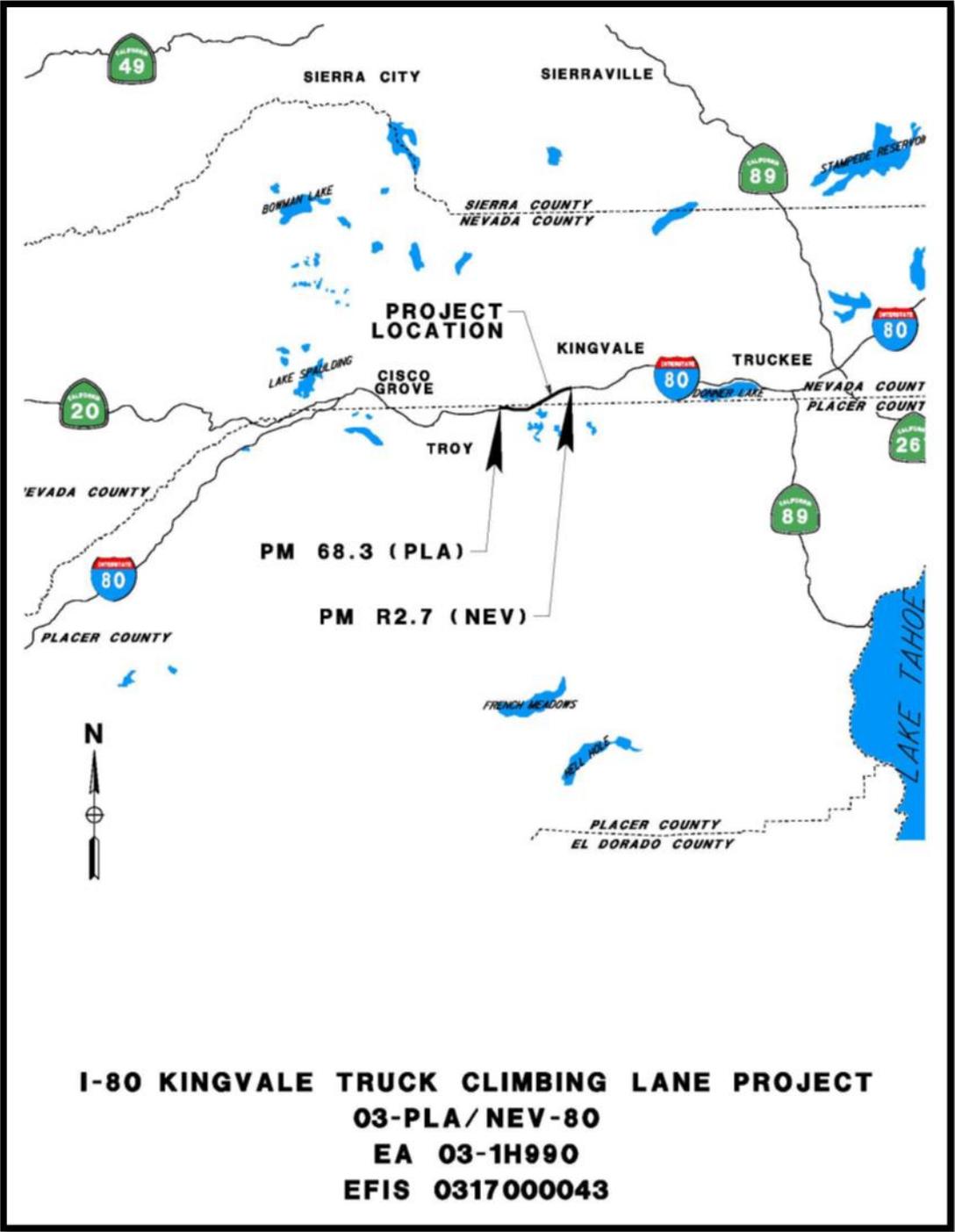


Figure 1. Project Vicinity Map

### 1.1.3 Preferred Alternative

For the proposed project, the roadway features remain consistent throughout the different alternatives. The difference in alternatives is the proposed improvements for the EB and WB Troy UC and Kingvale UC structures. Both the EB Troy UC and the EB Kingvale UC structures limits would be widened to accommodate the addition of the truck climbing lane.

Alternative 4 proposes to replace both the Troy undercrossing and Kingvale undercrossing structures with new structures.

### 1.1.4 Alternatives Considered but Removed from Further Consideration

#### ALTERNATIVE 1

For each structure, this alternative proposes to widen the existing structure to accommodate the EB truck climbing lane. However, the remaining existing bridge deck would remain in its current poor condition.

#### ALTERNATIVE 2

For each structure, this alternative proposes to widen the existing structure to accommodate the EB truck climbing lane and have a new concrete deck poured over the existing deck. This alternative would extend the life of the deck and improve the existing structure's rating from poor to fair.

#### ALTERNATIVE 3

For each structure, this alternative proposes to widen the existing structure to accommodate the EB truck climbing lane and have the existing reinforced concrete deck, girders, and beams removed and replaced with new precast T beams. This alternative would improve the existing structure's rating from poor to good.

### 1.1.5 No-Build Alternative

This alternative would maintain the facility's current condition and would not meet the purpose and need of the project. For each potential impact area discussed in Chapter 2, the No-Build alternative has been determined to have no impact. Under the No-Build alternative, no alterations would be made to the existing conditions, and the proposed improvements would not be implemented.

## 1.2 Permits and Approvals Needed

The following table indicates the permitting agency, permits/approvals, and status of permits required for the project:

**Table 1. Agency Approvals**

Agency	Permit/Approval	Status
United Auburn Indian Community of the Auburn	Approval	
Wilton Rancheria	Approval	

# Chapter 2 CEQA Environmental Checklist

## Environmental Factors Potentially Affected

The environmental factors noted below would potentially be affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Potential Impact Area	Impacted: Yes / No
Aesthetics	No
Agriculture and Forestry	No
<b>Air Quality</b>	<b>Yes</b>
<b>Biological Resources</b>	<b>Yes</b>
Cultural Resources	No
<b>Energy</b>	<b>Yes</b>
Geology and Soils	No
<b>Greenhouse Gas Emissions</b>	<b>Yes</b>
Hazards and Hazardous Materials	No
<b>Hydrology and Water Quality</b>	<b>Yes</b>
Land Use and Planning	No
Mineral Resources	No
<b>Noise</b>	<b>Yes</b>
Population and Housing	No
Public Services	No
Recreation	No
Transportation and Traffic	No
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
<b>Mandatory Findings of Significance</b>	<b>Yes</b>

The CEQA Environmental Checklist identifies physical, biological, societal, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A “No Impact” answer in

the last column of the checklist reflects this determination. The words “significant” and “significance” used throughout the checklist and this document are related only to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features can include design elements of the project, as well as standard measures 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 [Section 1.4]). These features are an integral part of the project and have been considered prior to any significant determinations documented in the checklist or document.

### **Project Impact Analysis Under CEQA**

CEQA broadly defines “project” to include “*the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment*” (14 CCR § 15378). Under CEQA, the baseline for environmental impact analysis normally consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project’s possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project’s impacts, a lead agency may define existing conditions by referencing historic conditions—and/or conditions expected when the project becomes operational—that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a “statement of the objectives sought by the proposed project” (14 CCR § 15124(b)).

CEQA requires the identification of each potentially “significant effect on the environment” resulting from the action, and ways to mitigate each significant effect. Significance is defined as “*substantial or potentially substantial adverse*

change to any of the physical conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests lead agencies adopt thresholds of significance, which define the level of effect above which the lead agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and its varied, diverse, and complex ecosystems, developing thresholds of significance on a statewide basis has not been pursued by Caltrans as a Lead Agency that encompasses the entire state. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland located within a park in a city that has only 1.00 acre of total wetland would be impacted then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed ND, along with a document known as an Initial Study, must be circulated for public review. CEQA allows for a "Mitigated Negative

Declaration” in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review. The lead agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated into the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would reasonably be expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered “mitigation” under CEQA, these measures are often referred to in an Initial Study as “mitigation,” Good Stewardship, or Best Management Practices. These measures can also be identified after the Initial Study/Mitigated Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (CAL. PUB. RES. CODE § 21065.3). The documents are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

## **No-Build Alternative**

For each of the following CEQA Environmental Checklist questions, the “No-Build” alternative has been determined to have “No Impact.” Under the “No-

Build” alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The “No-Build” alternative will not be discussed further in this document.

## 2.1 Aesthetics

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Have a substantial adverse effect on a scenic vista?				✓
<b>Would the project:</b> b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
<b>Would the project:</b> 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?				✓
<b>Would the project:</b> d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as on the Visual Impact Assessment Memo (Caltrans 2021a). The review indicates the project would not adversely affect or result in any noticeable change to the physical characteristics or scenic resources of the existing environment.

## 2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>				✓
<p><b>Would the project:</b> c) Conflict with existing zoning or cause rezoning of forest land (as defined by 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))?</p>				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
<b>Would the project:</b> e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as on the Nevada County Williamson Act map (Nevada 2017) and the Placer County land use map (Placer 2013). Potential impacts to agriculture and forest resources are not anticipated since no Williamson Act land parcels were identified within the project limits. The proposed project is located in a timberland zone, but the proposed work would not conflict with existing zoning or cause rezoning of forest land, as no tree removal is required. The proposed project would have no impact on agriculture and forest resources.

## 2.3 Air Quality

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

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
<b>Would the project:</b> 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?			✓	
<b>Would the project:</b> c) Expose sensitive receptors to substantial pollutant concentrations?				✓
<b>Would the project:</b> d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				✓

### 2.3.1 Regulatory Setting

The Federal Clean Air Act (CAA), as amended, is the primary federal law that governs air quality, while the California Clean Air Act is its corresponding state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (CARB), set standards for the concentration of pollutants in the air.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under NEPA. In addition to this analysis, a parallel “conformity” requirement under the CAA also applies.

### 2.3.2 Environmental Setting

The topography of a region can substantially impact air flow and resulting pollutant concentrations. To better manage air quality throughout the state, California is divided into 15 air basins with similar topography and meteorology. Each air basin has a local air district that is responsible for identifying and implementing air quality strategies to comply with ambient air quality standards.

The Kingvale Truck Climbing Lane project site is located in proximity to the town of Truckee in Nevada County, an area within the Mountain Counties Air Basin (MCAB), which includes Nevada County and the eastern portion of Placer County. Air quality regulation at Placer County and Nevada County in MCAB is administered by Placer County Air Pollution Control District and Northern Sierra Air Quality Management District. Forecasted population for Placer County and Nevada County are 398,329 and 99,755, respectively, as of the 2019 U.S. Census Population Estimates. Placer County's economy was largely driven by services (49.5 percent) and retail trade (10.4 percent) in 2020, and Nevada County's economy was largely driven by health care and social assistance, government and government enterprises, and retail trade in 2016.

### 2.3.3 Discussion of CEQA Question 2.3—Air Quality

#### **a) Would the project conflict with or obstruct implementation of the applicable air quality plan?**

An impact would have a significant cumulative impact if emissions from the project exceeded the district's thresholds, or if the project conflicted with the applicable air quality attainment plan. Implementation of applicable air district regulatory measures would reduce emissions, and it is anticipated they would reduce construction emissions to below applicable air district thresholds. According to the construction emissions calculation (Caltrans 2021b) and the operational emissions calculation (Caltrans 2021b) in the air quality report, short-

and long-term daily average emissions (Oxides of nitrogen [NO<sub>x</sub>], reactive organic gasses [ROG], and Particulate matter [PM]<sub>10</sub>) from the proposed project during the design year would be below the Placer County Air Pollution Control District Construction/Operational Project and Cumulative-Level Significance Thresholds, as well as the Nevada County Emissions Thresholds of Significance. Build-out of the general plans of Placer and Nevada Counties, the proposed action could not result in a cumulative impact related to operation and construction-related NO<sub>x</sub>, ROG, and PM<sub>10</sub> emissions. Therefore, the project would not result in cumulatively considerable.

**b) Would the project 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?**

The Clean Air Act requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for six criteria air contaminants: ozone (O<sub>3</sub>), PM, carbon monoxide (CO), nitrogen dioxide, lead, and sulfur dioxide. It also permits states to adopt additional or more protective air quality standards if needed. The overall operational emissions of criteria pollutants CO and NO<sub>x</sub> within the proposed project area under the future build alternatives would not be anticipated to increase in comparison with those under the baseline year. Compared with the PM emissions during the existing year, there would not be a substantial change in the build alternatives during the future years. There are no CO non-attainment areas in California; all areas in California are currently designated attainment/unclassified or maintenance for the state and federal CO standards. The proposed project anticipates temporary short-term air quality impacts resulting from construction activities. To minimize or eliminate dust through application of water or dust palliatives, Caltrans would adhere to the minimization measures stated in Section 2.3.4, and the proposed project would have a less than significant impact.

**c) Would the project expose sensitive receptors to substantial pollutant concentrations?**

Sensitive receptors include residential areas, schools, hospitals and other health care facilities, child/day-care facilities, parks, and playgrounds. The zone of

greatest concern near roadways is within 500 feet (or 150 meters), sensitive receptors (Donner Trail Elementary School and residential areas) within 500 feet (or 150 meters) have been identified. Figure 2 below shows the location of the receptors relative to the proposed project site.



**Figure 2: Sensitive Receptors Located Near the Proposed Project**

This proposed project would include the construction of a truck climbing lane to increase operational efficiency of the EB direction of I-80 and is located in proximity to sensitive receptors (Figure 2). However, the overall operational emissions of criteria pollutants (CO and NOx) within the proposed project area under the future build alternatives would not increase these pollutants in comparison with those under the baseline year. Compared with the PM

emissions during the existing year, the build alternatives would not result in an increase in PM. The estimated overall mobile source air toxic (MSAT) emissions would not result in appreciable changes between no-build and build alternatives or between the baseline and the future build alternatives, therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations and would have no impact.

**d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

The proposed project would not result in other emissions that would adversely affect a substantial number of people and would have not impact.

### **2.3.4 Minimization Measures**

The Caltrans standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. Control measures would be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 “Dust Control,” Section 14-9 “Air Quality,” and Section 18 “Dust Palliatives” to further reduce impacts. The proposed project anticipates temporary short-term air quality impacts; however, these impacts would be minimized with incorporation of the following minimization measures:

- The construction contractor must comply with the Caltrans’ Standard Specifications in Section 14-9 (2018).
  - Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including Placer County Air Pollution Control District (PCAPCD) and Northern Sierra Air Quality Management District (NSAQMD) regulations and local ordinances.
- Rule 228 (Fugitive Dust Emissions) in the list of current rules, PCAPCD would be applied within the proposed project area to reduce ambient concentrations and limit fugitive emissions for fine particulate matter from construction activities.

- Rule 226 (Fugitive Dust Emissions) in the list of current rules, NSAQMD would be applied within the proposed project area to reduce ambient concentrations and limit fugitive emissions for fine particulate matter from construction activities.
- Water or a dust palliative would be applied to the site and equipment as often as necessary to control fugitive dust emissions.
- Soil binder would be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.
- Trucks would be washed as they leave the right-of-way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles would be properly tuned and maintained. All construction equipment would use low sulfur fuel as required by CA Code of Regulations Title 17, Section 93114.
- A dust control plan would be developed, documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Equipment and materials storage sites would be located as far away from residential and park uses as practicable. Construction areas would be kept clean and orderly.
- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, would be used.
- All transported loads of soils and wet materials would be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) would be provided to minimize emission of dust during transportation.

- Dust and mud that are deposited on paved public roads due to construction activity and traffic would be promptly and regularly removed to reduce PM emissions.
- To the extent feasible, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- In addition, both PCAPCD and NSAQMD Guidelines provide reasonably available control measures for dust emissions. Measures to reduce particulate matter (PM) and greenhouse gas emissions (GHG) from construction are recommended to ensure that short-term health impacts to nearby sensitive receptors are avoided. The following techniques shall be implemented to limit the emission and/or airborne transport of fugitive dust from a site when practical, during all phases of construction work:
  - Application of water, chemical stabilizers/suppressants, soil stabilizers, or other liquids
  - Covering, paving, enclosing, shrouding, compacting, planting, cleaning, or other such measures the Air Pollution Control Officer may approve to accomplish satisfactory results for temporary and/or extended suppression of PM10 emissions

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

## 2.4 Biological Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> 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?</p>			✓	

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
<b>Would the project:</b> 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?				✓

### 2.4.1 Regulatory Setting

Within this section of the document (2.4. Biological Resources), the topics are separated into Natural Communities, Wetlands and Other Waters, Plant Species, Animal Species, Threatened and Endangered Species, and Invasive Species. Plant and animal species listed as “threatened” or “endangered” are covered within the Threatened and Endangered sections. Other special status plant and animal species, including California Department of Fish and Wildlife (CDFW) fully protected species, species of special concern, USFWS and NMFS candidate species, and California Native Plant Society (CNPS) rare and endangered plants, are covered in the Plant and Animal sections.

#### NATURAL COMMUNITIES

The CDFW maintains records of sensitive natural communities (SNC) in the California Natural Diversity Database (CNDDB). SNC are those natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status taxa or their habitat.

## WETLANDS AND OTHER WATERS

“Waters” of the United States (including wetlands) and State are protected under several laws and regulations. The primary laws and regulations governing wetlands and other waters include:

- Federal Clean Water Act (CWA), 33 USC 1344
- Federal Executive Order for the Protection of Wetlands (EO 11990)
- State Sections 1600–1607 of the California Fish and Game Code (CFGC)
- State Porter-Cologne Water Quality Control Act, Section 3000 et seq.

## PLANT SPECIES

The U.S. Fish and Wildlife Service (USFWS) and CDFW have regulatory responsibility for the protection of special status plant species. The primary laws governing plant species include:

- Federal Endangered Species Act (FESA), United States Code 16 (USC), Section 1531, et seq. See also 50 CFR Part 402
- California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq.
- Native Plant Protection Act, California Fish and Game Code, Sections 1900–1913
- National Environmental Policy Act (NEPA), 40 C.F.R. Section 1500 through Section 1508
- California Environmental Quality Act (CEQA), California Public Resources Code, Sections 21000–2117

## **ANIMAL SPECIES**

The USFWS, NMFS, and CDFW have regulatory responsibility for the protection of special status animal species. The primary laws governing animal species include:

- NEPA, 40 C.F.R. Section 1500–Section 1508
- CEQA, California Public Resources Code, Sections 21000–21177
- Migratory Bird Treaty Act, 16 U.S.C. Sections 703–712

Fish and Wildlife Coordination Act, 16 U.S. Code Section 661

- Sections 1600–1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

## **THREATENED AND ENDANGERED SPECIES**

The primary laws governing threatened and endangered species include:

- FESA, United States Code 16 (USC), Section 1531, et seq. See also 50 CFR Part 402
- CESA, California Fish and Game Code, Section 2050, et seq.
- CEQA, California Public Resources Code, Sections 21000–21177
- Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S. Code Section 1801

## **INVASIVE SPECIES**

The primary laws governing invasive species are Executive Order (EO) 13112 and NEPA.

## 2.4.2 Environmental Setting

The proposed project is located in the Sierra Nevada mountain range is surrounded by steep slopes and is located 6,000–8,600 feet above sea level. The project area is dominated by both evergreen and deciduous trees. The typical soil profile is coarse, well drained, decomposed granite with granite rock slope protection (RSP) placed at the top of the divided highway.

The South Fork of the Yuba River runs adjacent to parts of the project. However, the river does not enter the project limits. The surrounding habitat is suitable for common species such as the American Black Bear, Long-eared chipmunk, Whitetail deer, and Striped Skunk. No wildlife was observed during field visits.

The proposed project limits contain paved roadways and shoulders (i.e., compacted dirt or gravel surface); however, there is some vegetation present. The project contains a vegetated strip between the offset, divided highways containing evergreen and deciduous trees. This is where tree removal would occur to facilitate the addition of the truck lane.

Species that are present on the slopes include, but are not limited to, willow (*Salix* spp.), Ponderosa pine (*Pinus ponderosa*), and alder (*Alnus* spp.).

## 2.4.3 Discussion of CEQA Question 2.4a—Biological Resources

**a) *Would the project 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/NMFS?***

The plant and animal species considered special status that are known to occur or may occur in the proposed project include the following:

- Sierra Nevada mountain beaver
- North American porcupine

- California wolverine
- Sierra marten
- Grey headed pika
- Fisher
- Southern long-toed salamander
- Delta Smelt
- Black swift

The special status species listed above, as well as habitats of concern, have the potential to occur in the general project vicinity. Surveys concluded none of the nine special status species and habitats were present within the project limits, therefore the proposed project would have no impact to the nine special status species.

There is minimal potential impact for species of concern to occur within the project limits or to be impacted by the project activities, which include the Sierra Nevada yellow-legged frog and the starved daisy, which are discussed below.

### **SIERRA NEVADA YELLOW-LEGGED FROG**

Typical habitat includes lakes, ponds, marshes, meadows, and streams at high elevations typically ranging from approximately 4,500 to 12,000 feet but can occur as low as approximately 3,500 feet in the northern portions of their range. Sierra Nevada yellow-legged frogs are highly aquatic, and adults can be found sitting on rocks along the shoreline where there is little or no vegetation. They are rarely found more than 3.3 feet from water.

Reproduction is aquatic. Mature adults come into breeding condition, and the males call to advertise their fitness to competing males and to females. Fertilization is external, with the male grasping the back of the female and releasing sperm as the female lays her eggs.

A cluster of 100 to 350 eggs is laid in shallow water and is left unattached in still waters but may be attached to vegetation in flowing water. Egg-laying sites must be connected to permanent lakes or ponds that do not freeze to the bottom in winter, because the tadpoles must live in the water. The eggs hatch into tadpoles, which feed in the water and eventually grow four legs, lose their tails, and emerge onto land where they disperse into the surrounding territory. The Sierra Nevada yellow-legged frog is a medium-sized amphibian, measuring approximately 1.5 to 3.25 inches on average. Females tend to be slightly larger than males.

Adult frogs have a mix of brown and yellow coloring on their upper (dorsal) body, but can also be grey, red, or greenish-brown, usually with dark spots or splotches called cryptic coloration. These spots can look like lichen or moss and make the frog appear camouflaged. The belly and underside of their back legs, and sometimes the front legs, are yellow or light orange.

The South Fork of the Feather river runs adjacent to the project area. The California Natural Diversity Database Biological Information and Observation System shows occurrences of the Sierra Nevada yellow-legged frog within this section of the South Fork of the Yuba River. The nearest documented occurrences are approximately 0.02 miles from the Troy overcrossing. The westbound lane does have roadside drainages that convey small amounts of water.

Occurrences are outside the project limits. The proposed road widening is uphill from the occurrence areas. The closest occurrence of Sierra Nevada yellow-legged frog to the project activities is 0.02 miles from the Troy Overcrossing. With no suitable habitat and steep slopes, the presence of the Sierra Nevada yellow-legged frog is not anticipated. No in-water work would occur. Impacts to the Sierra Nevada yellow-legged frog or its habitat are not anticipated, therefore the proposed project would have no impact to the Sierra Nevada yellow-legged frog.

## STARVED DAISY

The Starved daisy (*Erigeron miser*) is endemic to California and is only found to grow in the northern High Sierra Nevada Mountain Range. It is a perennial herb producing several decumbent or erect stems up to approximately 25 centimeters long from a woody caudex. The plant is coated densely in long hairs. The small narrow leaves are equal in size and evenly spaced along the stem. The inflorescence bears one or more flower heads on long erect peduncles, each lined with hairy, glandular phyllaries. The flower head contains many yellow disc florets but no ray florets. The fruit is an achene with a pappus of bristles (Caltrans 2021c).

Granite RSP has been placed within the limits of this project. The RSP provides the rock crevices in which the starved daisy grows. However, the starved daisy also thrives in shaded, coniferous forest. This RSP is placed at the top of slope and receives full sun. During field surveys, there were no Starved daisy observed.

This RSP provides marginal habitat for the special status species, Starved daisy (*Erigeron miser*). The proposed project would have minimal impacts to RSP. Majority of construction activities would occur on pre-disturbed shoulders and pre-existing paved roadway; therefore, the proposed project would have no impact on the Starved daisy.

### 2.4.4 Discussion of CEQA Question 2.4b—Biological Resources

***b) Would the project 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?***

The South Fork of the Feather river runs adjacent to the project area, but no riparian habitats or other sensitive natural communities were identified within the project limits, therefore the proposed project would have no impact.

### 2.4.5 Discussion of CEQA Question 2.4c—Biological Resources

- c) Would the project 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?**

A wetland in the project area is outside the active work area, therefore, there would be no potential waters of the U.S. and State around the active construction, and a wetland delineation is not necessary.

### 2.4.6 Discussion of Question 2.4d—Biological Resources

- d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

No migratory fish or wildlife were identified in the project area. During nesting surveys, nests were found on the underside of the bridge deck for both Kingvale and Troy undercrossing. Mud nests were identified but no birds were found. Caltrans would contact the CDFW and the USFWS regarding appropriate action in order to comply with the Migratory Bird Treaty Act and California Endangered Species Act. If a lapse in project-related work of fifteen days or longer occurred, another survey and, if required, consultation with the CDFW would be required before the work could be reinitiated, therefore the proposed project would have less than significant impact on migratory bird nests.

### 2.4.7 Discussion of CEQA Question 2.4e—Biological Resources

- e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

The proposed project does not conflict with any local polices or ordinances protecting biological resources.

## 2.4.8 Discussion of Question 2.4f—Biological Resources

- f) *Would the project 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 proposed project does not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local/regional habitat conservation plan.

Based on the determinations made in the CEQA Environmental Checklist, mitigation and minimization measures have not been proposed for the project.

## 2.5 Cultural Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				✓
<b>Would the project:</b> b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				✓
<b>Would the project:</b> c) Disturb any human remains, including those interred outside of dedicated cemeteries?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the Historical Property Survey Report (Caltrans 2021d).

The Area of Potential Effects (APE) was established as the maximum limits of all potential ground-disturbing construction activities associated with the proposed work, including but not limited to, all existing and proposed new right of way, temporary construction easements, utility relocations, access roads, and equipment storage areas. The APE for the proposed project consists of an existing right of way between the project postmile limits, which varies in width from approximately 400 to 1000 feet. The length of the APE is 3.90 miles and totals 198.6 acres. The estimated maximum depth of ground disturbance is four feet. Results indicated that six previous cultural resources studies were conducted within the APE. The resources identified in the project area are not significant resources, therefore no historic properties are impacted.

## 2.6 Energy

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			✓	
<b>Would the project:</b> b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

### 2.6.1 Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

CEQA Guidelines Section 15126.2(b) and CEQA Guidelines Appendix F—Energy Conservation require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

### 2.6.2 Environmental Setting

A project-level analysis of energy uses data is used to derive project energy consumption. Energy in a resource context generally pertains to the use or conservation of fossil fuels, which are a finite resource. Transportation energy is generally described in terms of direct and indirect energy.

### 2.6.3 Discussion of CEQA Question 2.6—Energy

**a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?**

Table 2 below contains a summary of all long-term operational energy consumption associated with the proposed project.

**Table 2: Long-Term Fuel Consumption**

Scenario/ Analysis Year	Daily Vehicles Miles of Travel	Annual Average Daily Traffic		Fuel Consumption (gallons/day)	
		Truck	Non-Truck	Diesel	Gasoline
Baseline Year, 2019					
	19,020	3,004	15,850	969.276	2,255.182
Opening Year, 2026					
No-build Alternative	19,800	3,127	16,500	992.831	1,910.170
Build Alternatives	19,800	3,127	16,500	1,000.577	1,928.543
Design Year, 2046					
No-build Alternative	21,660	3,420	18,050	965.332	1,511.113
Build Alternatives	21,660	3,420	18,050	985.978	1,531.333

The construction of truck climbing lanes at the EB lanes on Interstate 80 would not increase vehicle capacity within the proposed project area. The fuel consumption from the build alternative during the future years would be higher than that from the no-build alternative due to changes in speed. The overall fuel consumption during the future years would increase in comparison with that during the existing condition due to increases in daily vehicles miles traveled and annual average daily traffic. In order to decrease the consumption of diesel fuels, the application of newer and more fuel-efficient truck vehicles would result in an overall lower potential for an increase in energy consumption.

Table 3 below summarizes estimates of average fuel and electricity consumption generated by construction work for the project.

**Table 3: Short-Term Fuel and Electricity Consumption**

Construction year	Fuel Consumption (gallons)		Electricity (kWh)
	Diesel Equipment	Gasoline Equipment	Electric Equipment
2023	18,685	3,846	32.425
2024	67,836	16,795	1,024.481
2025	27,987	14,904	1,804.568
<b>Total</b>	<b>114,508</b>	<b>35,545</b>	<b>2,861.474</b>

The proposed project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. As indicated above, energy use associated with proposed project construction is estimated to result in the total short-term consumption of 114,508 gallons from diesel-powered equipment, 35,545 gallons from gasoline-powered equipment, and 2,861 kWh from electric-powered equipment. This demand would cease once construction was complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy. While construction would result in a short-term increase in energy use, energy-saving measures (see Minimization Measures below) would help conserve energy, therefore the proposed project would have a less than significant impact.

**b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

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

### 2.6.4 Minimization Measures

The proposed project would result in a short-term increase in energy use and the following measures would be implemented when practical:

- Use recycled and energy-efficient building materials, energy-efficient tools and construction equipment, and renewable energy sources in construction and operation of the project.
- Improve operations and maintenance practices by regularly checking and maintaining equipment to ensure its functioning efficiently.
- Optimize start-up time, power-down time, and equipment sequencing.
- Revise janitorial practices to reduce the hours that lights are turned on each day.
- Visually inspect insulation on all piping, ducting, and equipment for damage (tears, compression, stains, etc.).
- Educate employees about how their behaviors affect energy use.
- Ensure that team members are trained in the importance of energy management and basic energy-saving practices. Hold staff meetings on energy use, costs, objectives, and employee responsibilities.

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

## 2.7 Geology and Soils

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b></p> <p>a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <p style="padding-left: 20px;">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.</p>				✓
<p style="padding-left: 20px;">ii) Strong seismic ground shaking?</p>				✓
<p style="padding-left: 20px;">iii) Seismic-related ground failure, including liquefaction?</p>				✓
<p style="padding-left: 20px;">iv) Landslides?</p>				✓
<p><b>Would the project:</b></p> <p>b) Result in substantial soil erosion or the loss of topsoil?</p>				✓
<p><b>Would the project:</b></p> <p>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?</p>				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				✓
<b>Would the project:</b> e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
<b>Would the project:</b> f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as field reviews conducted. Potential impacts to geology and soils are not anticipated because no faults, unstable geologic units or soil, or expansive soil were identified within the project limits.

## 2.8 Greenhouse Gas Emissions

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
<b>Would the project:</b> b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

### 2.8.1 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), and various hydrofluorocarbons (HFCs). CO<sub>2</sub> is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional human-generated CO<sub>2</sub>.

Two terms are typically used when discussing how we address the impacts of climate change: “greenhouse gas mitigation” and “adaptation.” Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or “mitigate” the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

## 2.8.2 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

### FEDERAL

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, 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.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA, therefore, supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks, while balancing environmental, economic, and societal values—“the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic

vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the *Energy Policy and Conservation Act of 1975 (42 USC Section 6201)* and *Corporate Average Fuel Economy (CAFE) Standards*. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

*Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006)*: This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA, in conjunction with the National Highway Traffic Safety Administration (NHTSA), is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

## 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) including, but not limited to, the following:

*EO S-3-05 (June 1, 2005)*: The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80

percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

*Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006:* AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (CARB) create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551 (b)).

The law requires the CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

*EO S-01-07 (January 18, 2007):* Sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

*Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection:* Requires the CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a “Sustainable Communities Strategy” (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

*SB 391, Chapter 585, 2009, California Transportation Plan:* Requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

*EO B-16-12 (March 2012)*: Orders State entities under the direction of the Governor, including the CARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

*EO B-30-15 (April 2015)*: Establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs the CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e).<sup>1</sup> Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

*SB 32, Chapter 249, 2016*: Codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

*SB 1386, Chapter 545, 2016*: Declared "it to be the policy of the state that the protection and management of natural and working lands is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

*AB 134, Chapter 254, 2017*: Allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects,

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<sup>1</sup> GHGs differ in how much heat each trap in the atmosphere (global warming potential or GWP). CO<sub>2</sub> is the most important GHG, so amounts of other gases are expressed relative to CO<sub>2</sub>, using a metric called "carbon dioxide equivalent" (CO<sub>2</sub>e). The global warming potential of CO<sub>2</sub> is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO<sub>2</sub>.

clean vehicle rebates and projects, and other emissions-reduction programs statewide.

*SB 743, Chapter 386 (September 2013)*: Changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, and promoting multimodal transportation while balancing the needs of congestion management and safety.

*SB 150, Chapter 150, 2017, Regional Transportation Plans*: Requires the CARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

*EO B-55-18 (September 2018)*: Sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

*EO N-19-19 (September 2019)*: Advances California's climate goals, in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs the CARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

*EO N-79-20 (September 2020)*: Establishes goals for 100 percent of in-state sales of new passenger cars and trucks to be zero-emissions vehicles by 2035, that the state transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible, and that 100 percent of medium- and heavy-duty vehicles in the state be zero-emissions by 2045 where feasible.

### 2.8.3 Environmental Setting

The proposed project is located on EB I-80 at postmile (PM) 0.0 to 2.7 in Nevada County and at PM 68.5 to 69.7 in Placer County, within the Tahoe National Forest. Within the project limits, I-80 is a 4-lane freeway divided by unpaved median. This section of freeway is in the Sierra Mountain region of District 3 and receives heavy recreation and visitor travel from both San Francisco Bay area and the Sacramento region. It also experiences heavy truck traffic and chain wear during the winter months.

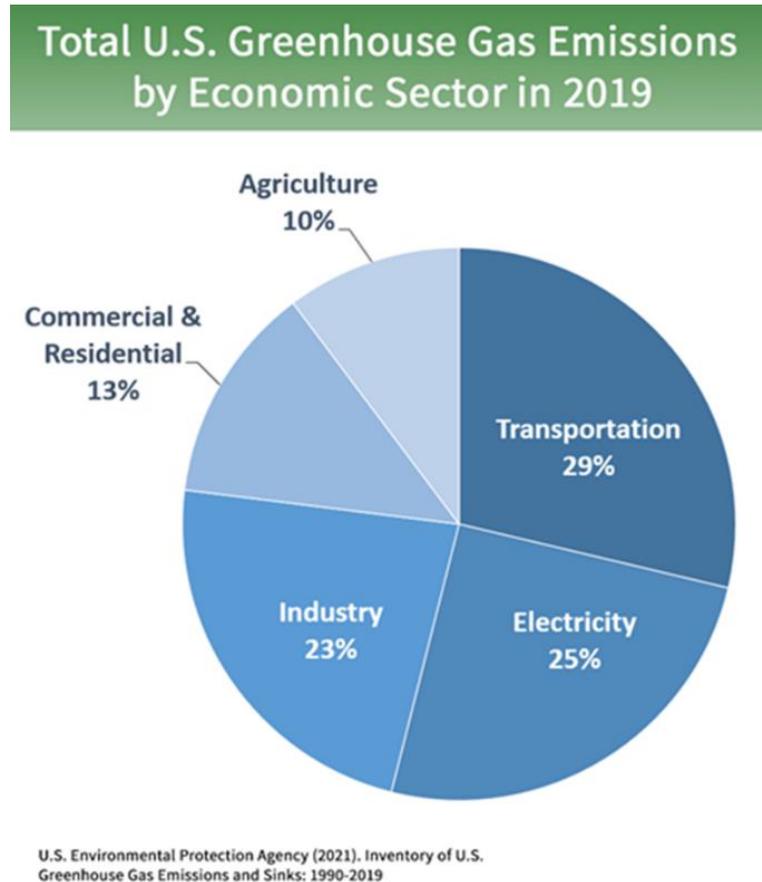
The Nevada County Transportation Commission and Placer County Transportation Planning Agency guides transportation development in the project area. The Nevada County General Plan circulation and safety elements (NCTC 2012,2020) also address GHGs and climate change in the project area.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. 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. The U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the state, as required by H&SC Section 39607.4.

#### NATIONAL GHG INVENTORY

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change (see Figure 3). The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, perfluorocarbons, SF<sub>6</sub>, and nitrogen trifluoride. It also accounts for emissions of CO<sub>2</sub> that are removed from the atmosphere by “sinks,” such as forests, vegetation, and soils that uptake and store CO<sub>2</sub> (carbon sequestration). The 1990–2019 inventory found that overall, GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8 percent from 1990 levels. Of these, 80 percent were CO<sub>2</sub>, 10 percent were CH<sub>4</sub>, and 7 percent were N<sub>2</sub>O; the balance consisted of fluorinated gases. CO<sub>2</sub>

emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown in Figure 3, the transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (U.S. EPA 2021a, 2021b).



**Figure 3. U.S. 2019 Greenhouse Gas Emissions by Economic Sector (source: U.S. EPA 2021c)**

### STATE GHG INVENTORY

The CARB 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. The 2021 edition of the GHG emissions inventory reported emissions trends from 200 to 2019. It found total California emissions were 418.2 MMTCO<sub>2</sub>e in 2019, a reduction of 7.2 MMTCO<sub>2</sub>e since 2018 and almost 13 MMTCO<sub>2</sub>e below the statewide 2020 limit of 431 MMTCO<sub>2</sub>e. The transportation sector (including interstate aviation and off-road sources) was responsible for about 40 percent of

direct GHG emissions, a 3.5 MMTCO<sub>2</sub>e decrease from 2018 (Figure 4). Overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and state economic output (Figure 5) (CARB 2021a).

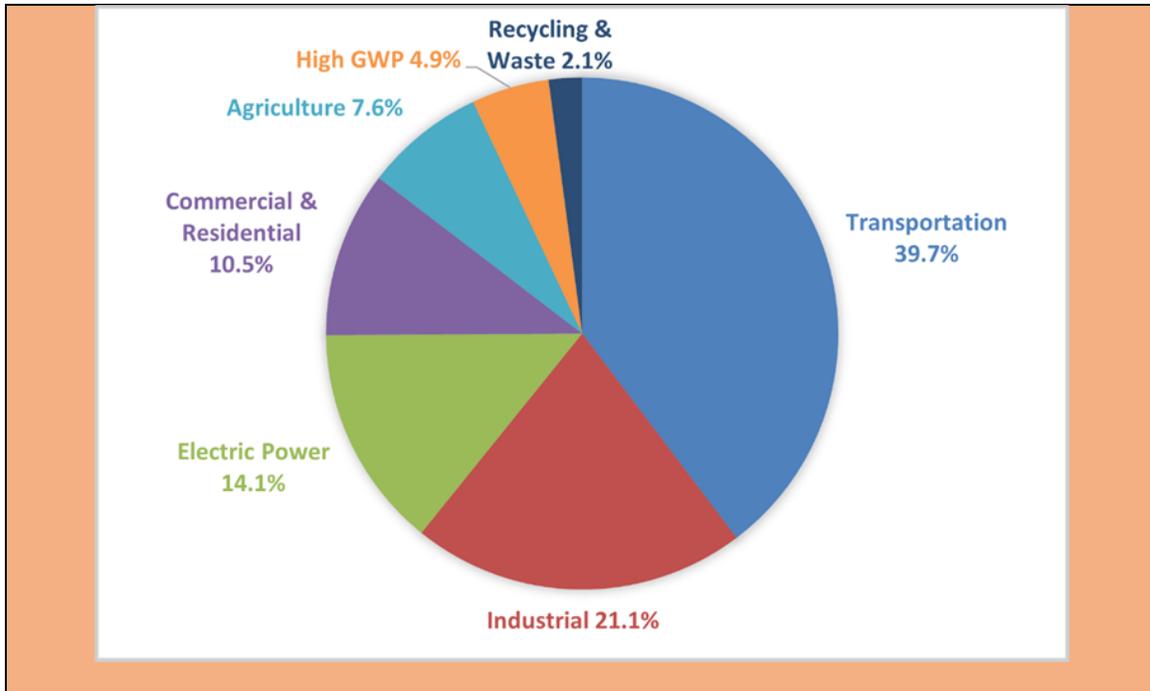


Figure 4. California 2019 Greenhouse Gas Emissions by Economic Sector (Source: ARB 2021a)

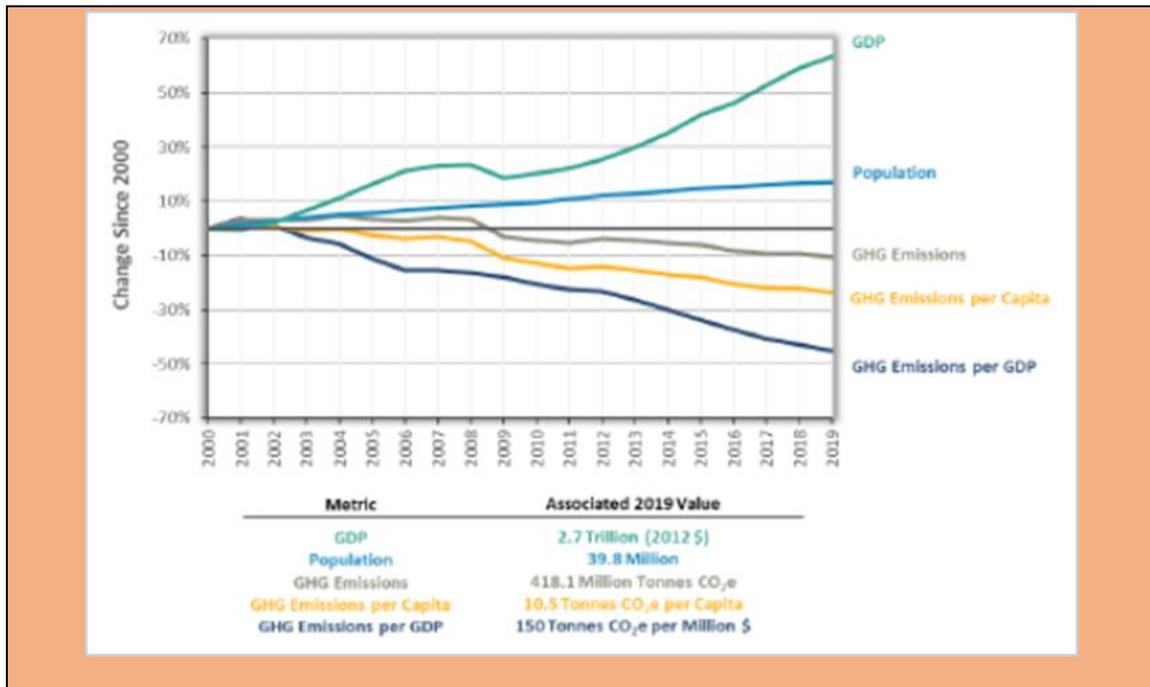


Figure 5. Change in California GDP, Population, and GHG Emissions Since 2000 (Source: CARB 2021a)

AB 32 required CARB 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 CARB 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 EOB-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

## REGIONAL PLANS

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project spans the jurisdictions of the Placer County Transportation Planning Agency (PCTPA) and the Nevada County Transportation Commission (NCTC) both of which are regional transportation planning agencies that produce their own RTPs but are not required to produce an SCS. The Sacramento Area Council of Governments (SACOG) is the MPO for the six-county region that includes Placer County (but not Nevada County). CARB's GHG reduction targets for SACOG is currently 19 percent by 2035 (CARB 2019). The PCTPA coordinates with SACOG to ensure PCTPA's RTP is consistent with and supports the regional plan.

PCTPA's 2036 RTP supports projects that reduce vehicle trips and GHG and air quality emissions, such as those that accommodate travel by transit, bicycle, and pedestrian modes. The RTP's Air Quality Action Plan short- and long-range goals include the following (PCTPA 2016: 7-19–7-21):

- Prioritize and recommend transportation projects that minimize vehicle emissions while providing cost effective movement of people and goods.
- Ensure transportation planning efforts comply with SB375 and AB32.
- Encourage jurisdictions and Caltrans to develop a green construction policy, the recycling of construction debris to the maximum extent

feasible, and to use the minimum feasible amount of GHG emitting materials in the construction of transportation projects.

- Encourage jurisdictions and Caltrans to use lighter colored pavement with increased reflectivity in pavement rehabilitation projects, to reduce the urban heat island effect.
- Encourage jurisdictions and Caltrans to protect, preserve, and incorporate trees and natural landscaping into transportation projects to provide shade, buffer winds, encourage people to walk, and to sequester CO<sub>2</sub>.

The NCTC 2015–2035 RTP includes Goal G6-P3, reduce greenhouse gas emissions and other air pollutants. This goal has a performance target of reducing GHG emissions in the county by 2.5 percent per year (NCTC 2018).

The Nevada County General Plan addresses climate change and GHG emissions in its circulation and safety elements. The Circulation Element contains Goal EP-4.3, *to the extent feasible, encourage the reduction of Greenhouse Gas emissions during the design phase of construction projects*; and Goal EP-4.4, *to the extent feasible, encourage the development of energy efficient circulation patterns*. The Safety Element contains Goal CC-10.13, *Build Climate-Resilient Communities and Protect Neighborhoods, Public Infrastructure, and Natural Resources Through Mitigating Climate Change*.

## **2.8.4 Project Analysis**

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) and those produced during construction. The primary GHGs produced by the transportation sector are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs. CO<sub>2</sub> emissions are a product of the combustion of petroleum-based products, such as gasoline, in internal combustion engines. Relatively small amounts of CH<sub>4</sub> and N<sub>2</sub>O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public 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 §§ 15064(h)(1) and 15130).

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

### **OPERATIONAL EMISSIONS**

The purpose of the proposed project is to restore the facility to a state of good repair and provide efficient movement of people and goods through pavement and culvert rehabilitation on a 3.9 mile portion of Interstate 80 (I-80) in Placer and Nevada counties. The addition of the truck climbing lanes will not increase the vehicle capacity of the roadway since they are not through lanes and they will improve traffic control and safety. This type of project generally causes minimal or no increase in operational GHG emissions because the project would not increase the number of travel lanes on I-80, therefore, the construction of the proposed project will not increase vehicle miles travelled (VMT). While some short term GHG emissions during construction period would be unavoidable, there will not be an increase in operational GHG emissions.

### **CONSTRUCTION EMISSIONS**

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase. Their frequency and occurrence could be reduced through innovations in plans and

specifications and by implementing better traffic management during construction phases.

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

The Caltrans Construction Emission Tool (CAL-CET2018 version 1.3) was used to estimate average carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and hydrofluorocarbons (HFCs) emissions from construction activities. The estimated emissions would be 584 tons of CO<sub>2</sub>, 0.014 CH<sub>4</sub>, 0.029 N<sub>2</sub>O, and 0.03 HFCs over a period of 490 working days (Caltrans 2021f).

All construction contracts include Caltrans Standard Specifications Sections 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 CARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations (such as equipment idling restrictions) that reduce construction vehicle emissions also help reduce GHG emissions.

### **2.8.5 CEQA Conclusion**

While the proposed project will result in GHG emissions during construction, the project will not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. While GHG emissions are less than significant, GHG reduction measures will be incorporated into the construction contract of the proposed project.

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

## 2.8.6 Greenhouse Gas Reduction Strategies

### STATEWIDE EFFORTS

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals (see Figure 5) that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to fifty percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

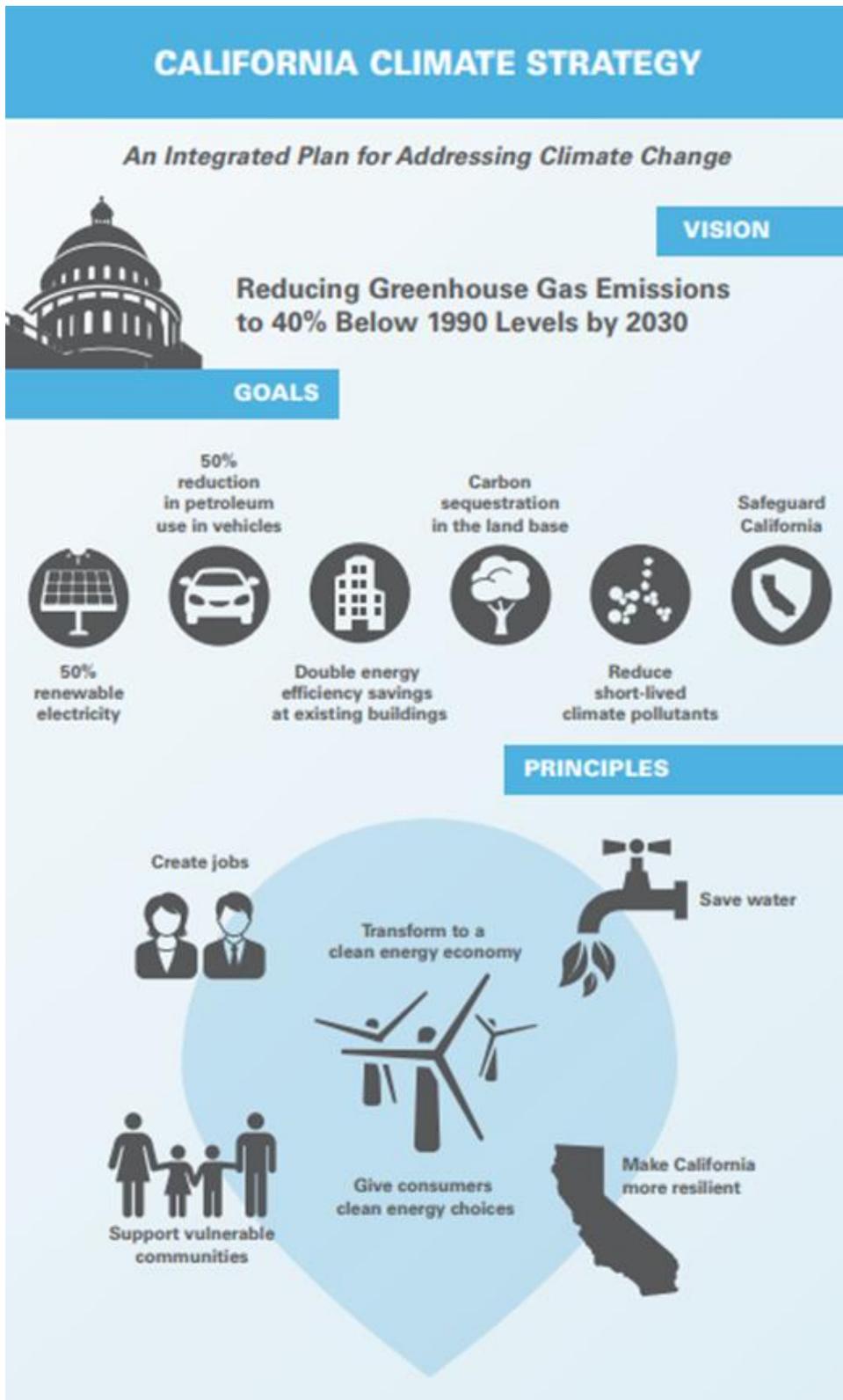


Figure 6. California Climate Strategy

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 result in the reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 40 percent 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. Each agency is to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the State's carbon neutrality goal and build climate resilience.

## **CALTRANS ACTIVITIES**

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB 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:

### **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 2021k).

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, the CTP identifies additional strategies.

### **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 2021).

### **Funding and Technical Assistance Programs**

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

### **Caltrans Policy Directives and Other Initiatives**

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

### **Project-Level Greenhouse Gas Reduction Strategies**

The following measures will also be implemented in the project to reduce greenhouse gas emissions and potential climate change impacts from the project:

- The construction contractor must comply with the 2018 Caltrans' Standard Specifications Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

- Caltrans' Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California ARB.
- Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of construction vehicles and equipment to no more than 5 minutes.
- Utilize a traffic management plan to minimize vehicle delays and idling emissions. Anticipated traffic control will have an estimated maximum delay of 10 minutes during reversing control and 20 minutes during intermittent closure. During k-rail placement and tie-in construction operations, public traffic may be stopped in both directions for periods not to exceed 5 minutes. After each closure, all accumulated traffic must be allowed to pass through the work zone before another closure is made.
- Construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Design features and additional methods to adjust the posted speed limit to the optimum speed for less GHG emissions. GHG reductions may be achieved by enforcing the speed limit on highways.

### **2.8.7 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. 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 U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the President every four years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. Ch. 56A § 2921 et seq.). The Fourth National Climate Assessment, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, “Transportation,” presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The *U.S. DOT Policy Statement on Climate Adaptation* in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions” (U.S. DOT 2011).

FHWA Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events, December 15, 2014*) established FHWA policy to strive to identify the risks of climate change and extreme

weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

## STATE EFFORTS

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment (2018)* is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity—an individual, a community, an organization, or a natural system—to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence

of capacity to adapt.” Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factors. These factors include, but are not limited to, ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

*EO S-13-08*, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise, and resulted in the *California Climate Adaptation Strategy (2009)*, updated in 2014 as *Safeguarding California: Reducing Climate Risk (Safeguarding California Plan)*. The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

*EO S-13-08* also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document (SLR Guidance)* in 2010, with instructions to state agencies on how to incorporate “sea-level rise (SLR) projections into planning and decision-making for projects in California” in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California—An Update on Sea-Level Rise Science* was published in 2017, and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

*EO B-30-15*, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of *EO B-30-15*, the Office of Planning and

Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017 to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

## **CALTRANS ADAPTATION EFFORTS**

### **Caltrans Vulnerability Assessments**

Caltrans conducted climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure*—Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence*—Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization*—Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

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 will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

## **PROJECT ADAPTATION EFFORTS**

### **Sea-Level Rise**

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

### **Floodplains and Precipitation**

According to the Federal Emergency Management Agency (FEMA) floodplain maps, the proposed project falls within a flood Zone D, an area where flood hazards are undetermined.

The Caltrans District 3 Climate Change Vulnerability Assessment (Caltrans 2019) anticipates the project area (and the District) will receive less precipitation overall in the future but arriving in heavier individual events. Mapping of future potential precipitation changes under various climate change scenarios shows that the project location could experience an increase in 100-year storm precipitation of between 9 percent and twelve percent through 2085 under a conservative (business-as-usual) GHG emissions scenario. (The 100-year flood design standard is commonly considered in the design of transportation assets.) No bodies of water were identified in the proposed project area. Drainage features typical to this corridor includes stabilized shoulder backing, vegetated and fill and cut slopes, vegetated roadside ditches, cross culverts, curb and gutter, sand vaults, vegetated basins, and RSP infiltration areas.

## Wildfire

The proposed project is in a State Responsibility Area that the California Department of Forestry and Fire protect (CalFire) maps as a very high fire hazard severity zone. The Caltrans District 3 Climate Change Vulnerability Assessment maps it as exposed roadway in a zone of high wildfire concern from 2021 through 2085. Project design features would rehabilitate the 10-foot wide shoulders on both directions of the highway that would help prevent the spread of wildfires. During construction, Caltrans would implement Caltrans 2018 revised Standard Specification 7-1.02M (2), which mandates fire prevention procedures during construction, including a fire prevention plan. The proposed scope of work would not introduce new structures or features that would more vulnerable to wildfire than the current infrastructure. The project is not anticipated to exacerbate the impacts of wildfires intensified by climate change.

## 2.9 Hazards and Hazardous Materials

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</p>				✓
<p><b>Would the project:</b> g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?</p>				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the Initial Site Assessment Memo (Caltrans 2021f). Potential impacts to hazardous waste are not anticipated due to the fact that no altered ultramafic bedrock, alluvium derived from ultramafic rock, or other rock commonly associated with Naturally Occurring Asbestos are present at the project site. The proposed project is not within or impacting any site on the Cortese List. The proposed project is not within 2 miles of an airport and does not interfere with any emergency plans. To prevent lead, thermoplastic paint, and treated wood waste, Caltrans would adhere to the standard special provisions outlined in the plans, specifications, and estimate package.

## 2.10 Hydrology and Water Quality

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b></p> <p>a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?</p>			✓	
<p><b>Would the project:</b></p> <p>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</p>				✓
<p><b>Would the project:</b></p> <p>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:</p> <p>(i) result in substantial erosion or siltation on- or off-site;</p>			✓	
<p>(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</p>				✓
<p>(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</p>				✓
<p>(iv) impede or redirect flood flows?</p>				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
<b>Would the project:</b> e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

### 2.10.1 Regulatory Setting

The primary laws and regulations governing hydrology and water quality include:

- Federal Clean Water Act (CWA), 33 USC 1344
- Federal Executive Order for the Protection of Wetlands (EO 11990)
- State Sections 1600–1607 of the California Fish and Game Code (CFGC)
- State Porter-Cologne Water Quality Control Act, § 13000 et seq.

### 2.10.2 Environmental Setting

The majority of the proposed project would take place in the Yuba River Hydrologic Unit. The American River Hydrologic Unit is also within the project area in a limited capacity. Drainage features typical to this corridor include the following: stabilized shoulder backing, vegetated fill and cut slopes, vegetated roadside ditches, cross culverts, curb and gutter, sand vaults, vegetated basins, and rock slope protection infiltration areas. The nearest receiving waters to the project area are the Yuba River (South Fork), Kidd

Lake, and Cascade Lake. The elevation of this project ranges from approximately 6200 to 6800 feet.

### 2.10.3 Discussion of CEQA Question 2.10—Hydrology and Water Quality

**a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

Construction-related activities would result in surface disturbances with the potential to violate water quality standards and waste discharge requirements (WDRs) if sediment or contaminant-laden runoff from work areas enters storm drains or other pathways leading to receiving waters. However, it is anticipated that the project would be regulated under the Construction General Permit (CGP), and appropriate compliance measures would be implemented to avoid discharges and potential water quality threats within the project area. As an example, compliance with the CGP requires a risk level analysis based on the project's potential erosion and transport to receiving waters. The results of this analysis would be utilized to determine standard water quality protection measures (to be implemented) in order to avoid surface and groundwater quality degradation during construction operations. It is anticipated that BMP usage, placement, field implementation, and effectiveness would be monitored, adjusted, and modified (accordingly) for the duration of the project. Compliance with all applicable NPDES Permits, in addition to coordination with the Regional Water Quality Board, is expected to ensure the protection of water resources in the area, therefore the proposed project would have less than significant impact on water quality standards.

**b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

The intended use of the facility and potential pollutants that would be encountered in stormwater runoff, after the project is constructed, is not anticipated to change from its current condition. The groundwater elevation within this corridor historically fluctuates but is not anticipated to permanently impact proposed drainage appurtenances, storm water treatment, or other design features. Additionally, due to excavation occurring on a temporary and short-term basis, during the construction period, groundwater resources should not be affected, and it is not anticipated that the project would negatively impact regional sustainable groundwater management (within the project vicinity).

**c) Would the project 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?**

Compliance with the Construction General Permit (GCP) is anticipated to address the implementation of minimization and avoidance measures. It is expected that standard construction erosion control measures would be utilized to avoid erosion and siltation for the duration of project activities. BMP measures and field implementation strategies would be outlined in the Contractor prepared report and Caltrans approved SWPPP. These would likely include temporary soil stabilization measures, linear sediment barriers (i.e., silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e., concrete washout, construction materials storage, litter/waste management), among other approved controls. The proposed project would have a less than significant impact on erosion and siltation.

**(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

The proposed project would not increase the surface runoff and would not result in flooding; therefore, the proposed project would have no impact.

**(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

The proposed project would not create or contribute runoff water and existing drainage systems would be maintained; therefore, the proposed project would have no impact.

**(iv) impede or redirect flood flows?**

Hydraulics determined the proposed project would not impede or redirect flood flows. therefore, the proposed project would have no impact.

**d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?**

The proposed project does not fall within a High-Risk Receiving Watershed area and is not located in a flood hazard risk area; therefore, the proposed project would have no impact.

**e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

It is expected that temporary impacts that may occur to localized water quality and groundwater would be minimized and/or avoided through the use of Best Management Practices and NPDES permit (i.e., CGP and Caltrans' MS4) compliance practices. The implementation of water quality measures, meant to promote storm water infiltration practices and low impact development, is anticipated. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected to any great extent or degree, therefore the proposed project would have a less than significant impact.

## 2.10.4 Minimization and Avoidance Measures

Caltrans would adhere to the best management practices (BMPs) that are typically implemented and common for projects having similar scopes of work, and field operations include (but are not limited to) the following: concrete washouts and bins, drainage inlet protection, plastic covering, straw wattles, silt fencing, waste management and disposal bins, stabilized construction vehicle ingress and egress points, vacuum trucks, and pavement sweepers.

In addition to the above, the following are recommendations to avoid water quality impacts and ensure NPDES permit compliance for the duration of the proposed project:

1. Project work and operations within the State's right-of-way are required to follow the conditions of Caltrans' Statewide NPDES Permit, issued by the State Water Resources Control Board (Order No. 2012-0011-DWQ, NPDES Permit No. CAS000003), on September 19, 2012. This statewide permit regulates storm water and non-storm water discharges from Caltrans' properties and facilities, and discharges associated with operation and maintenance of the State highway system. Caltrans facilities include, but are not limited to, maintenance stations/yards, equipment storage areas, storage facilities, fleet vehicle parking and maintenance areas, and warehouses with material storage areas.
2. Projects that disturb one or more acres of land surface or are part of a larger common plan of development or sale that disturbs more than one acre of land surface are regulated under the Statewide NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), also referred to as the Construction General Permit (CGP). The CGP contains a risk-based permitting approach by establishing three levels of risk possible for a construction site. Risk levels are determined during the planning, design, and

- construction phases, and are based on project risk of generating sediments and receiving water risk of becoming impaired.
3. Culvert lining involving styrene requires that no water can be present within the work area. Any deviation of this requirement could result in a violation notice, penalties, discharge fees, and work delays imposed by the governing regulatory agencies.
  4. Adherence to the following is required in order to prevent receiving water pollution as a result of construction activities and/or operations from this project:
    - a. Follow all applicable guidelines and requirements in the 2018 Caltrans Standard Specifications (2018 CSS), Section 13, regarding water pollution control and general specifications for preventing, controlling, and abating water pollution to Department owned Municipal Separate Storm Sewer Systems (MS4s), streams, waterways, and other bodies of water.
    - b. The Contractor prepared Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) shall incorporate appropriate temporary Construction Site BMPs to implement effective handling, storage, use and disposal practices during construction activities.
    - c. Focus and attention during construction should be given to 2018 CSS, Section 13-4 (Job Site Management), to control potential sources of water pollution before it encounters any MS4 or watercourse. It requires the Contractor to implement spill prevention and controls; materials, waste, and non-storm management controls; and manage dewatering activities at the construction site.
    - d. Existing drainage facilities should be identified and protected by the application of appropriate temporary Construction Site BMPs.

- e. If and where applicable, shoulder backing areas should be stabilized by Temporary Construction Site BMPs, or rolled and compacted in place, by the end of each day and prior to the onset of precipitation.
5. The Caltrans' Storm Water Management Plan (SWMP), the Project Planning and Design Guide (PPDG) Section 4, and the Evaluation Documentation Form (EDF) provide detailed guidance in determining if a specific project requires the consideration of permanent Treatment BMPs. Using these tools, general purpose BMPs would be selected by the Design Engineer (per Caltrans' PPDG) and described in the project SWDR.
  6. If groundwater dewatering is anticipated, a separate permit may be required. The contractor should coordinate with the District NPDES Coordinator prior to the plan's specifications and estimates (PS&E) phase for direction and guidance.

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

## 2.11 Land Use and Planning

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Physically divide an established community?				✓
<b>Would the project:</b> b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the Nevada County General Plan (Nevada 2017) and the Placer County General Plan (Placer 2013). The proposed project would not divide an established community; conflict with any applicable land use plan, policy, or regulation; or conflict with any habitat conservation plan or natural community conservation plan.

## 2.12 Mineral Resources

Question:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project. No mineral resources were identified within the project limits.

## 2.13 Noise

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project result in:</b> 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?</p>			✓	
<p><b>Would the project result in:</b> b) Generation of excessive groundborne vibration or groundborne noise levels?</p>				✓
<p><b>Would the project result in:</b> 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?</p>				✓

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## 2.13.1 Regulatory Setting

The primary laws governing noise are CEQA and NEPA.

## 2.13.2 Discussion of CEQA Question 2.13—Noise

- a) *Would the project result in 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?***

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 70 to 90 decibels (dB) at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of approximately 6 dB per doubling of distance. Construction noise would be short-term, and no adverse noise impacts from construction are anticipated since it would be conducted in accordance with Caltrans Standard Specification Section 14-8.02, therefore, the proposed project would have a less than significant impact.

- b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

The proposed project would not result in excessive groundbourne vibration or noise levels and would have no impact.

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

The proposed project is not located within the vicinity of an airport or private airstrip and would have not impact.

### 2.13.3 Avoidance Measures

Caltrans would adhere to the following noise control Standard Specification Section 14-8.02 avoidance measures:

- Do not exceed 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Control and monitor noise resulting from work activities.

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

## 2.14 Population and Housing

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> 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)?</p>				✓
<p><b>Would the project:</b> b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</p>				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to population and housing are not anticipated because the proposed project would not increase capacity or access; therefore, the project would not directly or indirectly induce population growth. The proposed project would not add new homes or businesses and would not extend any roads or other infrastructure. There are no residences within the project area, and no replacement housing would be necessary.

## 2.15 Public Services

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>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:</b></p> <p>Fire protection?</p>				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to service ratios and emergency response times are not anticipated, as no lane closures are anticipated during construction of the proposed project. Two lanes of through traffic and access to on and off ramps would always be maintained during construction.

## 2.16 Recreation

Question	Potentially Significant Impact	Less Than Significant with Mitigation	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?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project. The proposed project would not increase the use of existing neighborhood parks, regional parks, or other recreational facilities or require the construction or expansion of these recreational facilities.

## 2.17 Transportation and Traffic

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>Would the project:</b> a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				✓
<b>Would the project:</b> b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				✓
<b>Would the project:</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)?				✓
<b>Would the project:</b> d) Result in inadequate emergency access?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the traffic Management Plan Data Sheet (Caltrans 2021i), the Air Quality Report (Caltrans 2021b), and the Traffic Data Report (Caltrans 2021j). The proposed project would not conflict with transit ordinance or policy. The proposed project would not change the existing configuration of the roadway. There would be the addition of the truck climbing lanes, but it would not increase capacity or vehicle miles traveled. The project results would not increase hazards due to design features or negatively affect emergency services.

## 2.18 Tribal Cultural Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, or 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:</b></p> <p>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 § 5020.1 (k), or</p>				✓
<p>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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the Historic

Property Survey Report (Caltrans 2021 d). The Native American Heritage Commission (NAHC) was contacted requesting a Sacred Lands file search and list of potential contacts for the proposed project. Letters were sent to interested Tribes, including the United Auburn Indian Community (UAIC), Wilton Rancheria, Colfax-Todd Valley Consolidated Tribe, and the Washoe Tribe of Nevada and California, and no tribal resources were identified in the proposed project.

## 2.19 Utilities and Service Systems

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>Would the project:</b> a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?</p>				✓
<p><b>Would the project:</b> b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓
<p><b>Would the project:</b> 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?</p>				✓

<b>Would the project:</b> e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓
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“No Impact” determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts are not anticipated due to the fact that the proposed project would not require the relocation or newly constructed utilities.

## 2.20 Wildfire

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<p><b>If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:</b></p> <p>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</p>				✓
<p>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?</p>				✓
<p>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 may result in temporary or ongoing impacts to the environment?</p>				✓
<p>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?</p>				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the CalFire Hazard Severity Zone map (CALFIRE 2020) and the California Landside Inventory map (CDC 2019). The proposed project is located in a high-risk fire hazard severity zone in a federal responsibility area. The project would not impair an adopted emergency response plan, as the proposed project would maintain two lanes of traffic throughout construction. Traffic would shift to the right, remove the existing shoulder, and construct a 12-foot lane

and 10-foot shoulder. The project is not located in an area of high landslide risk, so no impact is anticipated from fire-related landslides. The project would comply with all regulations and not expose people or structures to fire-related flooding.

## 2.21 Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) 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) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

### 2.21.1 Discussion of CEQA Question 2.21—Mandatory Findings of Significance

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal**

**community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

The proposed project construction activities would result in short-term air quality impacts, an increase in short-term energy use, temporary impacts to localized water quality and groundwater, and noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. These impacts would have a less than significant impact to quality of the environment.

**b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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.)**

The proposed project does not have impacts that are cumulatively considerable when viewed with the effects of past and future projects.

**c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

The proposed project does not have environmental effects which would cause substantial adverse effects to human beings.

## **2.21.2 Conclusion**

The proposed project would have less than significant impact on the environment. While these impacts have been found to be less than significant, Caltrans would implement the avoidance and minimization measures outlined in the air quality, biology, energy, hydrology, noise, and greenhouse gas sections of this document to further reduce impacts.

## Chapter 3 List of Preparers

The following individuals performed the environmental work on the project:

### ***California Department of Transportation, District 3***

Bria Miller	Environmental Planner
Mike Bartlett	Environmental Branch Chief
Anna Kluge	Associate Environmental Planner (Natural Science)
Koren Tippet	Associate Environmental Planner (Archaeologist)
Mark Melani	Hazardous Waste Specialist
Youngil Cho	Air Specialist
Saeid Zandian	Noise Specialist
Sean Cross	Water Quality Specialist
Julia Riggins	Landscape Architect
Scott Foster	Design Engineer
Mohan Bonala	Project Manager

## Chapter 4 References

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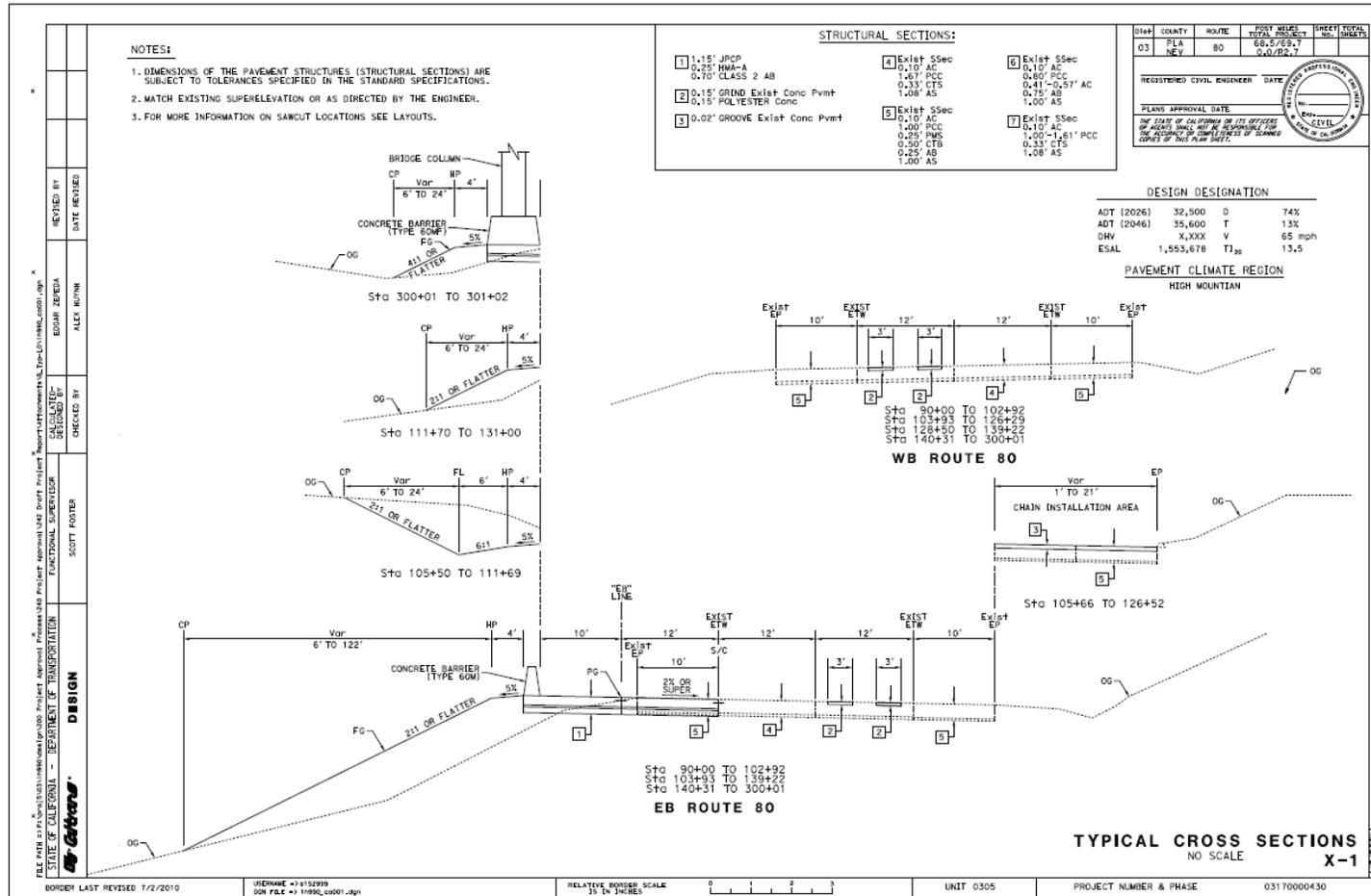
- California Air Resources Board (ARB). 2021a. *California Greenhouse Gas Emissions Inventory–2021 Edition*.  
<https://ww2.arb.ca.gov/cc/inventory/data/data.htm>. Accessed: October 13, 2021.
- California Air Resources Board (ARB). 2021b. *SB 375 Regional Plan Climate Targets*. <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed: October 13, 2021.
- California Department of Conservation (CDC).2019. *California Landside Inventory*. <https://maps.conservation.ca.gov/cgs/lsi/app/>. Accessed September 28, 2021.
- California Department of Forestry and Fire Protection (CALFIRE) Fire and Resource Assessment Program (FRAP). 2020. *FHSZ Viewer*.  
<https://egis.fire.ca.gov/FHSZ/>. Accessed October 14, 2021.
- California Department of Transportation (Caltrans) 2018a. *Caltrans Climate Change Vulnerability Assessments. District 3 Technical Report*. Prepared by WSPA. Accessed September 22, 2021.
- California Department of Transportation (Caltrans) 2018b. *Standard Specifications*.  
<https://dot.ca.gov/-/media/dot-media/programs/design/documents/2018-std-plns-for-web-a11y.pdf>  
Accessed: Date October 14, 2021.
- California Department of Transportation (Caltrans). 2021a. *Visual Impact Assessment Memo*. Dated June 23, 2021. Accessed September 22, 2021.
- California Department of Transportation (Caltrans). 2021b. *Air Quality Report*. Dated September 2021. Accessed October 14, 2021.

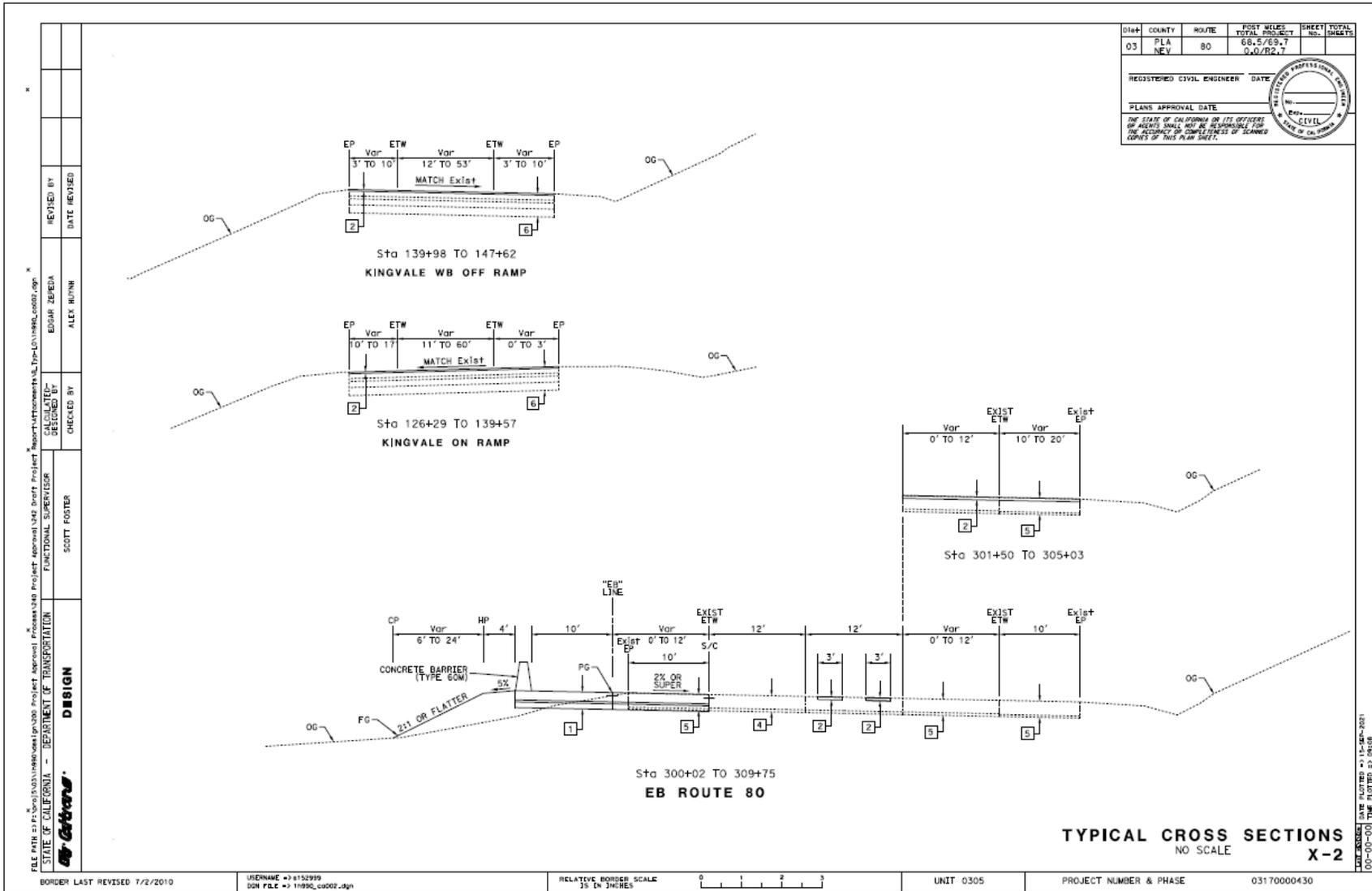
- California Department of Transportation (Caltrans). 2021c. *Natural Environmental Study*. Dated June 1, 2021. Accessed September 23, 2021.
- California Department of Transportation (Caltrans). 2021d. *Historical Property Survey Report*. Dated September 2021. Accessed October 14, 2021.
- California Department of Transportation (Caltrans). 2021e. *Energy Analysis*. Dated September 28, 2021. Accessed October 14, 2021.
- California Department of Transportation (Caltrans). 2021f. *Initial Site Assessment*. Dated June 14, 2021. Accessed September 22, 2021.
- California Department of Transportation (Caltrans). 2021g. *Water Quality Assessment Memo*. Dated July 12, 2021. Accessed September 22, 2021.
- California Department of Transportation (Caltrans). 2021h. *Noise Study Report*. Dated October 2021. Accessed October 14, 2021.
- California Department of Transportation (Caltrans). 2021i. *Traffic Management Data Sheet*. Dated February 5, 2021. Accessed September 22, 2021.
- California Department of Transportation (Caltrans). 2021j. *Travel Forecast Memo*. Dated June 9, 2021. Accessed September 22, 2021.
- California Department of Transportation (Caltrans). 2021k. *California Transportation Plan 2050*. February.  
<https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan>. Accessed: March 3, 2021.
- California Department of Transportation (Caltrans). 2021l. *Caltrans 2020-2024 Strategic Plan*. <https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf>. Accessed: May 19, 2021.
- California Environmental Protection Agency. 2015. *California Climate Strategy*. <https://calepa.ca.gov/wp->

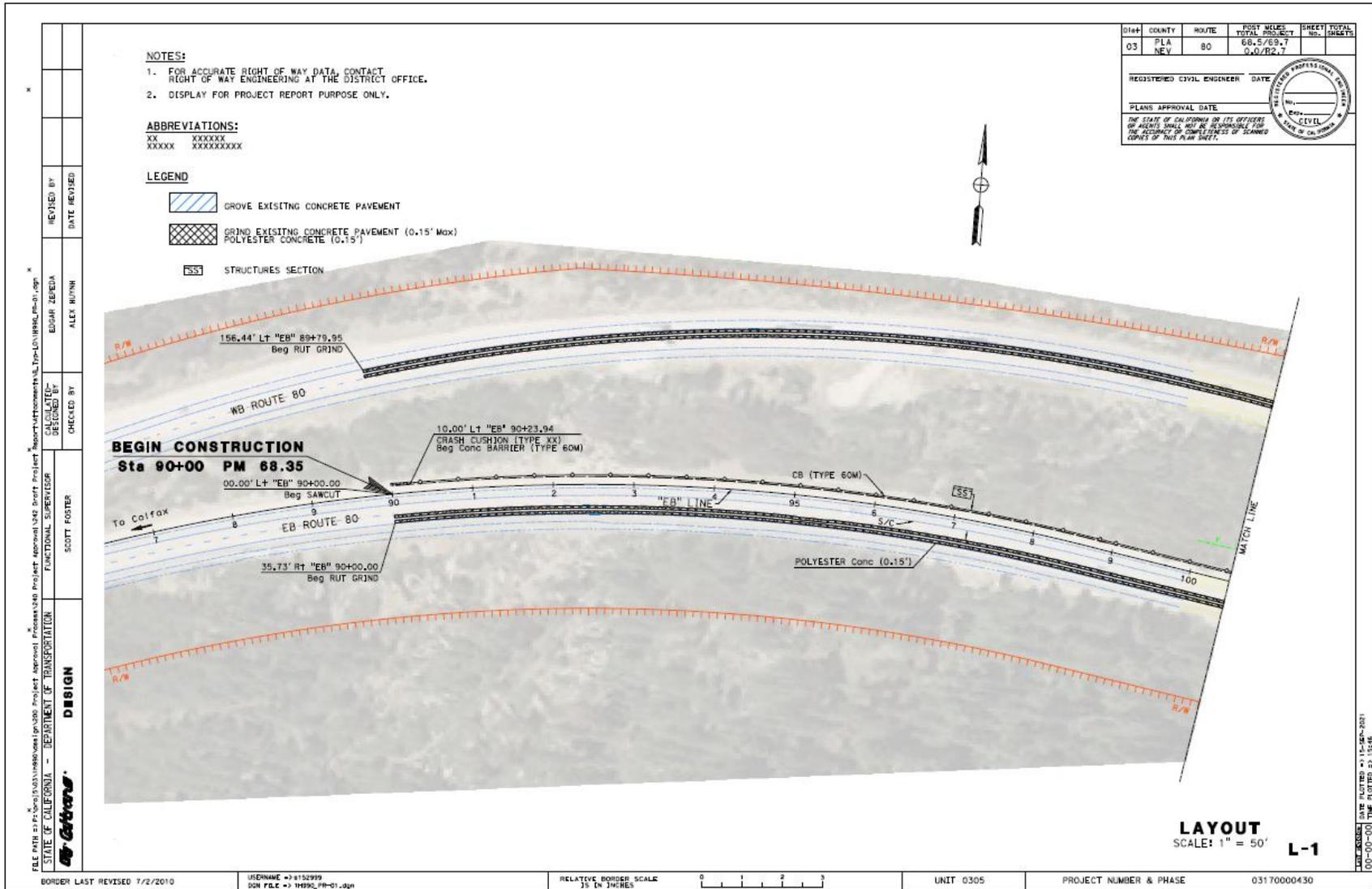
- [content/uploads/sites/6/2016/10/Climate-Documents-2015yr-CAStrategy.pdf](#). Accessed: April 28, 2021.
- County of Nevada (Nevada). 2017. Nevada County Williams Act Map. Nevada county Williamson map <https://mynevadacounty.com/DocumentCenter/View/30242/2017-Parcels-Affected-By-Williamson-Act-PDF> Accessed September 22, 2021.
- County of Placer (Placer). 2013. Placer County Land Use Map. <https://www.placer.ca.gov/DocumentCenter/View/8572/Land-Use-and-Circulation-PDF> Accessed September 22, 2021.
- Federal Highway Administration (FHWA). 2019. *Sustainability*. <https://www.fhwa.dot.gov/environment/sustainability/resilience/>. Last updated February 7, 2019. Accessed: August 21, 2021.
- Federal Highway Administration (FHWA). No date. *Sustainable Highways Initiative*. <https://www.sustainablehighways.dot.gov/overview.aspx>. Accessed: August 21, 2021.
- Nevada County Transportation Commission. 2010. Circulation Element. In *Nevada County General Plan*. Originally approved 1996. Amended 2008, 2010, 2014, and 2020. <https://www.mynevadacounty.com/1065/General-Plan>. Accessed: September 29, 2021.
- Nevada County Transportation Commission. 2020. Safety Element. In *Nevada County General Plan*. Originally approved 1996. Amended 2008, 2010, 2014, and 2020. <https://www.mynevadacounty.com/1065/General-Plan>. Accessed: September 29, 2021.
- Placer County Transportation Planning Agency. 2016. Chapter 7: Air Quality, Global Warming, Climate Change, & Greenhouse Gas Element. In *Final Placer County Regional Transportation Plan*. Adopted February 12, 2016. Available: <https://pctpa.net/regional-planning/2036-rtp/>. Accessed: October 6, 2021.

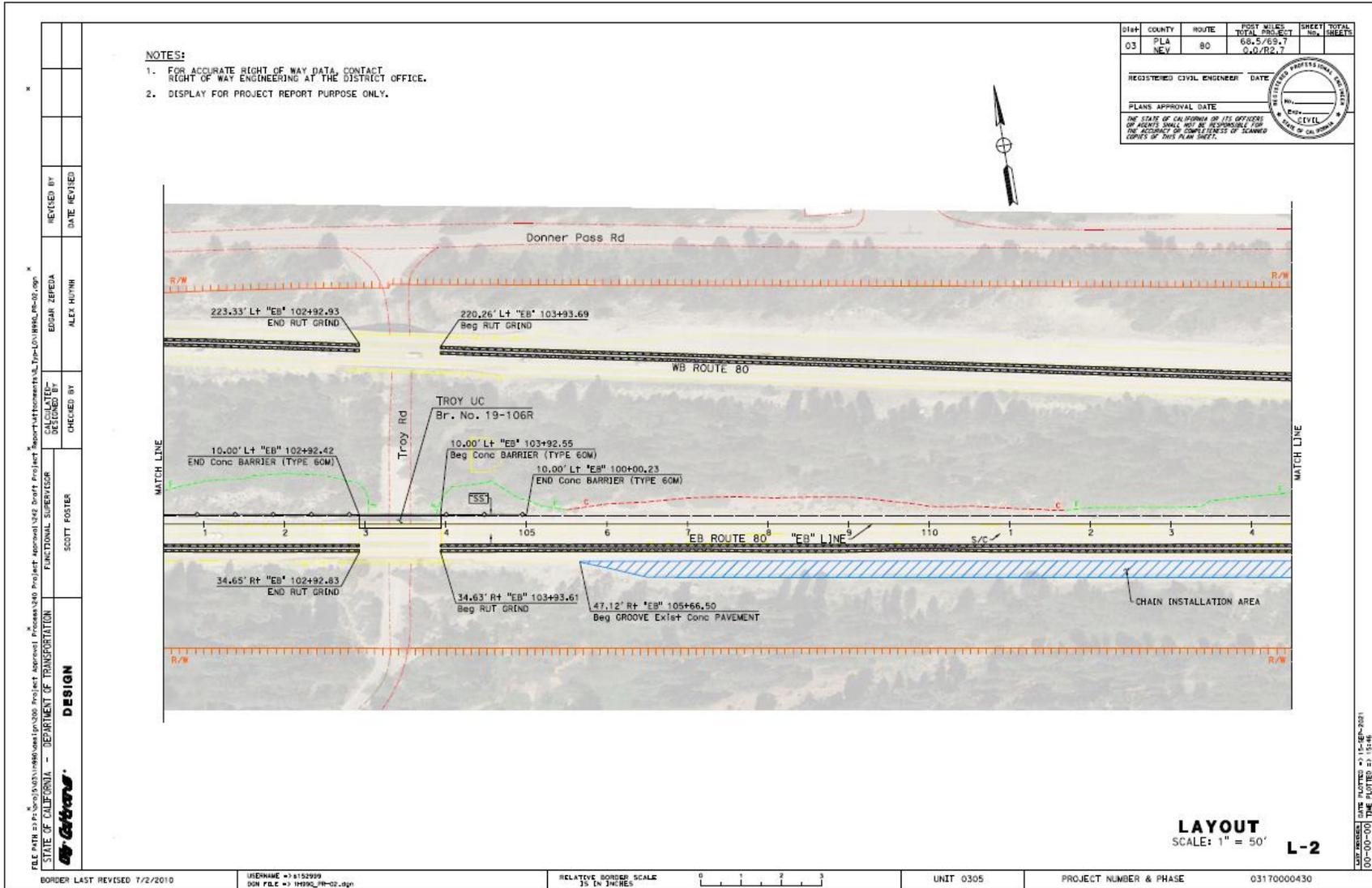
- State of California. 2018. *California's Fourth Climate Change Assessment*. <http://www.climateassessment.ca.gov/>. Accessed: August 21, 2021.
- U.S. Department of Transportation (U.S. DOT). 2011. *Policy Statement on Climate Change Adaptation*. June. [https://www.fhwa.dot.gov/environment/sustainability/resilience/policy\\_and\\_guidance/usdot.cfm](https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm). Accessed: August 21, 2021.
- U.S. Environmental Protection Agency. 2021a. *Fast Facts 1990-2019*. EPA 430-F-21-011. April. <https://www.epa.gov/sites/production/files/2021-04/documents/fastfacts-1990-2019.pdf>. Accessed: April 28, 2021.
- U.S. Environmental Protection Agency. 2021b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2019*. EPA 430-R-21-005. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019>. Accessed: May 5, 2021.
- U.S. Environmental Protection Agency. 2021c. *Sources of Greenhouse Gas Emissions*. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>. Accessed: May 5, 2021.
- U.S. Global Change Research Program (USGCRP). 2018. *Fourth National Climate Assessment*. <https://nca2018.globalchange.gov/>. Accessed: August 21, 2021.

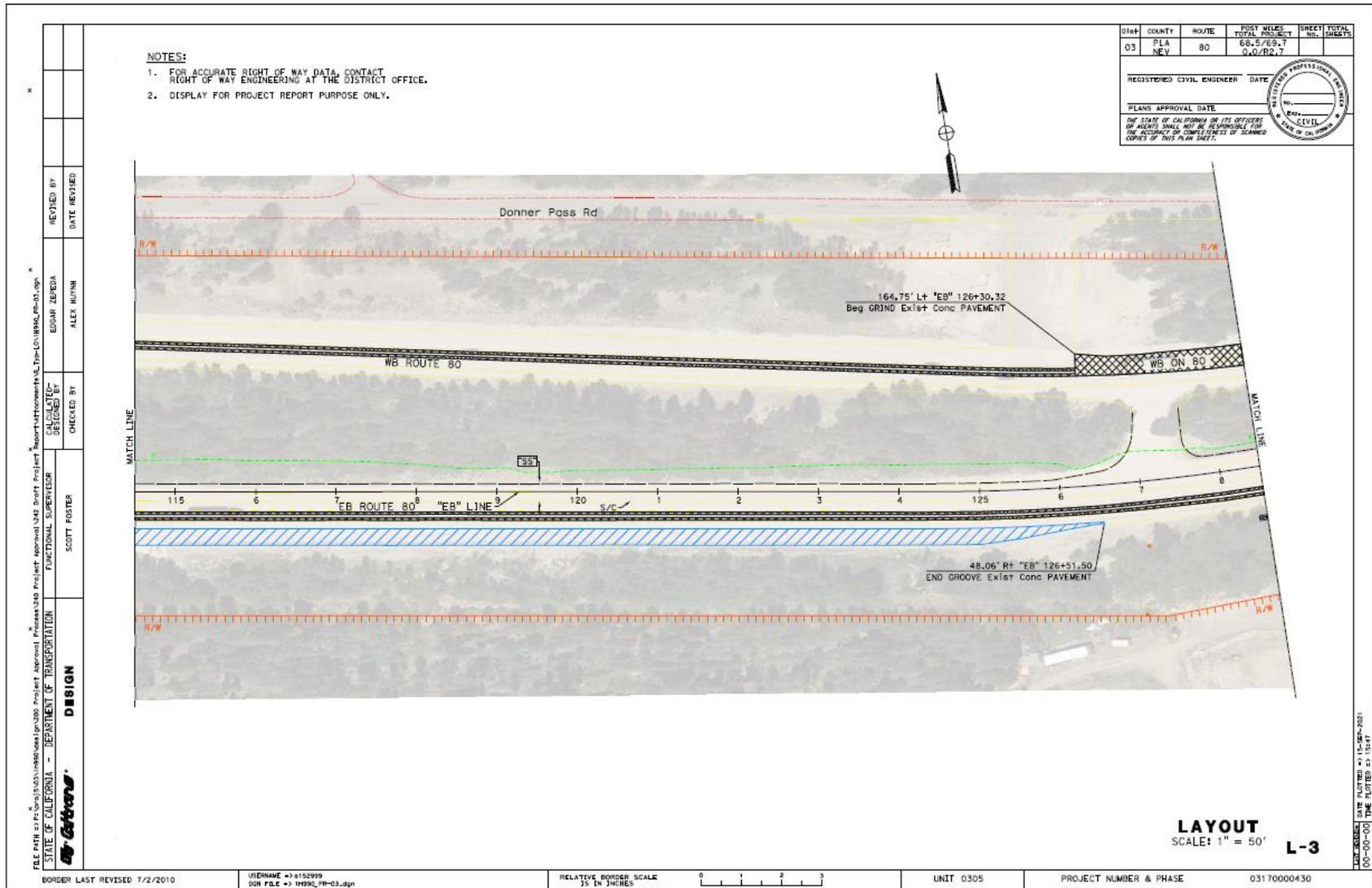
# Appendix A Project Layouts



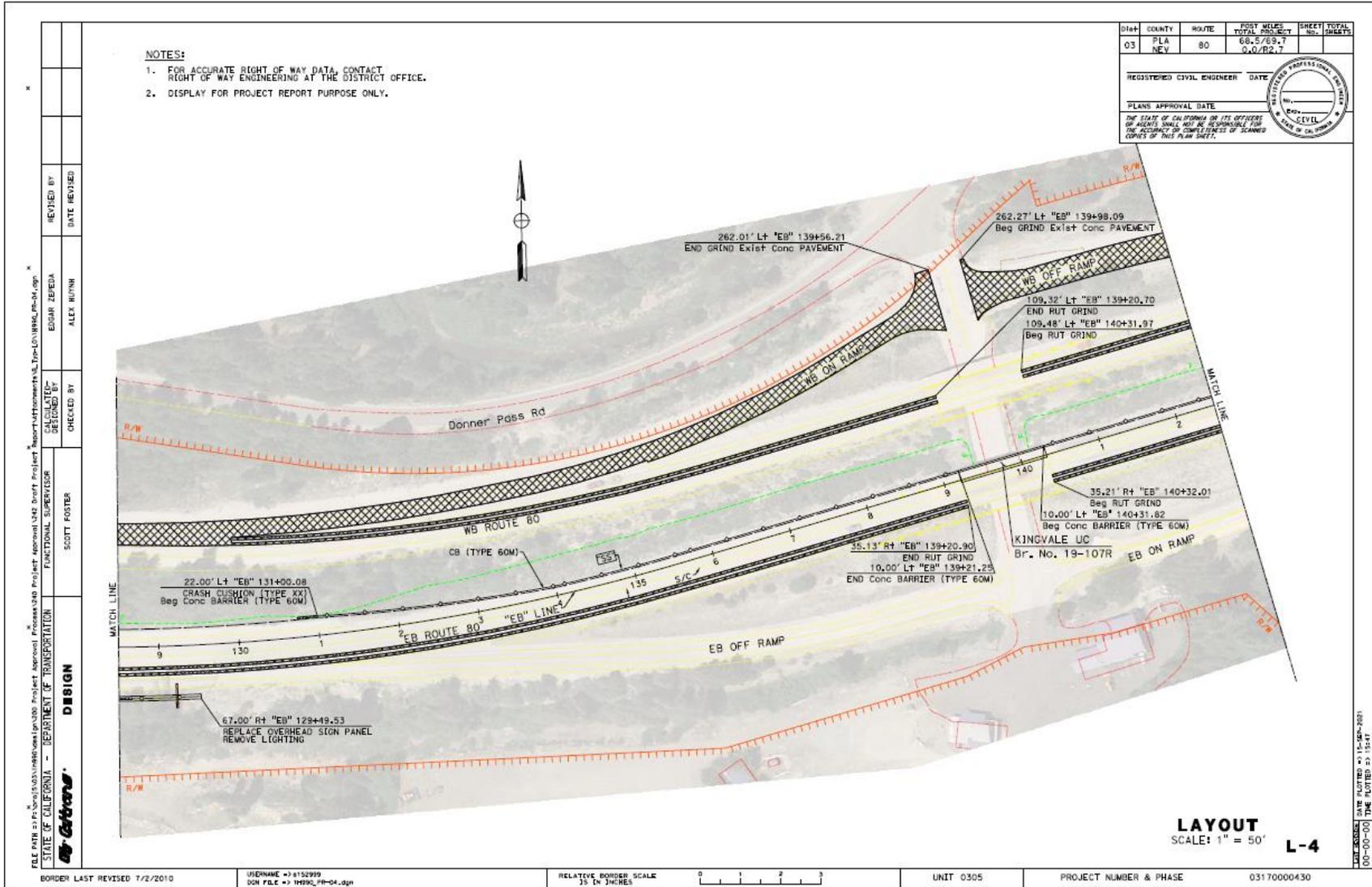


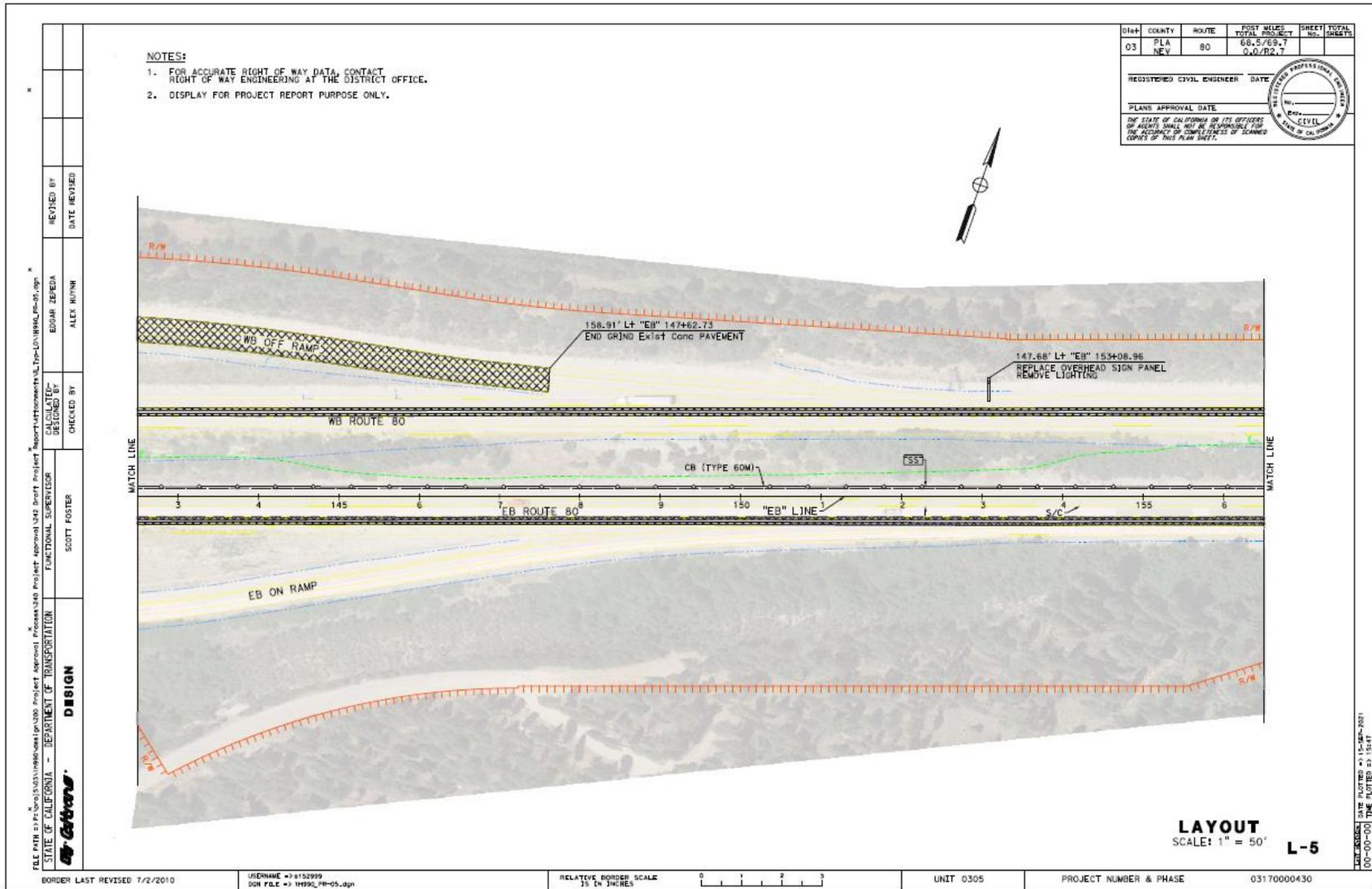




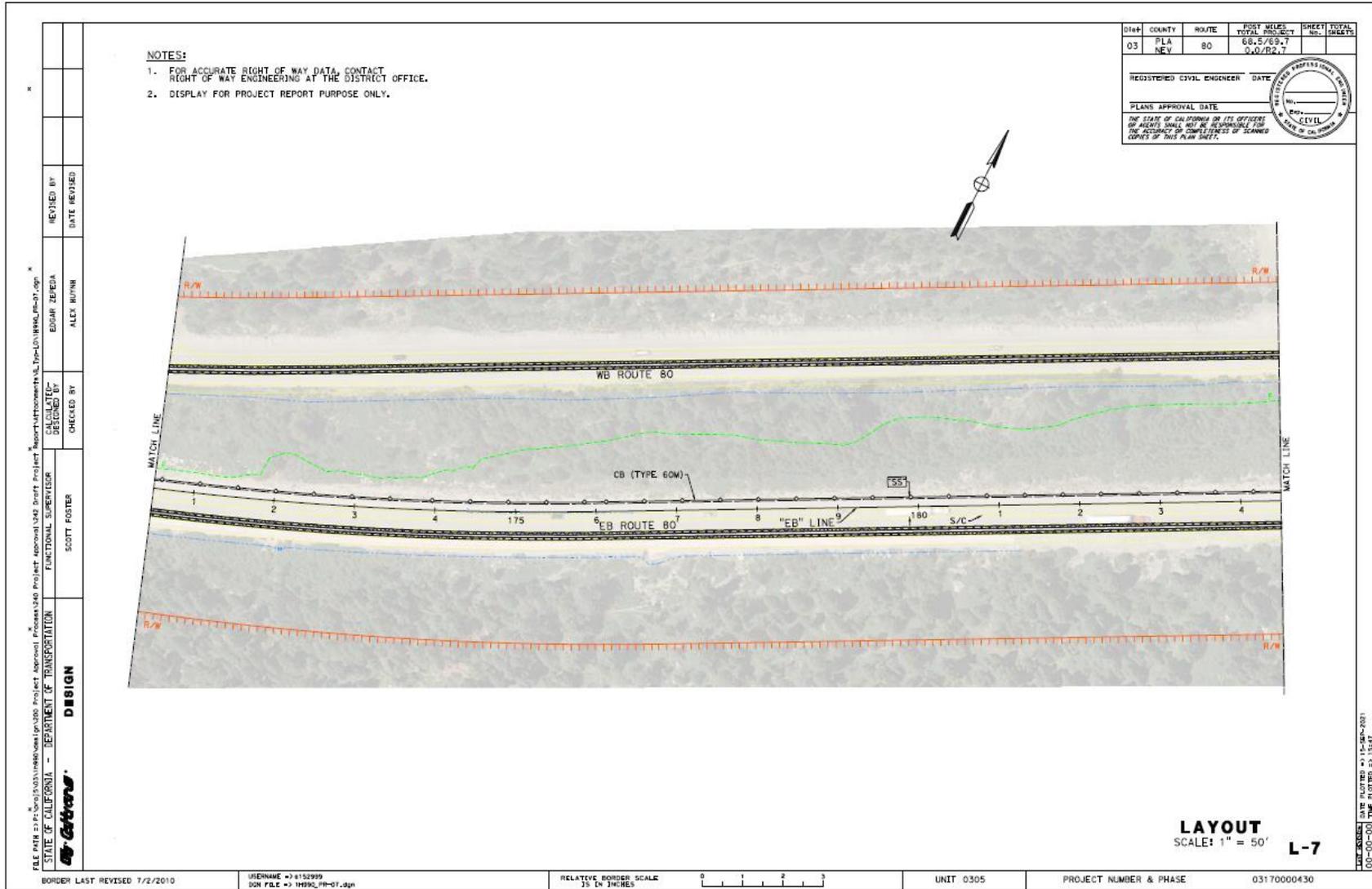


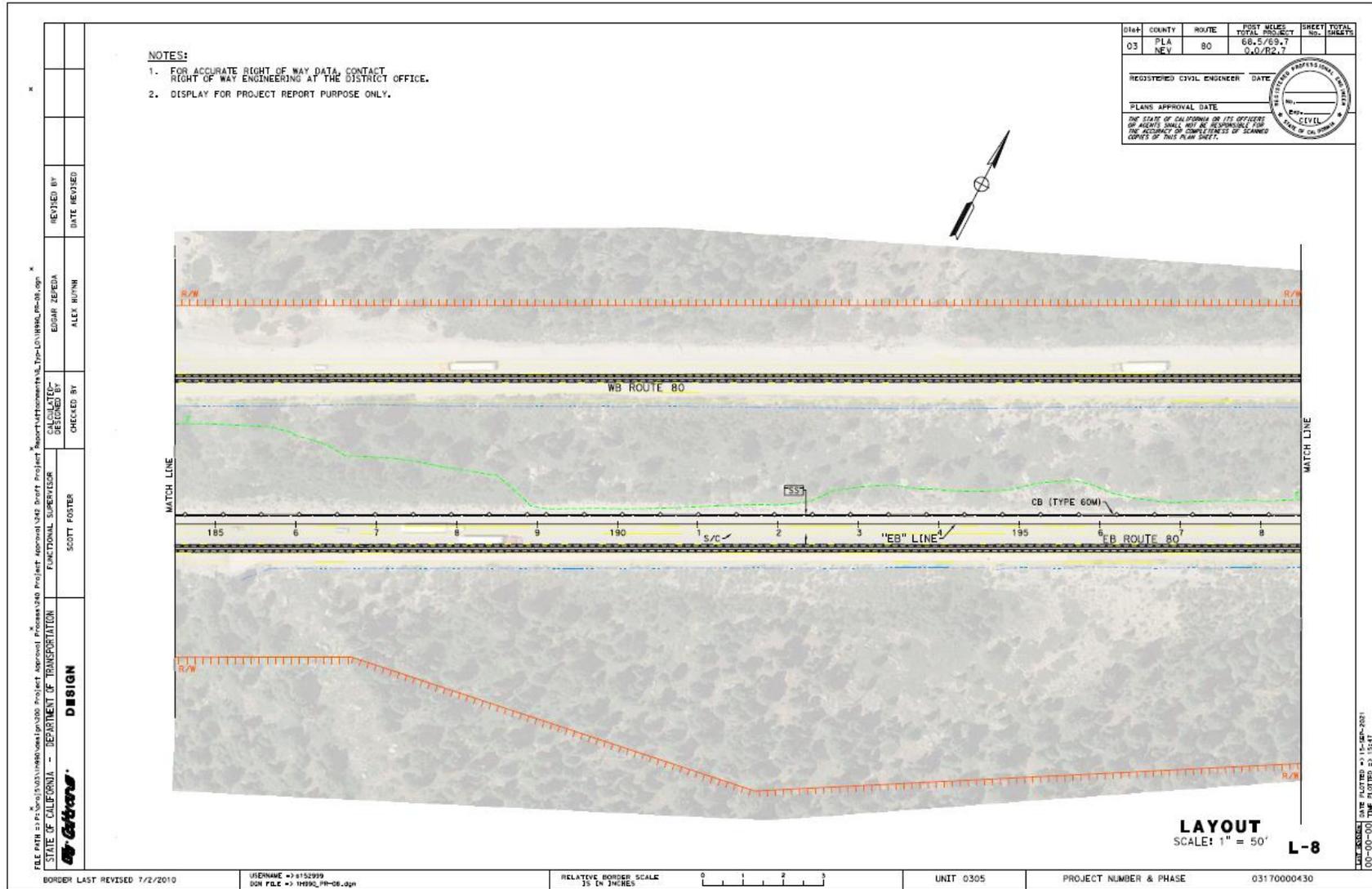
03-1H990 Soda Springs Pavement Rehabilitation  
Initial Study/Proposed Mitigated Negative Declaration

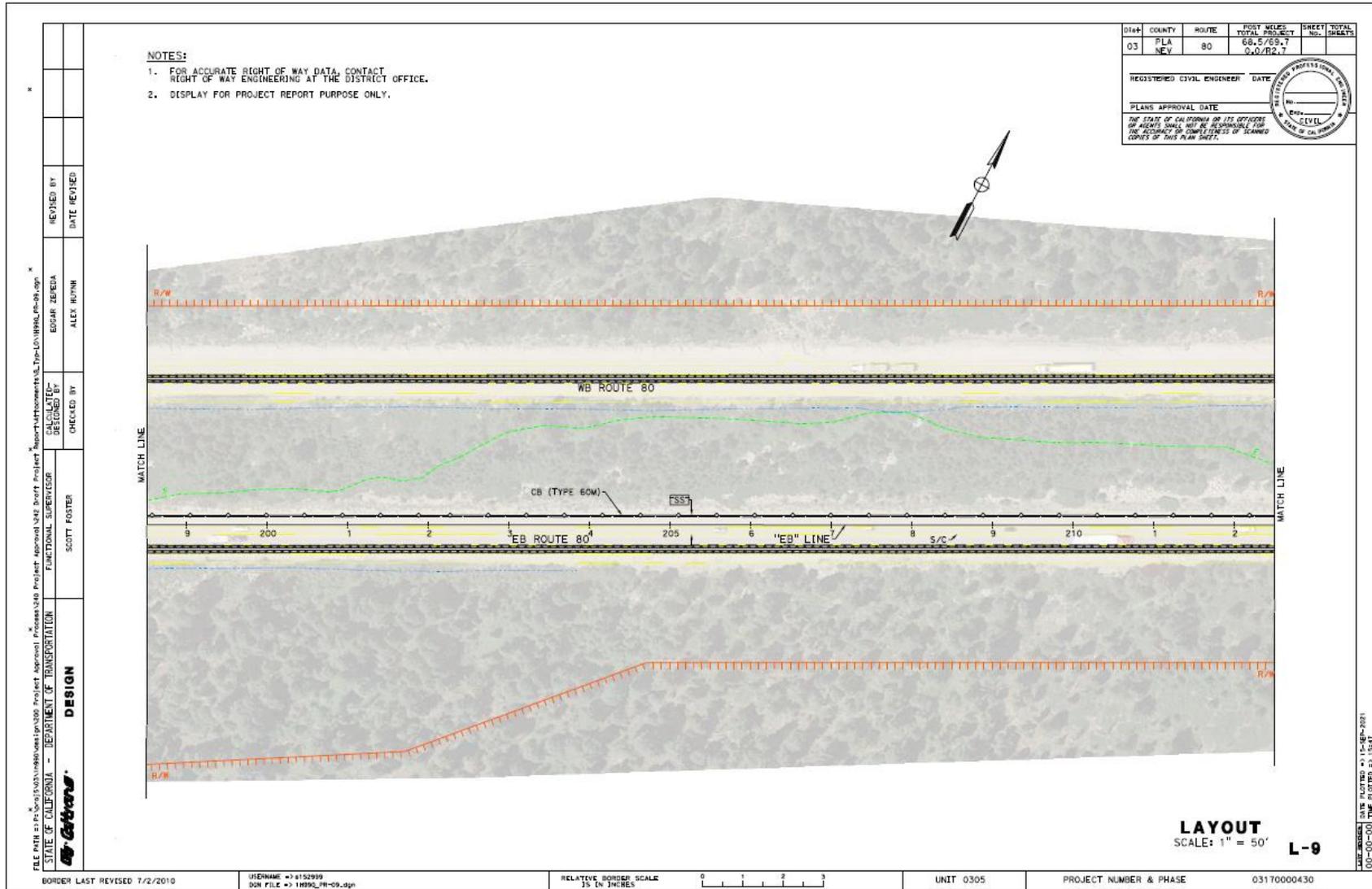


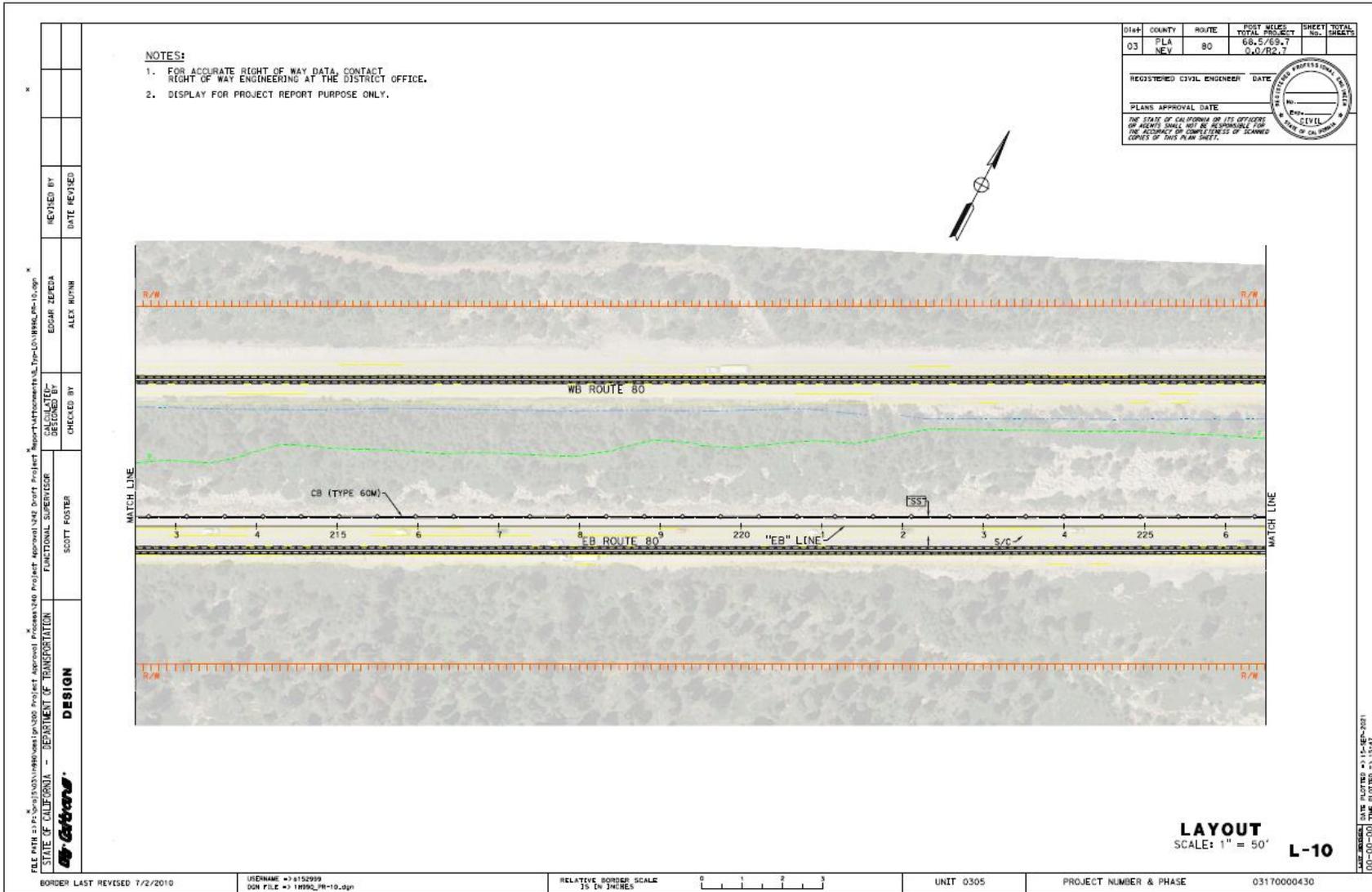


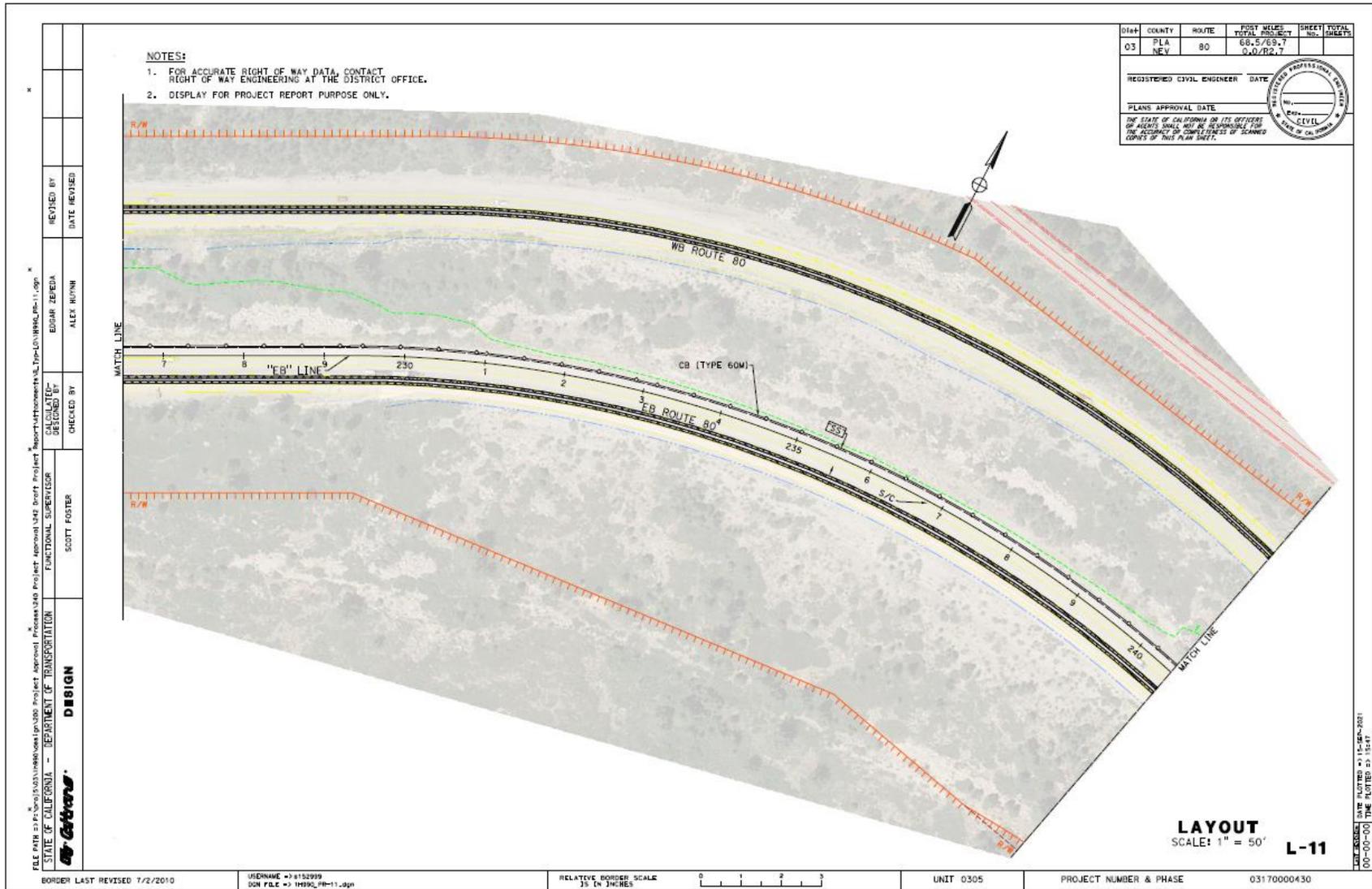


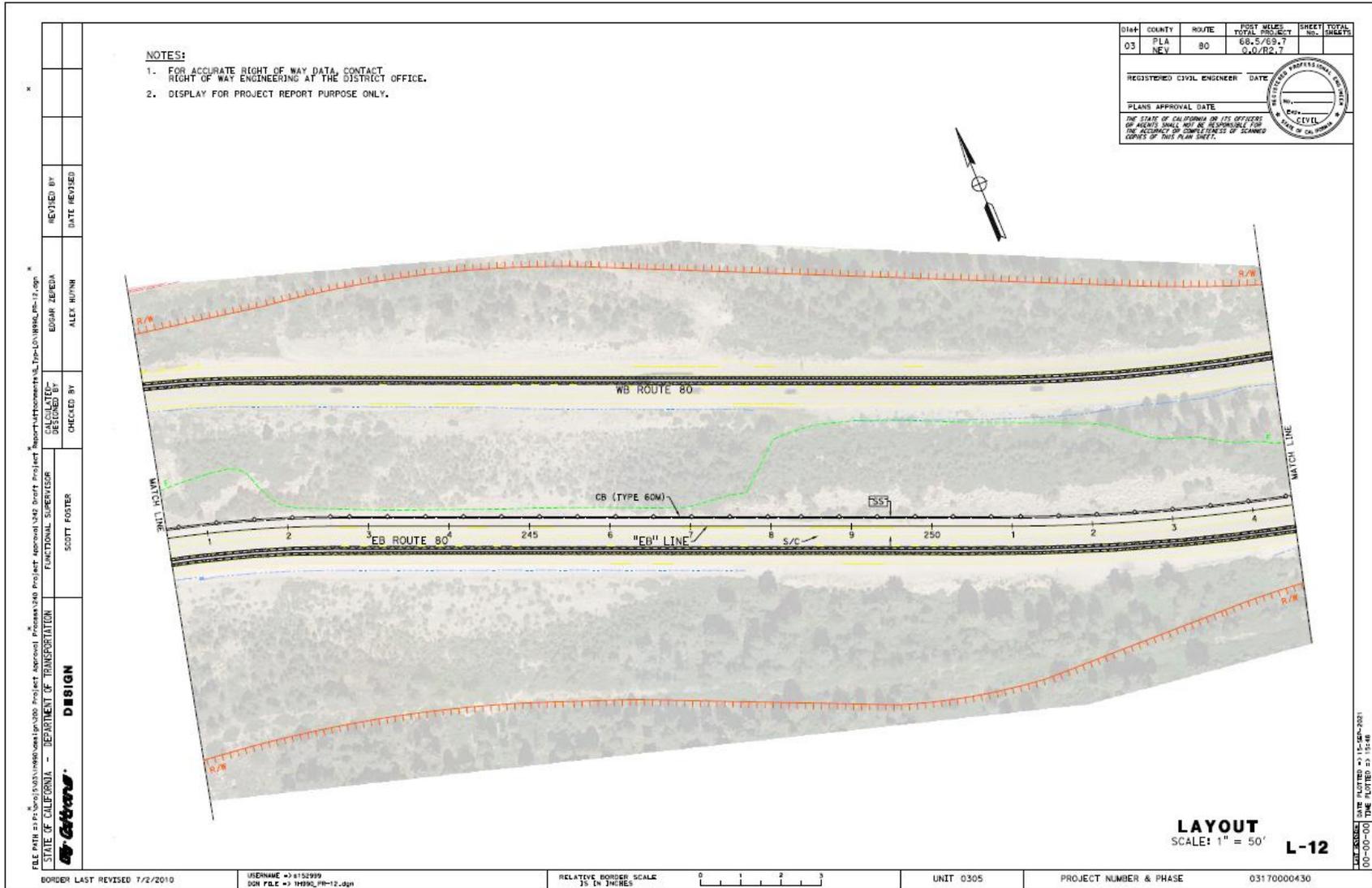










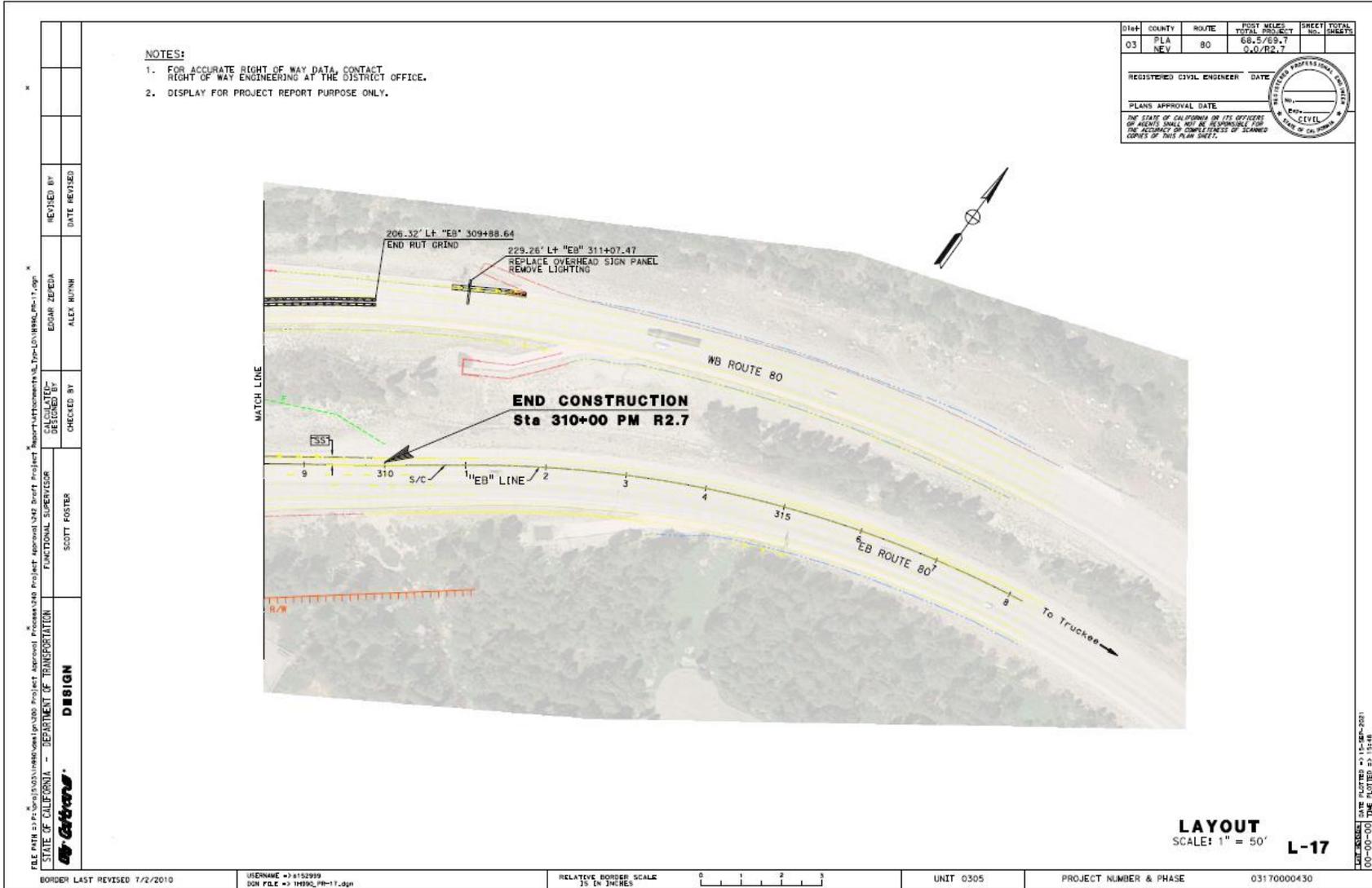












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# Appendix B Title VI Policy Statement

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

## DEPARTMENT OF TRANSPORTATION

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



*Making Conservation  
a California Way of Life.*

April 2018

### NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page:  
[http://www.dot.ca.gov/hq/bep/title\\_vi/t6\\_violated.htm](http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm).

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14<sup>th</sup> Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov), or visit the website [www.dot.ca.gov](http://www.dot.ca.gov).

A handwritten signature in blue ink that reads "Laurie Berman".

LAURIE BERMAN  
Director

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

# Appendix C USFWS, CDFW, and Species Lists



**Selected Elements by Common Name**  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Query Criteria: QuadIS (Soda Springs (3912034))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>alder buckthorn</b> <i>Rhamnus alnifolia</i>	PDRHAOC010	None	None	G5	S3	2B.2
<b>black swift</b> <i>Cypseloides niger</i>	ABNUA01010	None	None	G4	S2	SSC
<b>black-backed woodpecker</b> <i>Picoides arcticus</i>	ABNYF07090	None	None	G5	S2	
<b>California wolverine</b> <i>Gulo gulo</i>	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
<b>Fisher</b> <i>Pekania pennanti</i>	AMAJF01020	None	None	G5	S2S3	SSC
<b>gray-headed pika</b> <i>Ochotona princeps schisticeps</i>	AMAEA0102L	None	None	G5T2T4	S2S4	
<b>North American porcupine</b> <i>Erethizon dorsatum</i>	AMAFJ01010	None	None	G5	S3	
<b>Sierra marten</b> <i>Martes caurina sierrae</i>	AMAJF01014	None	None	G5T3	S3	
<b>Sierra Nevada mountain beaver</b> <i>Apodontia rufa californica</i>	AMAF01013	None	None	G5T3T4	S2S3	SSC
<b>Sierra Nevada yellow-legged frog</b> <i>Rana sierrae</i>	AAABH01340	Endangered	Threatened	G1	S1	WL
<b>southern long-toed salamander</b> <i>Ambystoma macrodactylum sigillatum</i>	AAAAA01085	None	None	G5T4	S3	SSC
<b>starved daisy</b> <i>Erigeron miser</i>	PDAST3M2K0	None	None	G3?	S3?	1B.3
<b>Stebbins' phacelia</b> <i>Phacelia stebbinsii</i>	PDHYD0C4D0	None	None	G3	S3	1B.2

Record Count: 13



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:  
Consultation Code: 08ESMF00-2021-SLI-0473  
Event Code: 08ESMF00-2021-E-01271  
Project Name: Kingvale Truck Lane

December 03, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

## Project Summary

Consultation Code: 08ESMF00-2021-SLI-0473

Event Code: 08ESMF00-2021-E-01271

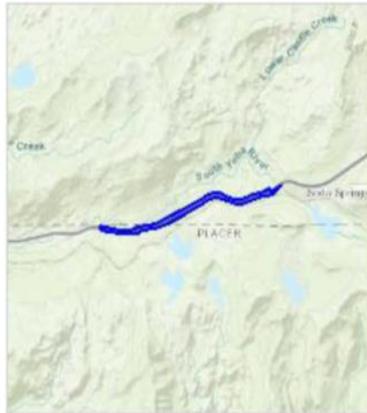
Project Name: Kingvale Truck Lane

Project Type: TRANSPORTATION

Project Description: Roadway Construction

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/39.32021340603965N120.42506580957883W>



Counties: Nevada, CA | Placer, CA

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9529">https://ecos.fws.gov/ecp/species/9529</a>	Endangered

### Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

### Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> <a href="https://ecos.fws.gov/ecp/species/9529#crithab">https://ecos.fws.gov/ecp/species/9529#crithab</a>	Final

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Quad Name **Soda Springs**

Quad Number **39120-C4**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) -  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) -  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -  
CCV Steelhead DPS (T) -  
Eulachon (T) -  
sDPS Green Sturgeon (T) -

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
CCC Coho Critical Habitat -  
CC Chinook Salmon Critical Habitat -  
CVSR Chinook Salmon Critical Habitat -  
SRWR Chinook Salmon Critical Habitat -  
NC Steelhead Critical Habitat -  
CCC Steelhead Critical Habitat -  
SCCC Steelhead Critical Habitat -  
SC Steelhead Critical Habitat -  
CCV Steelhead Critical Habitat -  
Eulachon Critical Habitat -  
sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) -  
Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

---

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -  
Olive Ridley Sea Turtle (T/E) -  
Leatherback Sea Turtle (E) -  
North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -  
Fin Whale (E) -  
Humpback Whale (E) -  
Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

**Essential Fish Habitat**

Coho EFH -  
Chinook Salmon EFH - **X**  
Groundfish EFH -  
Coastal Pelagics EFH -  
Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

See list at left and consult Monica DeAngelis  
[monica.deangelis@noaa.gov](mailto:monica.deangelis@noaa.gov)  
562-980-3232

MMPA Cetaceans -  
MMPA Pinnipeds -

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Scientific Name	Common Name	Lifeform	CRPR	GRank	SRank	CESA	FESA	Blooming	Habitat	Micro Hab	Elevation I	Elevation I CA	Endemic
Bruchia bolanderi	Bolander's moss		4.2	G3G4	S3	None	None		Lower moi damp soil		1700	5575	F
Ceanothus fuscus	Fresno ceaj	perennial t	4.3	G4	S4	None	None	May-Jul	Cismontane woodland		900	2950	T
Erigeron rufus	starved da	perennial l 18.3		G3?	S3?	None	None	Jun-Oct	Upper montane conif		1840	6035	T
Hordeum jubatum	vernal bar	annual her	3.2	G3G4	S3S4	None	None	Mar-Jun	Coastal dunes, Coast		5	15	F
Lewisia rediviva	Hutchison's lk	perennial l	3.2	G3G4T3Q	S3	None	None	(Apr)May-	Upper moi Openings,		765	2505	T
Lewisia rediviva	Kellogg's lk	perennial l	3.2	G3G4T2T3	S2S3	None	None	(Apr)May-	Upper moi Openings,		1465	4805	T
Phacelia serotina	Stebbins' ç	annual her 18.2		G3	S3	None	None	May-Jul	Cismontane woodland		610	2000	T
Silene occidentalis	Western c	perennial l	4.3	G4T3	S3	None	None	Jun-Aug	Chaparral, dry, open		1230	4035	T

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## **Appendix D** Response to Comments

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