PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298

Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 5648E
As of July 7, 2020

Subject: Request for Section 320 Scenic Highway Deviation - Relocation of Poles Along Highway 50 at Camino El Dorado County.

Division Assigned: Energy

Date Filed: 09-27-2019

Date to Calendar: 10-02-2019

Authorizing Documents: None

Disposition:	**Signed**
Effective Date:	**04-16-2020**

Resolution Required: Yes

Resolution Number: E-5065

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Annie Ho
(415)973-8794
AMHP@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298

To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

Advice Letter Number
Name of Filer
CPUC Corporate ID number of Filer
Subject of Filing
Date Filed
Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
Effective Date of Filing
Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov

Pacific Gas and Electric Company®

Erik Jacobson
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

September 27, 2018

Advice 5648-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: **Request for Section 320 Scenic Highway Deviation- Relocation of Poles Along Highway 50 at Camino in El Dorado County**

Purpose

Pacific Gas and Electric Company ("PG&E") requests an order from the California Public Utilities Commission ("CPUC") granting it a deviation from Public Utilities Code Section 320 to allow the overhead relocation of 2 wood poles in an existing 12-kilovolt ("kV") distribution pole line located along the south side of the California Highway Route 50 at Camino in El Dorado County.

Background

Pacific Gas and Electric Company (PG&E) has been requested by the State of California, Department of Transportation (Caltrans) to relocate 2 wood poles in an existing 12 kV distribution pole line located along the south side of California State Highway Route 50 (Hwy 50), in the Camino Community in the County of El Dorado. A copy of this request is provided in Attachment 1. Caltrans has requested the relocation to accommodate the safety project of installing a continuous concrete median barrier from Still Meadow Road to Upper Carson Road. A birds-eye view aerial photo of the site area and photos of the affected poles, and Caltrans' utility plan drawings are provided as Attachments 2 and 3 respectively.

Pole relocation area is located along a section of Hwy 50 that is currently designated as a State Scenic Highway. As such, relocation of those poles would be subject to Public Utility (PU) Code Section 320, which requires that all future utility distribution facilities proposed to be erected in proximity to a designated state scenic highway and which would be visible from such scenic highway if erected above ground should, whenever feasible and not inconsistent with sound environmental planning, be placed underground. (PU Code Section 320.)

Overhead relocation of the subject facilities would require the relocation of two (2) existing 45-foot wood poles. PG&E would shift one pole east and one south to eliminate

the conflicts. The new poles would be installed using avian-safe design standards and would be relocated to an easement granted from El Dorado Union High School. Since the baseline visual environment contains two existing distribution poles, relocating those two poles will not create increased impacts on the scenic quality of the area as viewed from Hwy 50.

On the other hand, undergrounding the subject facilities would itself create adverse visual changes. In order to underground the section of distribution line now being supported by the two poles in question, PG&E would need to modify the two existing poles on either side of the poles being removed. PG&E would convert the western pole from a transformer pole to a riser pole, and add 4 J-boxes, a PMI and 3 padmount transformers (2 single phase 120/240V & 1- 3 phase 120/208V). The eastern pole next to Highway 50 would be converted to a riser pole. These changes would also be over 9 times costlier than simply moving the two existing poles.

Engineering has not been completed on the undergrounding option. It is possible that the poles being modified would actually need to be replaced, which we estimate would cost approximately $15,000 additional per pole (which is currently not factored into the job costs).

Cost Comparison for overhead and underground relocation are summarized as follows:

Approximate Cost for Overhead	$50,000.00
Approximate Cost for Underground	$475,000.00 (without replacement poles)
Cost Differential	$425,000.00

Please note the figures are only rough estimates. An engineered estimate will be prepared after determination of the method of installation.

Replacement poles in the overhead alternative would be roughly the same size and in the same location in relation to the new edge of pavement. In the undergrounding alternative – although two poles would be removed, two existing poles would become riser poles, possibly requiring replacement to transition the distribution lines from overhead to underground.

While PG&E is prepared to underground the subject facilities pursuant to Rule 20 if directed to do so, the County of El Dorado has reviewed preliminary plans for relocation of the poles and supports a deviation from Section 320 of the California Public Utilities Code to allow for the overhead relocation, as stated in their letter dated February 6, 2019. The County's letter is attached hereto as Attachment 4. We have also received a determination from Caltrans District 3 that the proposed overhead relocation will have only an "insignificant impact to the aesthetic view." (See Attachment 4a.)

An environmental review of the roadway improvement project was performed and it was determined that moving the existing distribution lines to the proposed new locations would not result in adverse effects to the scenic resources within a designated scenic

highway (Attachment 5). Caltrans approved a Categorical Exclusion under the National Environmental Protection Act (NEPA) and a Mitigated Negative Declaration under the California Environmental Quality Act (CEQA). The environmental document will be revalidated as needed prior to construction.

In Summary, an overhead relocation for the two existing PG&E poles would not significantly impact the scenic corridor along Hwy 50. Additionally, the lower cost of the overhead option makes overheard relocation the preferred choice, supported by both the County of El Dorado and Caltrans. PG&E therefore requests a deviation from PU Code Section 320 to allow the overhead relocation.

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Protests

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than October 17, 2019, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest;

supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

PG&E requests that this Tier 3 advice submittal become effective upon Commission approval.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/
Erik Jacobson
Director, Regulatory Relations

Attachments

Attachment 1 – Relocation Request
Attachment 2 – Project Area Arial Photo and Affected Poles Photos
Attachment 3 – PGE Deviation Exhibit
Attachment 3a – Utility Conflict
Attachment 4 – California Department of Transportation Wavier Letter
Attachment 4a – California Department of Transportation Camino Safety Project
Attachment 5 – CEQA Categorical Exemption and NEPA Programmatic Categorical Exclusion

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39 E)

Utility type:
☑ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Annie Ho
Phone #: (415) 973-8794
E-mail: PGETariffs@pge.com
E-mail Disposition Notice to: AMHP@pge.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5648-E

Tier Designation: 3

Subject of AL: Request for Section 320 Scenic Highway Deviation- Relocation of Poles Along Highway 50 at Camino in El Dorado County

Keywords (choose from CPUC listing): Agreements,

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? ☐ Yes ☑ No

If yes, specification of confidential information:
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☑ Yes ☐ No

Requested effective date: No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

[1]Discuss in AL if more space is needed.

Clear Form

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Clear Form

Attachment 1

Relocation Request

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 740-4346
FAX (530) 741-4490
TTY 711
www.dot.ca.gov/dist3

October 2, 2018

PG&E
Attention: Piper Wagner
343 Sacramento Street
Auburn, CA 95603

03-ED-50
PM 21.95/24.45
E.A. 4E620
File no.: 2672.1
Facility: Electrical Facilities

Dear Ms. Wagner:

Enclosed are a set of the State's maps identifying your utility facilities as being in conflict with the proposed roadway construction project in Sacramento County project 4E620. The purpose of this project is to improve the safety on State Route 50 in the Camino Corridor by modifying the facility. This will be done by installing a concrete barrier that will restrict left-turn movements within the project limits. Widen the outside shoulders to standard width and installing several acceleration/deceleration lanes to help reduce collisions within the project limits. A secondary purpose is to maintain local and regional access to and from the north and south sides of SR 50 while providing safe east and west access on and off SR 50.

Your company's facilities are within the project and will be affected by planned construction.

These plans are for your use in (1) verifying your existing facilities as shown on the plans, (2) **completing your relocation plans**, (3) identifying related easement requirements, (4) developing your claim of liability and (5) preparing your estimate of cost for the project.

If the State is liable for any portion of your relocation costs, and if any of your plans will be prepared by a consulting engineer, a copy of the proposed agreement with your consultant must be furnished to this office as soon as possible. Employment of a consultant for a fee based on a percentage of the relocation cost is not acceptable. If desired, an example of a typical consultant agreement, along with the Certification of Consultant, will be furnished upon your request.

If easements are required to relocate your facilities, please delineate your needs on the plans. This information is needed as soon as possible so your replacement easements can be acquired by the State along with other lands for this project. If easements are required, and you would like the State to acquire for you, the State may be reimbursed by your company for acquisition and expenses incurred while doing so. You may submit your easement requirements ahead of your overall relocation plans.

Please submit the following information for review prior to **November 9th, 2018** so a Notice to Owner, Encroachment Permit and, if necessary, a Utility Agreement can be prepared.

1. Six sets of your relocation plans with related easement requirements, and any changes to the existing facilities as shown on the State's preliminary plans.

2. The appropriate number of working days you need to complete your relocation work as per your plans, including any construction windows you may need.

3. The date your existing facilities were installed.

4. Your occupancy rights for installation:

   A. Fee-owned land
   B. Easement (recorded)
   C. Easement (unrecorded)
   D. Prescriptive right
   E. JUA or CCUA
   F. Franchise
   G. State Permit
   H. County Permit
   I. City Permit
   J. Joint Pole Agreement
   K. Other (explain)

Please provide a copy of your documentation to support your occupancy rights claim for A, B, C, D, or E above.

5. An itemized estimate of cost which includes a breakdown for labor, material, transportation, equipment and administrative overhead. If you will be requesting a lump sum Utility Agreement, provide an itemized estimate which includes a detailed breakdown of the above-mentioned items.

6. Your work will be performed by:

   A. Own forces
   B. Continuing contractor
   C. Competitive bid contract

7. Your liability claim:

   State _____% Owner _____%

This project will be subject to Buy America. All relocations will need to be Buy America compliant.

If you have any technical questions, please contact Brian Krcelic of Wood Rodgers, under contract with State as Utility Project Engineer, at (925) 847-1556 or bkrcelic@WoodRodgers.com. For any other assistance, please call me at (530) 741-4346 or email me at robert.ronald@dot.ca.gov . Your cooperation is appreciated.

Sincerely,

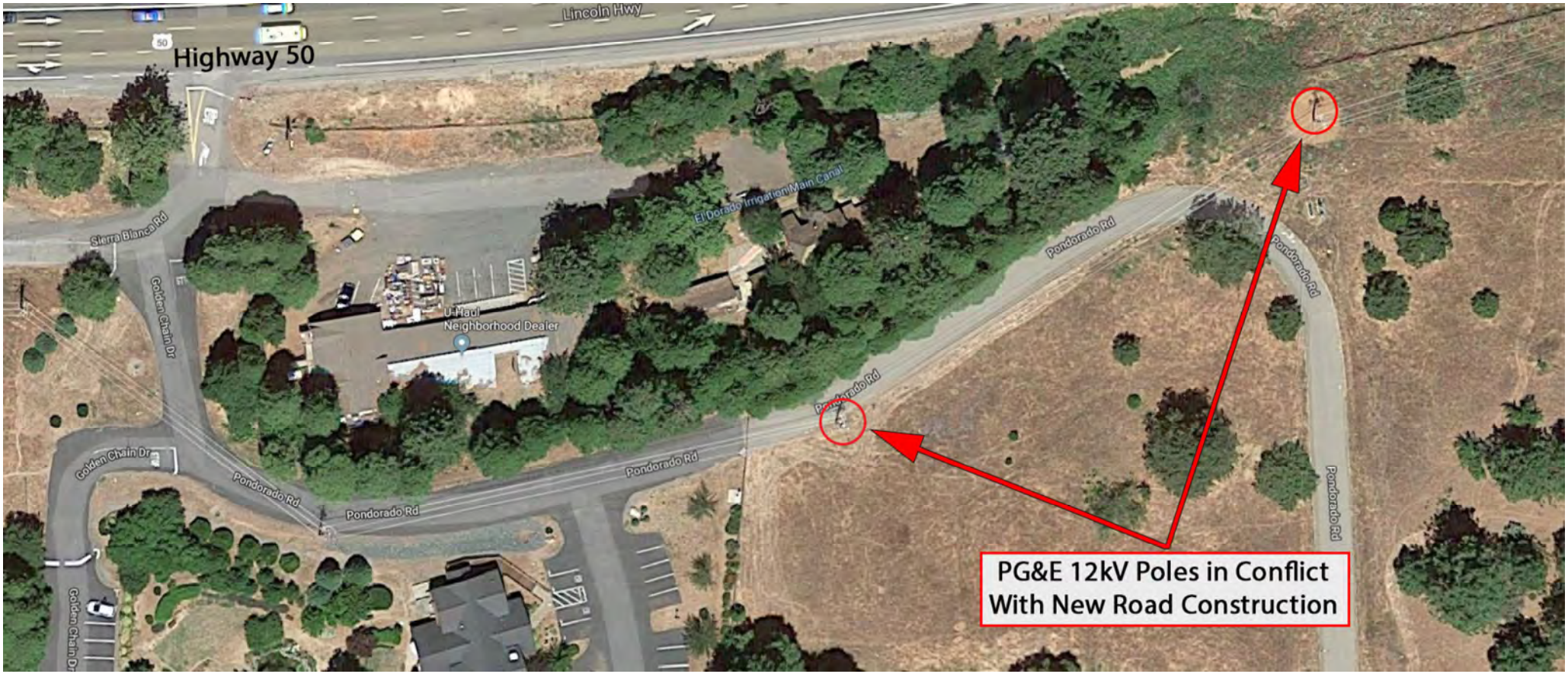
Robert H. Ronald III

Robert Ronald
Right of Way Agent
Utility Coordinator

Enclosures

Attachment 2

Project Area Arial Photo and Affected Poles Photos


Highway 50
Lincoln Hwy
Sierra Blanca Rd
Golden Chain Dr
U-Haul
Neighborhood Dealer
El Dorado Irrigation Main Canal
Pondorado Rd
Pondorado Rd
Pondorado Rd
Pondorado Rd
Pondorado Rd
Pondorado Rd
Golden Chain Dr
Golden Chain Dr
PG&E 12kV Poles in Conflict
With New Road Construction


1
2
15
© 2018 Google
© 2019 Google


2
© 2018 Google
© 2019 Google
lat 38.736770° lon -1

Attachment 3

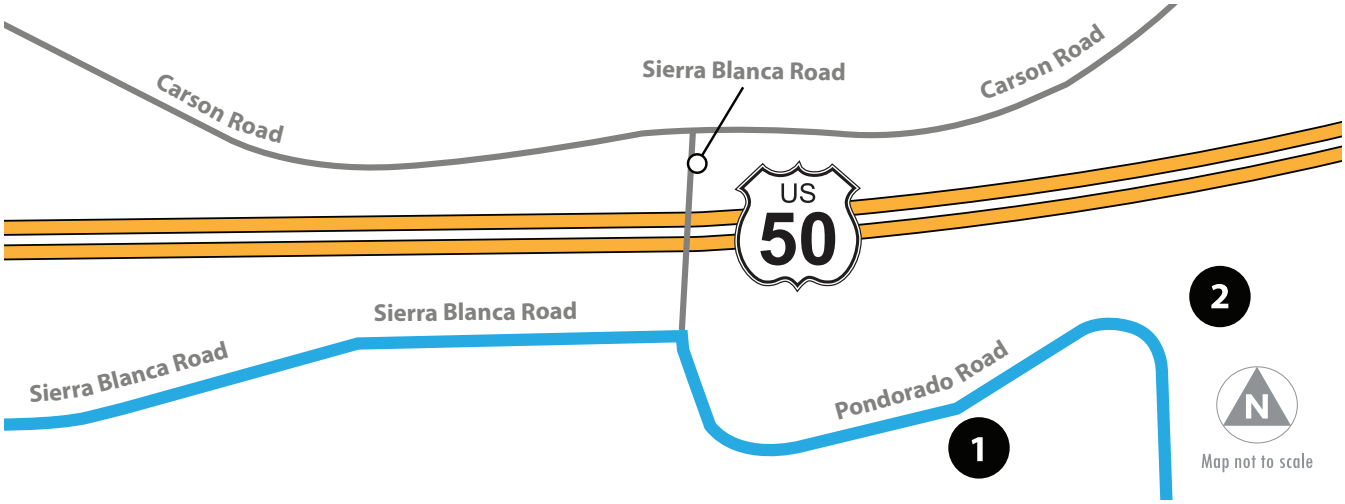
Utility Conflict

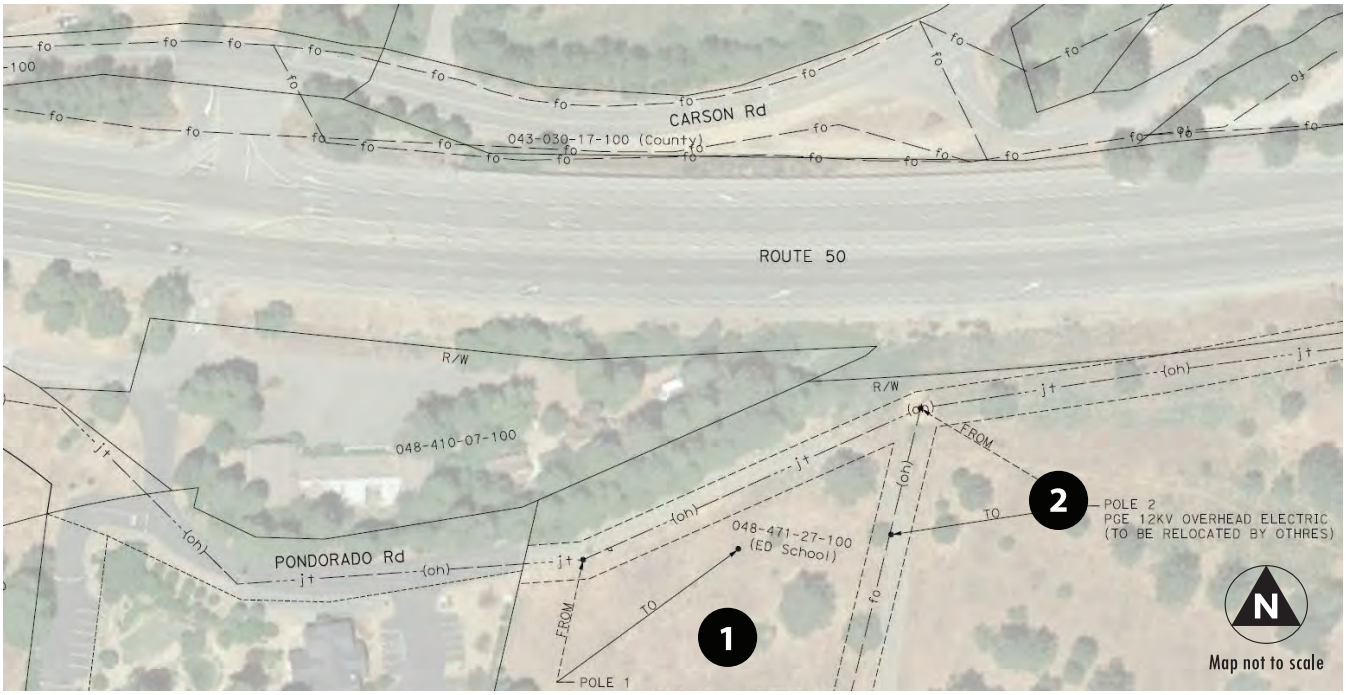
CAMINO SAFETY PROJECT
UTILITY CONFLICT MAP

ED 50 PM 21.95/24.45

March 25, 2019

NOTE: *EXHIBITS ARE NOT FOR CONSTRUCTION.*





Description: Two impacted joint utility poles will be in conflict with the realignment of Pondorado Rd, as well as the construction of the new bridge undercrossing. In order to accommodate the improvements on this project, pole #1 will be relocating 95ft to the east while pole #2 will be relocating 115ft further south.

Images: GOOGLE EARTH 4-19

CAMINO SAFETY PROJECT
UTILITY CONFLICT MAP

ED 50 PM 21.95/24.45

March 25, 2019

1

MOTORIST'S LINE OF VISION OF PONDORADO RD. FROM EASTBOUND HIGHWAY 50.

MOTORIST'S LINE OF VISION OF PONDORADO RD. FROM WESTBOUND HIGHWAY 50.

POLE 1 DESCRIPTION:

Potential Impact:
Impacted utility pole will be in conflict with the realignment of Pondorado Road leading into new bridge undercrossing.

Solution:
Relocate new utility pole 95.0' northeast from the impacted utility pole location to accommodate project improvements.

Impacted utility pole is located approximately 200 feet from edge of travel way and not visible from motorist's line of vision. Suggested new utility pole location is approximately 200 feet of edge of traveled way and remains hidden by treescape.

POLE #1

Existing Utility Pole Location
38°44'10.9"N, 120°42'23.4"W

Suggested New Utility Pole Location
38°44'11.2"N, 120°42'21.9"W

Images: GOOGLE EARTH 4-19

CAMINO SAFETY PROJECT
UTILITY CONFLICT MAP

ED 50 PM 21.95/24.45

March 25, 2019

2

MOTORIST'S LINE OF VISION OF PONDORADO RD. FROM EASTBOUND HIGHWAY 50.

MOTORIST'S LINE OF VISION OF PONDORADO RD. FROM WESTBOUND HIGHWAY 50.

POLE 2 DESCRIPTION:

Potential Impact:
Impacted utility pole will be in conflict with the construction of the new bridge undercrossing.

Solution:
Relocate new utility pole 115.0' southwest from the impacted utility pole location to accommodate project improvements.

Impacted utility pole is located approximately 90 feet from edge of travel way and visible from motorist's line of vision. Suggested new utility pole location is approximately 200 feet from edge of traveled way and potentially hidden by a tree.

POLE #2

Existing Utility Pole Location
38°44'12.5"N, 120°42'20.3"W

Suggested New Utility Pole Location
38°44'11.4"N, 120°42'20.4"W

Images: GOOGLE EARTH 4-19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	21.95/24.45		XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

Wood Rodgers Inc.
3301 C Street, Suite 100-B
Sacramento, CA 95816

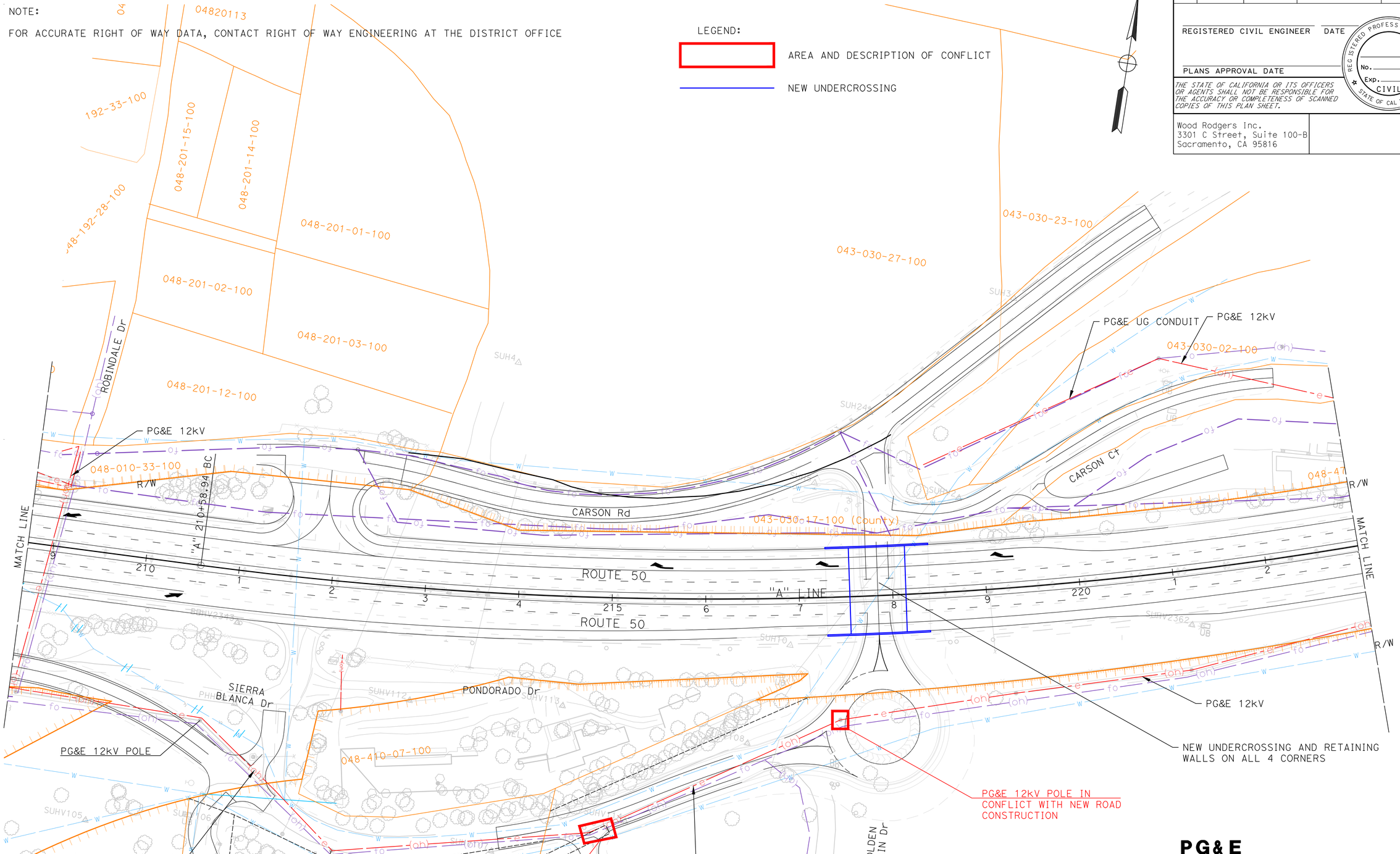
NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE

LEGEND:

AREA AND DESCRIPTION OF CONFLICT

NEW UNDERCROSSING



PG&E
UTILITY CONFLICT PLAN

SCALE: 1" = 50'

UC-1

REVISED BY | DATE REVISED

CALCULATED- DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: MARK RAYBACK

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION: DATE PLOTTED => $DATE | 00-00-00 | TIME PLOTTED => $TIME

BORDER LAST REVISED 7/2/2010 | USERNAME => $USER | DGN FILE => $REQUEST | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

Attachment 4

California Department of Transportation Wavier Letter

COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION
http://www.edcgov.us/DOT/

PLACERVILLE OFFICES:
MAIN OFFICE:
2850 Fairlane Court, Placerville, CA 95667
(530) 621-5941 / (530) 621-2030 Fax

CONSTRUCTION & MAINTENANCE:
2441 Headington Road, Placerville, CA 95667
(530) 642-4909 / (530) 642-0508 Fax

LAKE TAHOE OFFICES:
ENGINEERING:
924 B Emerald Bay Road, South Lake Tahoe, CA 96150
(530) 573-7900 / (530) 541-7049 Fax

MAINTENANCE:
1121 Shakori Drive, South Lake Tahoe, CA 96150
(530) 573-3180 / (530) 577-8402

February 6, 2019

Amarjeet S. Benipal
District 3 Director
California Department of Transportation
703 B Street
Marysville, CA 95901

RE: Waiver of Utility Undergrounding – U.S. 50/Camino Area Safety Project

Dear Mr. Benipal:

This is to advise you that County of El Dorado is in support of Caltrans' upcoming programmed project to improve the safety on U.S. Highway 50 in Camino. The County Supervisor from the district where the project is located has been advised of the site conditions and is in agreement with the requested waiver.

As you know, this project is located in corridors designated as a scenic highway. County staff has recently reviewed the State's preliminary plans for this project and has concluded that relocation of a limited number of aerial PG&E/AT&T/Comcast utility poles within the project's footprint in the Camino Heights area will not negatively impact the visual integrity of the surrounding environment. Therefore, County is in support of Caltrans' request to the California Public Utility Commission (CPUC) for a deviation to Section 320 of the California Public Utilities Code. PG&E is the lead utility company on these existing poles and PG&E personnel have been advised of this support in writing. We are very appreciative that Clark Peri of your staff advised us of this situation. Through his efforts, we were able to resolve the matter in a way that will result in a cost savings to the public as well as allowing the needed safety improvement work to go forward sooner. Please let me know if you need any additional information.

Sincerely,

Rafael Martinez
Director
Department of Transportation
El Dorado County

Cc: Caltrans- Clark Peri, Robert Ronald
PG&E- Jennifer Donovan

Attachment 4a

California Department of Transportation Camino Safety Project

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 741-4346
FAX (530) 741-4490
TTY 711
www.dot.ca.gov/dist 3

Making Conservation a California Way of Life.

March 25, 2019

Mrs. Annalesa Morlock
A2WC@pge.com
Pacific Gas & Electric
343 Sacramento Street
Sacramento, CA 95603

Subject: Camino Safety Project (EA 03-4E620): California Scenic Highway

This memorandum has been prepared to summarize Caltrans' determination that the existing utility poles requiring relocation (Impacted Facility #1 and #2) and the proposed location of the replacement poles for the above referenced project does not affect the California Scenic Highway along United States Highway 50 (US 50) as it relates to Section 260 of the Streets and Highways Code and California Public Utilities (PU) Code Section 320.

Introduction & Background

The California Department of Transportation (Caltrans) has selected Wood Rodgers as the design consultant for this project. The project team is in the Final Design phase of the Camino Safety Project (Project). The Project's area of concern, highlighted in this letter, is located in the County of El Dorado along US 50 near Pondorado Road in the Camino community. To improve safety, the Project proposes to install a continuous concrete median barrier from Still Meadow Road to Upper Carson Road. The new median barrier will restrict left-turn movements at at-grade intersections within the project limits. Installation of the continuous concrete median barrier will result in motorists on both the north and south side of US 50 driving out of direction for several miles to travel eastbound and westbound on US 50. To reduce the out of direction travel, a new bridge undercrossing and local road will be constructed near the east end of Pondorado Road that will allow local traffic to access the north and south side of US 50. The new local road will cross under US 50 and connect to Carson Road and Carson Court on the north side of US 50. During the planning and design process, it was determined by the project team that two 12 kV Pacific Gas & Electric (PGE) utility poles, owned and operated by PG&E (Impacted Facility #1 & #2), were in conflict with the proposed improvements near Pondorado Road, thereby requiring relocation. The impacted facilities also have joint utility owners, AT&T and Comcast.

Understanding of California Scenic Highway

Caltrans has designated the portion of US 50 between the City of Placerville and South Lake Tahoe, approximately 58 miles, a California Scenic Highway pursuant to the Streets and Highways Code Section 260. The Project is located within the section of US 50 designated a Scenic Highway.

Caltrans has written guidance through the establishment of the California Scenic Highway Program (Program) that designates the Scenic Highway as the land generally adjacent to and visible from the highway using a motorist's line of vision.

Determination

It is understood the relocated poles are subject to the PU Code Section 320 criteria and still "within 1,000 feet of any highway designated an official scenic highway and visible from that highway." However, the project team has determined that the relocated poles are proposed to be located further south or away from the view of US 50 and will have an insignificant impact to the aesthetic view (Please see Exhibit 1).

Since the relocation of these two joint poles is contained to just a small part of a longer line of PG&E poles that run along US 50, the project team was able to design the new alignment of poles without having to impact any other pole within this line. So, any potential to add an impact on the aesthetic view due to a relocation of a pole that was not in conflict with the project is non-existent.

Current views from a proprietary street map indicates motorists traveling eastbound on US 50 do not see either of the poles as they are both obscured behind an existing tree line. Pole #2 is only visible from US 50 after motorists pass the tree line. Whereas, US 50 westbound motorists might view both poles from the highway due to a clearing of the trees, meaning that there are fewer planted trees in an open space for the poles to hide behind.

Proposed project plans indicate, after the relocation, pole #2 will be relocated far enough to the south that the view from eastbound US 50 will no longer be visible in the motorist's line of vision. Traveling westbound, with pole #1 and #2 being relocated further south from US 50 and potentially behind trees, the poles would no longer be within the motorist's line of vision. In addition, to improve safety on US 50, the new median barrier will be 54 inches in height, further obscuring westbound motorist's view of the relocated poles.

Therefore, it is determined that relocation of pole #1 and pole # 2 south of their existing location will have an insignificant impact on the existing aesthetic view of the Scenic Highway when traveling both westbound and eastbound on US 50.

If any additional information is needed, please do not hesitate to contact Robert Ronald, Caltrans Right-of-Way Utilities Coordinator at (530) 741-4346 or email: robert.ronald@dot.ca.gov.

Thank you for all the assistance you have provided.

Sincerely,

Clark A. Peri.PE, PMP
Project Manager
Caltrans, District 3

Brian Krcelic, PE
Project Engineer
Wood Rodgers, Inc.

Attachment:
Impacted Facilities #1 & #2 - Dated: March 25, 2019

Attachment 5

CEQA Categorical Exemption and NEPA Programmatic Categorical Exclusion

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM

03/ED/50/21.95-24.45		03-4E620	0314000039
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

PROJECT DESCRIPTION: (Briefly describe project including need, purpose, location, limits, right-of-way requirements, and activities involved in this box. *Use Continuation Sheet, if necessary.)*

Caltrans proposes to improve safety on US 50 in the Camino corridor by installing a concrete median barrier that would restrict left-turn movements at at-grade intersections, widening the outside shoulders to standard width, and installing several acceleration/deceleration lanes to help reduce collisions within the project limits. Safety improvements are needed because the collision rates along this segment of US 50 are higher than the statewide average. Uncontrolled left-turn movements at intersections and driveways and cross-centerline collisions contribute to an increase in potential conflicts. The project is in El Dorado County on US 50 from PM 21.95 to PM 24.45. The total length of the project is approximately 2.4 miles.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal and supporting information, the following statements are true and exceptions do not apply (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION (Check one)

☐ **Not Applicable – Caltrans is not the CEQA Lead Agency**

☒ **Not Applicable – Caltrans has prepared an Initial Study or Environmental Impact Report under CEQA**

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
Based on an examination of this proposal, supporting information, and the above statements, the project is:

☐ **Categorically Exempt. Class** . (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3].)

Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager	
Signature	Date	Signature	Date

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NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA, and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b).

CALTRANS NEPA DETERMINATION (Check one)

☐ **23 USC 326:** The State has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an EA or EIS under the National Environmental Policy Act. The State has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding dated May 31, 2016, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☐ **23 CFR 771.117(c): activity (c)(___)**
- ☐ **23 CFR 771.117(d): activity (d)(___)**
- ☐ **Activity ___ listed in Appendix A of the MOU between FHWA and the State**

☒ **23 USC 327:** Based on an examination of this proposal and supporting information, the State has determined that the project is a Categorical Exclusion under 23 USC 327. The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

Kelly McNally		**Clark Peri**	
Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager/DLA Engineer	
Kelly McNally	3-22-18	Clark Peri	3-22-18
Signature	Date	Signature	Date

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

03/ED/50/21.95-24.45 Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	**03-4E620** E.A/Project No.	**0314000039** Federal-Aid Project No. (Local Project)/Project No.
Date of Categorical Exclusion Checklist completion: 3.22.18		Date of ECR or equivalent : 10.11.17	

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., CE checklist, additional studies and design conditions).

Continued from page 1:
Avoidance and minimization measures include:

- Provide temporary signage directing visitors to area attractions and businesses
  - During construction, ample signage will be provided to guide drivers to local tourist attractions and other businesses.
- Implement a Traffic Management Plan during Construction
  - Implementation of the measures in the TMP will reduce the temporary access and circulation impacts of the project caused by potentially lengthy construction delays.The TMP will include the following measures:
  - Any emergency service agency whose ability to respond to incidents will be affected by any lane closure must be notified prior to that closure.
  - Work will be coordinated with the local busing system (including school buses and public systems) to minimize impacts on their bus schedules.
  - The lead agency will provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction.
- Revegetating Slopes and Providing Aesthetic Treatments.
  - Visual impacts would be reduced by project features such as revegetating slopes and providing aesthetic treatments for retaining walls. If an alternative that includes roundabouts is selected, the roundabouts would be landscaped as part of project design. Specific aesthetic and landscape treatments will be developed when an alternative is selected and as project design progresses.
- Implement a Storm Water Pollution Prevention Plan and Caltrans' Best Management Practices to Avoid and Minimize Potential Effects on Water Quality.
  - Implementation of the Storm Water Pollution Prevention Plan (SWPPP), Caltrans' best management practices (BMPs), and stormwater guidance measures will minimize the potential for construction-related surface water pollution and ensure that water quality will not be compromised during construction. The following BMPs will be considered for the project to minimize water quality effects from construction.
  - Handle, store, and use construction materials in ways that prevent their release into stormwater.
  - Schedule construction work to coordinate with the installation of erosion and sediment control practices.
  - Use appropriate fueling and maintenance procedures to reduce discharge of pollutants.
  - Place designated equipment wash areas away from exposed areas.
- The following BMPs will be considered for the project to minimize effects on water quality from operation and construction.
  - Manage waste (concrete and other hazardous materials) to prevent release of waste into stormwater.
  - All construction would conform to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit requirements to maintain water quality within the project area and vicinity; these requirements include stormwater and non-stormwater quality protection measures for all construction activities within the Caltrans right-of-way.
- Conduct Site Investigation and Develop and Implement Plans to Address Worker Health and Safety
  - A site investigation of the road right-of-way will be conducted prior to acquisitions and construction to determine the extent and nature of possible contamination and implement appropriate avoidance or remediation measures according to state and federal regulations.
  - As necessary, and as required by Caltrans and federal and state regulations, plans such as a health and safety plan, BMPs, and/or an injury and illness prevention plan will be prepared and implemented to address worker safety when working with potentially hazardous materials, including potential aerially deposited lead (ADL), styrene, lead or chromium in traffic stripes, naturally-occurring asbestos (NOA), and other construction-related materials within the right-of-way during any soil-disturbing activity.
  - If project components are removed that may contain treated wood waste (TWW) (e.g., signposts, metal beam guardrail wood posts, and lagging on retaining walls), the contractor must prepare and submit a safety and health work practices plan for handling TWW that is approved by an American Board of Industrial Hygiene Certified Industrial Hygienist. TWW will be disposed of in accordance with Standard Special Provisions (SSP) 14-11.09 (Treated Wood Waste) in an approved TWW facility. Construction workers who handle this material must be provided with training that includes the following.
    - All applicable requirements of Title 8 California Code of Regulations (CCR).
    - Procedures for identifying and segregating TWW.

- Safe handling practices.
- Requirements of Title 22 CCR, Division 4.5, Chapter 34.
- Proper disposal methods.

- Conduct a NOA Site Investigation
  - An investigation for NOA will be conducted in the project area along US 50 prior to construction work to determine if NOA is present in areas where surface materials would be disturbed. The presence of NOA cannot be confirmed until a detailed site investigation is performed. The results of this investigation will dictate the work practices that must be followed.
  - Any material with NOA exceeding a concentration of 0.25% that is excavated from a project site is required to be reused with appropriate cover, disposed of at a state-owned facility in accordance with the Caltrans' policy for NOA, or taken to a landfill licensed to accept the material.
- Develop a Lead Compliance Plan for Traffic Stripe Removal and Disposal
  - Traffic stripes for the project will be cold planed. Grindings (traffic stripes and asphalt) will be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints) which requires a lead compliance plan.
  - The contractor will prepare a project-specific lead compliance plan to prevent or minimize worker exposure to lead while handling the removed yellow thermoplastic and yellow paint residue in accordance with Title 8, CCR, Section 1532.1. Prior to submission of the plan to Caltrans, it will be approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene.
- Perform Soil Testing and Dispose of Soils Contaminated with ADL Appropriately
  - To prevent exposure of workers and the public to lead, soil testing for ADL contamination will be conducted in the project area along US 50 prior to construction work.
  - Soils in the project limits that are identified as having hazardous levels of ADL will be disposed of or reused according to federal and state regulations. Soils within the right-of-way that contain hazardous waste concentrations of ADL may be reused under the authority of variances issued by the California Department of Toxic Substances Control. These variances include stockpiling, transporting, and reusing soils with concentrations of lead below maximum allowable levels in the project right-of-way. Stockpiling, transporting and reusing of soil will also be conducted following Caltrans' standard special provisions.
- Implement Additional Control Measures for Construction Emissions of Fugitive Dust
  - Additional measures to control dust will be borrowed from EDCAQMD's Rule 223-1, Fugitive Dust – Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Trackout Prevention, which limits fugitive dust emissions from construction, and construction related activities, and implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the NPDES permit, Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project.
- Establish Environmentally Sensitive Areas
  - Additional direct and indirect impacts on sensitive biological resources, including wetland and other waters resources, throughout the Environmental Study Limit (ESL) will be avoided or minimized; Caltrans will designate these features outside of the construction impact area as environmentally sensitive areas (ESAs) on project plans and in project specifications. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not necessarily limited to, the use of temporary orange fencing to identify the proposed limit of work in areas adjacent to sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavated materials). ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete.
- Limit Vegetation Removal
  - Vegetation removal will be limited to the minimum amount required for construction. Caltrans will install ESA fencing between the designated work area and vegetation communities supporting oak trees to minimize disturbance to this habitat.
- Replace Oak Trees within Highway Right-of-Way
  - Caltrans will provide on-site replacement oak plantings within the highway right-of-way (ROW) beyond the clear recovery zone (CRZ) where feasible.

- An on-site restoration and revegetation plan addressing oak planting within Caltrans ROW will be prepared by the District Biologist and Restoration Specialist and submitted to the applicable permitting agencies for review and approval prior to project construction. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and District Biologist.
- Any seed (acorns) or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics and approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.

• Containment Measures / Construction Site Best Management Practices

- Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. BMPs for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.
- The project is subject to stormwater quality regulations established under the NPDES, described in Section 402 of the federal Clean Water Act (CWA). In California, the NPDES program requires that any construction activity disturbing 1 or more acres comply with the statewide General Permit, as authorized by the State Water Resources Control Board (SWRCB). The General Permit requires elimination or minimization of non-stormwater discharges from construction sites and development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for the site.

• Caltrans and its contractors will comply with all construction site BMPs specified in the SWPPP and any other permit conditions to minimize the introduction of construction-related contaminants and mobilization of sediment in wetlands and other waters in and adjacent to the ESL. These BMPs will address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-stormwater management, and waste management practices. The BMPs will be based on the best conventional and best available technology. The BMPs will include, but are not limited to, the following:

- Conduct all drainage, earthwork, or foundation activities involving wetlands and other waters in the dry season (generally between June 15 and October 15, may vary based on weather).
- Where working areas encroach on live or dry streams, lakes, or wetlands, Regional Water Quality Control Board (RWQCB) - approved physical barriers adequate to prevent the flow or discharge of sediment into these systems will be constructed and maintained between working areas and streams, lakes, and wetlands. Discharge will be contained through the use of RWQCB-approved measures that will keep sediment from entering protected waters.
- Oily or greasy substances originating from the contractor's operations will not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland.
- Asphalt concrete will not be allowed to enter a live or dry stream, pond, or wetland.

• Restore Temporarily Affected Areas On-Site

- Disturbed areas within the construction limits will be graded to minimize surface erosion and siltation into receiving waters. Areas that are disturbed by construction activities will be stabilized as soon as feasible (and no later than October 15th of each construction season) to avoid erosion during subsequent storms and runoff.
- An on-site restoration and revegetation plan will be prepared by the District Biologist and Restoration Specialist and submitted to the permitting agencies for review and approval prior to project construction. Once construction is complete, a final site review will be performed by the District Biologist and Restoration Specialist to ensure channel topography is restored and appropriate for seeding/planting. Bare areas will be covered with mulch and revegetated with appropriate native species to pre-project conditions. Construction site BMPs will be utilized to prevent contamination of the stream-bank and watercourse from construction material and debris. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and Project Biologist.
- Permanent erosion control seeding will be performed at all disturbed sites by hydro-seeding with an application of native grass straw mulch over the course of construction as each site is completed, with all sites seeded by the completion of construction activities. Additional riparian restoration planting using container plants will be conducted the first fall following the first growing season post-construction. This allows observation of water flow patterns (that then direct the planting distribution of these species) and allows observation and addressing of any problems resulting from winter flows.
- Any seed or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics. Willow cuttings for use in biotechnical bank stabilization will be obtained from the vicinity of the project from along the existing Caltrans ROW or from sites approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.

• Restrict Timing of Woody Vegetation Removal—Birds

- Vegetation Removal and Ground Disturbance: The contractor will take such measures as necessary to prevent disturbing any areas that will cause conflict between performing necessary work and nesting migratory birds.

- Birds will be allowed to nest in any areas where conflicts with construction are not anticipated. If contractors work does not conflict with bird nesting, then no further measures are required.
- If woody vegetation removal, construction of structures, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds (February 1st to September 30th), a focused survey for active nests of such birds will be conducted by a qualified biologist within 15 days prior to the beginning to project-related activities. If active nests are found, Caltrans will consult with the U.S. Fish and Wildlife Service (USFWS) regarding appropriate action to comply with the Migratory Bird Treaty Act (MBTA) of 1918 and with the California Department of Fish and Wildlife (CDFW) to comply with provisions of the Fish and Game Code of California.
- If a lapse in project-related work of 15 days or longer occurs, another survey and, if required, consultation with USFWS and CDFW will be required before the work can be reinitiated.
- If contractors perform woody vegetation removal or other construction activities within nesting bird habitat between February 1st to September 30th, then no further measures are required.

• Restrict Timing of Woody Vegetation Removal—Bats

- Trees should be removed between October 1st to January 31st. If trees are removed between February 1st to September 30th a two-phase system of removing tree limbs one day and cutting the remaining boles on the next day will be employed. Evergreen trees can be limbed early in the day, but work on trees likely to be used as day roosts by bats should occur as late in the first day as possible. Live deciduous trees lacking cavities, broken limbs, and deep bark fissures (particularly riparian trees) should be limbed by chainsaw late in the afternoon of one day (to the extent possible), starting with the lower branches and delaying the cutting of higher branches prior to a minimum of 15 minutes of chainsaw operation. The intent of this method is that any red bats using live deciduous trees will be awakened by the chainsaw and leave the tree close enough to dusk that this disturbance event will not result in increased predation or injury. To the extent possible, snags and trees with cavities, broken limbs, or deep bark fissures should also be limbed late in the day and struck repeatedly with percussive force (i.e., with the bucket of an excavator) or tapped with hand tools for 15 minutes prior to being limbed. The intent of this method is that any crevice-roosting bats will be awakened by the percussive force and leave the tree close enough to dusk that this disturbance event will not result in increased predation or injury.

• Restrict Timing of Woody Vegetation Removal

- It is recommended that the removal of any woody vegetation (trees and shrubs) required for the project be completed between October 1st to January 31st prior to project construction, outside of the predicted nesting season for raptors and migratory birds in this area. Vegetation removal outside this time period may not proceed until a survey by a qualified biologist determines no migratory bird nests are present or in use.

• Weed Free Construction Equipment

- All off-road construction equipment will be cleaned of potential noxious weed sources (mud, vegetation) before entry into the project area ESL, and after entering a potentially infested area before moving on to another area, to help ensure noxious weeds are not introduced into the ESL. The contractor shall employ whatever cleaning methods (typically with the use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Equipment washing stations shall be placed in areas that afford easy containment and monitoring and that do not drain into sensitive (riparian, streams, wetlands, etc.) areas.

• Equipment Staging in Weed Free Areas

- Staging and storage of equipment should only be done in weed free areas. Infestations of noxious and/or highly invasive weeds were mapped as part of the project planning effort to determine if pre-construction hand, mechanical, or chemical eradication treatments are feasible, or if it is feasible prior to designating these areas for the contractor's use.

• Weed Free Erosion Control and Revegetation Treatments

- To further minimize the risk of introducing additional non-native species into the area, only locally adapted plant species appropriate for the project area ESL will be used in any erosion control or revegetation seed mix or stock. No dry-farmed straw will be used, and certified weed-free straw shall be required where erosion control straw is to be used. In addition, any hydroseed mulch used for revegetation activities must only contain native species.

With the following mitigation measures incorporated, the proposed project would have less-than-significant effects to natural communities, wetlands and other waters, and animal species.

• Preserve/Improve Wildlife Movement. Caltrans will include the following design considerations for roadway improvements to minimize impacts on wildlife movement across the highway.

- Where culverts are upgraded they would be designed as much as practicable to accommodate small- and medium-sized mammals, reptiles, and amphibians. This may include such features as ensuring culverts are at grade with the surrounding landscape and trimming or planting appropriate vegetation.
- Gaps and scuppers will be installed in the median barrier at the appropriate locations to ensure habitat connectivity.
- To accommodate wildlife connectivity and in an effort to prevent wildlife and vehicle collisions, a large mammal wildlife crossing would be installed in a strategic location to ensure use by all possible taxa. Fencing would be placed to direct species into the crossing.
- The wildlife crossing will be monitored to ensure the structure meets biological and management goals. Monitoring will be conducted using motion-detecting wildlife cameras.

• Compensate for Permanent Impacts to Riparian Habitat

- To compensate for the permanent project impacts on riparian habitat, Caltrans will purchase credits at an approved mitigation bank. The compensation ratio is expected to be between 1:1 and 3:1 to compensate for temporal losses of riparian habitat between the project impact and the implementation of establishment projects. The project proponent also will implement the conditions and requirements of state and federal permits that will be obtained for the proposed project.

• Compensate for Permanent Impacts to Wetlands

- To compensate for the permanent project impacts on potentially jurisdictional wetlands, Caltrans will purchase credits at an approved mitigation bank or through the participation in the U.S. Army Corps of Engineers (USACE) National Fish and Wildlife Foundation (NFWF) in-lieu fee program to ensure no net loss of wetland functions and values.
- If in-lieu fees are based on USACE methodology, the in-lieu fee wetland compensation ratio is expected to be between 1:1 and 3:1 to compensate for "temporal" losses of wetland functions and values between the project impact and the implementation of wetland establishment projects within the identified watershed, and to ensure no-net-loss of wetland habitat functions and values. Caltrans will also implement the conditions and requirements of state and federal permits that will be obtained for the proposed project.

• Compensate for Permanent Impacts to Other Waters

To compensate for the permanent project impacts on potentially jurisdictional other waters of the United States, Caltrans will purchase credits at an approved mitigation bank or through the participation in the USACE NFWF in-lieu fee program to ensure no net loss of waters of the United States.

- If in-lieu fees are based on USACE methodology, the in-lieu fee waters compensation ratio is expected to be between 1:1 and 3:1.

Camino Safety Project

EL DORADO COUNTY, CALIFORNIA
DISTRICT 3 – ED – 50 (PM 21.95/24.45)
03-4E620/0314000039

Final Initial Study with Mitigated Negative Declaration/Final Section 4(f) De Minimis Determination

Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

Caltrans

January 2018

General Information about this Document

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study with Mitigated Negative Declaration for the proposed project located in El Dorado County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The Initial Study circulated to the public for 30 of days between October 11, 2017 and November 9, 2017. Comments received during this period are included in Appendix E. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document circulation. Minor editorial changes and clarifications have not been so indicated. Additional copies of this document and the related technical studies are available for review at Caltrans District 3, 703 B Street, Marysville, CA 95901, Placerville Library, 345 Fair Lane, Placerville, CA 95667, and Pollock Pines Public Library, 6210 Pony Express Trail, Pollock Pines, CA 95726. This document may be downloaded at the following website: http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Kristen Stubblefield, Associate Environmental Planner, Department of Transportation, District 3 703 B Street; (530) 741-5124 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

FHWA Highway ID No.

SCH:2017102027
03-ED-50-PM 21.95/24.45
03-4E620
0314000039

Install safety improvements on US 50
US Highway 50, in El Dorado County, Post Miles 21.95 to 24.45

FINAL INITIAL STUDY with Mitigated Negative Declaration/Final Section 4(f) De Minimis Determination

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA
Department of Transportation

Cooperating Agencies: El Dorado County
Responsible Agencies: California Transportation Commission

1-30-2018
Date of Approval

Suzanne Melim
Suzanne Melim
Office Chief
California Department of Transportation
CEQA Lead Agency

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

Kristen Stubblefield
Caltrans District 3
703 B Street, Marysville, CA 95031
(530) 741-5124

MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to improve safety on U.S. Highway 50 (US 50) in the Camino corridor by installing a concrete median barrier that would restrict left-turn movements at at-grade intersections, widening the outside shoulders to standard width, and installing several acceleration/deceleration lanes to help reduce collisions within the project limits. The project is in El Dorado County on US 50 from post mile (PM) 21.95 to PM 24.45. The total length of the project is approximately 2.4 miles.

Determination

This Mitigated Negative Declaration (MND) is included 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 following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on coastal zone, Wild & Scenic Rivers, parks and recreational facilities, growth, farmlands/timberlands, hydrology and floodplain, geology/soils/seismic/topography, paleontology, noise, sensitive plant species, and threatened and endangered species.

In addition, the proposed project would have less-than-significant effects to community impacts (community character and cohesion, relocations and real property acquisition, environmental justice), utilities/emergency services, traffic and transportation/pedestrian and bicycle facilities, visual resources, water quality and stormwater runoff, hazardous waste/materials, air quality, and invasive plant species.

Avoidance and minimization measures include:

- CIA-1: Provide temporary signage directing visitors to area attractions and businesses
  - During construction, ample signage will be provided to guide drivers to local tourist attractions and other businesses.
- TRA-1: Implement a Traffic Management Plan during Construction
  - A Traffic Management Plan (TMP) is a program of activities for alleviating or minimizing work-related traffic delays by applying traditional traffic handling practices and innovative strategies such as public awareness campaigns, motorist information, demand management, incident management, system management, construction methods and staging, and alternate route planning. TMP strategies also strive to reduce overall duration of work activities where appropriate. Typical components of a TMP can include measures such as the implementation of staging, traffic handling, and detour plans;

restricting construction work to certain days and/or hours to minimize impacts to traffic and pedestrians; coordination with other construction projects to avoid conflicts; and the use of portable changeable message signs to inform the public of construction activities.

  - Implementation of the measures in the TMP will reduce the temporary access and circulation impacts of the project caused by potentially lengthy construction delays. In addition to the measures described above, the TMP will include the following measures:
  - Any emergency service agency whose ability to respond to incidents will be affected by any lane closure must be notified prior to that closure.
  - Work will be coordinated with the local busing system (including school buses and public systems) to minimize impacts on their bus schedules.
  - The lead agency will provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction.

- VIS-1: Revegetating Slopes and Providing Aesthetic Treatments.
  - Visual impacts would be reduced by project features such as revegetating slopes and providing aesthetic treatments for retaining walls. If an alternative that includes roundabouts is selected, the roundabouts would be landscaped as part of project design. Specific aesthetic and landscape treatments will be developed when an alternative is selected and as project design progresses.
- WQ-1: Implement a Storm Water Pollution Prevention Plan and Caltrans' Best Management Practices to Avoid and Minimize Potential Effects on Water Quality.
  - Implementation of the Storm Water Pollution Prevention Plan (SWPPP), Caltrans' best management practices (BMPs), and stormwater guidance measures will minimize the potential for construction-related surface water pollution and ensure that water quality will not be compromised during construction. The following BMPs will be considered for the project to minimize water quality effects from construction.
  - Handle, store, and use construction materials in ways that prevent their release into stormwater.
  - Schedule construction work to coordinate with the installation of erosion and sediment control practices.
  - Use appropriate fueling and maintenance procedures to reduce discharge of pollutants.
  - Place designated equipment wash areas away from exposed areas.
- The following BMPs will be considered for the project to minimize effects on water quality from operation and construction.
  - Manage waste (concrete and other hazardous materials) to prevent release of waste into stormwater.
  - All construction would conform to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit requirements to maintain water quality within the project area and vicinity; these requirements include stormwater and non-stormwater quality protection measures for all construction activities within the Caltrans right-of-way.

- HAZ-1: Conduct Site Investigation and Develop and Implement Plans to Address Worker Health and Safety
  - A site investigation of the road right-of-way will be conducted prior to acquisitions and construction to determine the extent and nature of possible contamination and implement appropriate avoidance or remediation measures according to state and federal regulations.
  - As necessary, and as required by Caltrans and federal and state regulations, plans such as a health and safety plan, BMPs, and/or an injury and illness prevention plan will be prepared and implemented to address worker safety when working with potentially hazardous materials, including potential aerially deposited lead (ADL), styrene, lead or chromium in traffic stripes, naturally-occurring asbestos (NOA), and other construction-related materials within the right-of-way during any soil-disturbing activity.
  - If project components are removed that may contain treated wood waste (TWW) (e.g., signposts, metal beam guardrail wood posts, and lagging on retaining walls), the contractor must prepare and submit a safety and health work practices plan for handling TWW that is approved by an American Board of Industrial Hygiene Certified Industrial Hygienist. TWW will be disposed of in accordance with Standard Special Provisions (SSP) 14-11.09 (Treated Wood Waste) in an approved TWW facility. Construction workers who handle this material must be provided with training that includes the following.
    - All applicable requirements of Title 8 California Code of Regulations (CCR).
    - Procedures for identifying and segregating TWW.
    - Safe handling practices.
    - Requirements of Title 22 CCR, Division 4.5, Chapter 34.
    - Proper disposal methods.
- HAZ-2: Conduct a NOA Site Investigation
  - An investigation for NOA will be conducted in the project area along US 50 prior to construction work to determine if NOA is present in areas where surface materials would be disturbed. The presence of NOA cannot be confirmed until a detailed site investigation is performed. The results of this investigation will dictate the work practices that must be followed.
  - Any material with NOA exceeding a concentration of 0.25% that is excavated from a project site is required to be reused with appropriate cover, disposed of at a state-owned facility in accordance with the Caltrans' policy for NOA, or taken to a landfill licensed to accept the material.
- HAZ-3: Develop a Lead Compliance Plan for Traffic Stripe Removal and Disposal
  - Traffic stripes for the project will be cold planed. Grindings (traffic stripes and asphalt) will be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints) which requires a lead compliance plan.
  - The contractor will prepare a project-specific lead compliance plan to prevent or minimize worker exposure to lead while handling the removed yellow thermoplastic and yellow paint residue in accordance with Title 8, CCR, Section 1532.1. Prior to

submission of the plan to Caltrans, it will be approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene.

- HAZ-4: Perform Soil Testing and Dispose of Soils Contaminated with ADL Appropriately
  - To prevent exposure of workers and the public to lead, soil testing for ADL contamination will be conducted in the project area along US 50 prior to construction work.
  - Soils in the project limits that are identified as having hazardous levels of ADL will be disposed of or reused according to federal and state regulations. Soils within the right-of-way that contain hazardous waste concentrations of ADL may be reused under the authority of variances issued by the California Department of Toxic Substances Control. These variances include stockpiling, transporting, and reusing soils with concentrations of lead below maximum allowable levels in the project right-of-way. Stockpiling, transporting and reusing of soil will also be conducted following Caltrans' standard special provisions.
- AQ-1: Implement California Department of Transportation Standard Specification Sections 18, 13-5, and 13-4.03C(3) per Standard Specification Section 10-5, in addition to Standard Specification 14-11.04
  - To control the generation of construction-related PM10 emissions, the project proponent will follow Standard Specification Section 14, Air Quality, which includes specifications relating to air quality. Standard Specification Section 14-9.02 requires compliance with El Dorado County Air Quality Management District (EDCAQMD) rules, regulations, ordinances, and statutes that apply to work performed under the contract, including air pollution control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 (Public Contract Code § 10231). Standard Specification Section 10-5 addresses dust control requirements by preventing and alleviating dust by means of Standard Specification Section 18 (applying dust palliatives), Standard Specification Section 13-5 (applying temporary soil stabilization), and Standard Specification Section 13-4.03C(3) (managing material stockpiles). In addition, Standard Specification Section 14-11.04 addresses dust control associated with material containing hazardous waste or contamination.
- AQ-2: Implement Additional Control Measures for Construction Emissions of Fugitive Dust
  - Additional measures to control dust will be borrowed from EDCAQMD's Rule 223-1, Fugitive Dust – Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Trackout Prevention, which limits fugitive dust emissions from construction, and construction related activities, and implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the NPDES permit, Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project.
- BIO-1: Establish Environmentally Sensitive Areas
  - Additional direct and indirect impacts on sensitive biological resources, including wetland and other waters resources, throughout the Environmental Study Limit (ESL) will be avoided or minimized; Caltrans will designate these features outside of the construction impact area as environmentally sensitive areas (ESAs) on project plans and

in project specifications. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not necessarily limited to, the use of temporary orange fencing to identify the proposed limit of work in areas adjacent to sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavated materials). ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete.

- BIO-2: Limit Vegetation Removal
  - Vegetation removal will be limited to the minimum amount required for construction. Caltrans will install ESA fencing between the designated work area and vegetation communities supporting oak trees to minimize disturbance to this habitat.
- BIO-3: Replace Oak Trees within Highway Right-of-Way
  - Caltrans will provide on-site replacement oak plantings within the highway right-of-way (ROW) beyond the clear recovery zone (CRZ) where feasible.
  - An on-site restoration and revegetation plan addressing oak planting within Caltrans ROW will be prepared by the District Biologist and Restoration Specialist and submitted to the applicable permitting agencies for review and approval prior to project construction. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and District Biologist.
  - Any seed (acorns) or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics and approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.
- BIO-6: Containment Measures / Construction Site Best Management Practices
  - Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. BMPs for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.
  - The project is subject to stormwater quality regulations established under the NPDES, described in Section 402 of the federal Clean Water Act (CWA). In California, the NPDES program requires that any construction activity disturbing 1 or more acres comply with the statewide General Permit, as authorized by the State Water Resources Control Board (SWRCB). The General Permit requires elimination or minimization of non-stormwater discharges from construction sites and development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for the site.
- Caltrans and its contractors will comply with all construction site BMPs specified in the SWPPP and any other permit conditions to minimize the introduction of construction-related contaminants and mobilization of sediment in wetlands and other waters in and adjacent to the ESL. These BMPs will address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-stormwater management, and waste management practices. The BMPs will be based on the best conventional and best available technology. The BMPs will include, but are not limited to, the following:

- Conduct all drainage, earthwork, or foundation activities involving wetlands and other waters in the dry season (generally between June 15 and October 15, may vary based on weather).
- Where working areas encroach on live or dry streams, lakes, or wetlands, Regional Water Quality Control Board (RWQCB) - approved physical barriers adequate to prevent the flow or discharge of sediment into these systems will be constructed and maintained between working areas and streams, lakes, and wetlands. Discharge will be contained through the use of RWQCB-approved measures that will keep sediment from entering protected waters.
- Oily or greasy substances originating from the contractor's operations will not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland.
- Asphalt concrete will not be allowed to enter a live or dry stream, pond, or wetland.

- BIO-7: Restore Temporarily Affected Areas On-Site
  - Disturbed areas within the construction limits will be graded to minimize surface erosion and siltation into receiving waters. Areas that are disturbed by construction activities will be stabilized as soon as feasible (and no later than October 15th of each construction season) to avoid erosion during subsequent storms and runoff.
  - An on-site restoration and revegetation plan will be prepared by the District Biologist and Restoration Specialist and submitted to the permitting agencies for review and approval prior to project construction. Once construction is complete, a final site review will be performed by the District Biologist and Restoration Specialist to ensure channel topography is restored and appropriate for seeding/planting. Bare areas will be covered with mulch and revegetated with appropriate native species to pre-project conditions. Construction site BMPs will be utilized to prevent contamination of the stream-bank and watercourse from construction material and debris. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and Project Biologist.
  - Permanent erosion control seeding will be performed at all disturbed sites by hydro-seeding with an application of native grass straw mulch over the course of construction as each site is completed, with all sites seeded by the completion of construction activities. Additional riparian restoration planting using container plants will be conducted the first fall following the first growing season post-construction. This allows observation of water flow patterns (that then direct the planting distribution of these species) and allows observation and addressing of any problems resulting from winter flows.
  - Any seed or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics. Willow cuttings for use in biotechnical bank stabilization will be obtained from the vicinity of the project from along the existing Caltrans ROW or from sites approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.
- BIO-10: Restrict Timing of Woody Vegetation Removal—Birds
  - Vegetation Removal and Ground Disturbance: The contractor will take such measures as necessary to prevent disturbing any areas that will cause conflict between performing necessary work and nesting migratory birds.

- Birds will be allowed to nest in any areas where conflicts with construction are not anticipated. If contractors work does not conflict with bird nesting, then no further measures are required.
- If woody vegetation removal, construction of structures, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds (February 1st to September 30th), a focused survey for active nests of such birds will be conducted by a qualified biologist within 15 days prior to the beginning to project-related activities. If active nests are found, Caltrans will consult with the U.S. Fish and Wildlife Service (USFWS) regarding appropriate action to comply with the Migratory Bird Treaty Act (MBTA) of 1918 and with the California Department of Fish and Wildlife (CDFW) to comply with provisions of the Fish and Game Code of California.
- If a lapse in project-related work of 15 days or longer occurs, another survey and, if required, consultation with USFWS and CDFW will be required before the work can be reinitiated.
- If contractors perform woody vegetation removal or other construction activities within nesting bird habitat between February 1st to September 30th, then no further measures are required.

- BIO-11: Restrict Timing of Woody Vegetation Removal—Bats
  - Trees should be removed between October 1st to January 31st. If trees are removed between February 1st to September 30th a two-phase system of removing tree limbs one day and cutting the remaining boles on the next day will be employed. Evergreen trees can be limbed early in the day, but work on trees likely to be used as day roosts by bats should occur as late in the first day as possible. Live deciduous trees lacking cavities, broken limbs, and deep bark fissures (particularly riparian trees) should be limbed by chainsaw late in the afternoon of one day (to the extent possible), starting with the lower branches and delaying the cutting of higher branches prior to a minimum of 15 minutes of chainsaw operation. The intent of this method is that any red bats using live deciduous trees will be awakened by the chainsaw and leave the tree close enough to dusk that this disturbance event will not result in increased predation or injury. To the extent possible, snags and trees with cavities, broken limbs, or deep bark fissures should also be limbed late in the day and struck repeatedly with percussive force (i.e., with the bucket of an excavator) or tapped with hand tools for 15 minutes prior to being limbed. The intent of this method is that any crevice-roosting bats will be awakened by the percussive force and leave the tree close enough to dusk that this disturbance event will not result in increased predation or injury.
- BIO-12: Restrict Timing of Woody Vegetation Removal
  - It is recommended that the removal of any woody vegetation (trees and shrubs) required for the project be completed between October 1st to January 31st prior to project construction, outside of the predicted nesting season for raptors and migratory birds in this area. Vegetation removal outside this time period may not proceed until a survey by a qualified biologist determines no migratory bird nests are present or in use.

- BIO-13: Weed Free Construction Equipment

- All off-road construction equipment will be cleaned of potential noxious weed sources (mud, vegetation) before entry into the project area ESL, and after entering a potentially infested area before moving on to another area, to help ensure noxious weeds are not introduced into the ESL. The contractor shall employ whatever cleaning methods (typically with the use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Equipment washing stations shall be placed in areas that afford easy containment and monitoring and that do not drain into sensitive (riparian, streams, wetlands, etc.) areas.

- BIO-14: Equipment Staging in Weed Free Areas
  - Staging and storage of equipment should only be done in weed free areas. Infestations of noxious and/or highly invasive weeds were mapped as part of the project planning effort to determine if pre-construction hand, mechanical, or chemical eradication treatments are feasible, or if it is feasible prior to designating these areas for the contractor's use.

- BIO-15: Weed Free Erosion Control and Revegetation Treatments
  - To further minimize the risk of introducing additional non-native species into the area, only locally adapted plant species appropriate for the project area ESL will be used in any erosion control or revegetation seed mix or stock. No dry-farmed straw will be used, and certified weed-free straw shall be required where erosion control straw is to be used. In addition, any hydroseed mulch used for revegetation activities must only contain native species.

With the following mitigation measures incorporated, the proposed project would have less-than-significant effects to natural communities, wetlands and other waters, and animal species.

- BIO-4: Preserve/Improve Wildlife Movement. Caltrans will include the following design considerations for roadway improvements to minimize impacts on wildlife movement across the highway.
  - Where culverts are upgraded they would be designed as much as practicable to accommodate small- and medium-sized mammals, reptiles, and amphibians. This may include such features as ensuring culverts are at grade with the surrounding landscape and trimming or planting appropriate vegetation.
  - Gaps and scuppers will be installed in the median barrier at the appropriate locations to ensure habitat connectivity.
  - To accommodate wildlife connectivity and in an effort to prevent wildlife and vehicle collisions, a large mammal wildlife crossing would be installed in a strategic location to ensure use by all possible taxa. Fencing would be placed to direct species into the crossing.
  - The wildlife crossing will be monitored to ensure the structure meets biological and management goals. Monitoring will be conducted using motion-detecting wildlife cameras.
- BIO-5: Compensate for Permanent Impacts to Riparian Habitat

- To compensate for the permanent project impacts on riparian habitat, Caltrans will purchase credits at an approved mitigation bank. The compensation ratio is expected to be between 1:1 and 3:1 to compensate for temporal losses of riparian habitat between the project impact and the implementation of establishment projects. The project proponent also will implement the conditions and requirements of state and federal permits that will be obtained for the proposed project.

- BIO-8: Compensate for Permanent Impacts to Wetlands
  - To compensate for the permanent project impacts on potentially jurisdictional wetlands, Caltrans will purchase credits at an approved mitigation bank or through the participation in the U.S. Army Corps of Engineers (USACE) National Fish and Wildlife Foundation (NFWF) in-lieu fee program to ensure no net loss of wetland functions and values.
  - If in-lieu fees are based on USACE methodology, the in-lieu fee wetland compensation ratio is expected to be between 1:1 and 3:1 to compensate for "temporal" losses of wetland functions and values between the project impact and the implementation of wetland establishment projects within the identified watershed, and to ensure no-net-loss of wetland habitat functions and values. Caltrans will also implement the conditions and requirements of state and federal permits that will be obtained for the proposed project.
- BIO-9: Compensate for Permanent Impacts to Other Waters
  - To compensate for the permanent project impacts on potentially jurisdictional other waters of the United States, Caltrans will purchase credits at an approved mitigation bank or through the participation in the USACE NFWF in-lieu fee program to ensure no net loss of waters of the United States.
  - If in-lieu fees are based on USACE methodology, the in-lieu fee waters compensation ratio is expected to be between 1:1 and 3:1.

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Office Chief
District 3
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1-30-2018

Date

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Chapter 1 Proposed Project

1.1 Introduction

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

Caltrans proposes to improve safety on US 50 in the Camino corridor by installing a concrete median barrier that would restrict left-turn movements at at-grade intersections, widening the outside shoulders to standard width, and installing several acceleration/deceleration lanes to help reduce collisions within the project limits. Four build alternatives and one No-Build Alternative are analyzed in this Initial Study. The project is in El Dorado County on US 50 from PM 21.95 to PM 24.45. The total length of the project is approximately 2.4 miles. Figures 1 and 2 show project location and vicinity maps. Figures 3, 4, 5, and 6 show the build alternatives.

This project is included in the 2016 Federal Statewide Transportation Improvement Program (FSTIP) and is proposed for funding from the Highway Safety Improvement Program (HSIP), local transportation funds, and State Highway Operations and Protection Program (SHOPP) – Safety Improvements. It is also included in the Sacramento Area Council of Governments (SACOG) 2016 (covering 2012–2036) Metropolitan Transportation Plan (MTP) and the 2016 cost-constrained Metropolitan Transportation Improvement Program (MTIP).

1.2 Purpose and Need

The purpose of this project is to improve safety on US 50 in the Camino corridor by installing a concrete median barrier that would restrict left-turn movements at at-grade intersections, widening the outside shoulders to standard width, and installing several acceleration/deceleration lanes. The improvements would maintain local and regional access to and from the north and south sides of US 50, while providing safe east-west access on and off the highway.

The need for this project is to improve safety on US 50 in the Camino area. Safety improvements are needed because the collision rates along this segment of US 50 are higher than the statewide average. Uncontrolled left-turn movements at intersections and driveways and cross-centerline collisions contribute to an increase in potential conflicts.

The findings of a traffic study in August of 2009 by DKS Associates showed that there are operations and safety issues in the Camino corridor on US 50 that occur at the unsignalized intersection within the project limits. The turning movements, primarily left turns, result in a delay for drivers and potential conflict locations. This project proposes alternatives that focus on eliminating or reducing potential conflicts, improving safety and traffic flow. The project area is well traveled, and the existing daily peak hour volume on US 50 for the segment west of Upper Carson Road is 2,650 vehicles per hour with a daily volume of 25,000 vehicles per day.

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Figure 1. Project Vicinity

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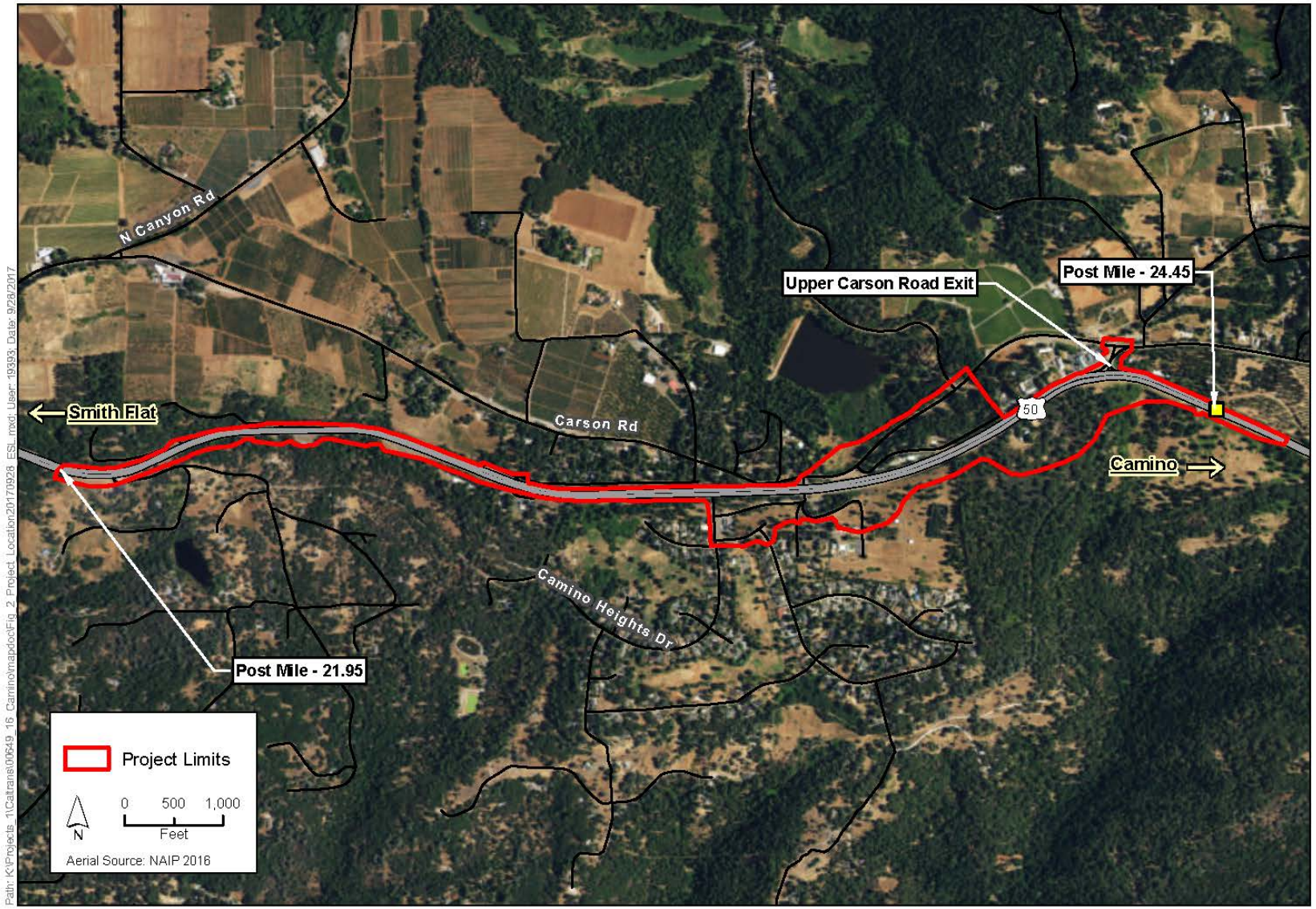

Figure 2. Project Location

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Traffic Accident Surveillance and Analysis System (TASAS) data was collected for the most recent 3 years from January 1, 2011, through December 31, 2013, to determine the collision history at this location. This report identified a total of 44 collisions. The collision breakdown is as follows: 1 fatal, 18 injury, and 25 property damage only (PDO) collisions. Twenty-eight of the collisions involved multiple vehicles.

Collision rates for this location and similar statewide facilities are shown in Table 1-1.

Table 1-1. TASAS Collision Summary for US 50 (January 2011 to December 2013)

Location	Collisions	Actual Rates (Collisions/Million Vehicle Miles)			Statewide Average Rate (Collisions/Million Vehicle Miles)		
		Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
ED-50 R21.95/24.25	44	0.019	0.36	0.84	0.007	0.30	0.73

A review of the collision data indicates the following types of collisions: 10 hit object, 10 broadside, 6 rear end, 5 other, 7 sideswipe, 2 head-on, and 3 overturn. The main primary collision factors listed include “Failure to yield” and “Other violations”. These two factors were cited in 59% of all collisions listed for this location. Three of the collisions involved impaired drivers. Over 75% of all collisions occurred during daylight hours when the weather was clear and the roadway dry. The collisions listed in Table 1-1 are for US 50 and include 10 collisions that occurred within the intersections identified in Table 1-2.

Intersection-related collisions are summarized in Table 1-2 and are for the same PM limits and time period as Table 1-1.

Table 1-2. Intersection Collisions from January 2011 to December 2013

Intersection	Broadside	Rear End	Sideswipe	Hit Object	Head On
Still Meadow Rd.	3	2	0	1	0
5Mi/Paul Bunyan Rd.	1	1	0	3	0
Camino Heights Dr.	4	0	0	0	1
Lower Carson Rd.	2	0	0	0	0
Upper Carson Rd.	1	0	1	1	0

A total of 22 intersection-related collisions are listed for the same 3-year period. Nearly one-half of all intersection collisions were broadside collisions. These collisions involved vehicles that were either turning at an intersection or attempting to cross the US 50. The majority of the broadside collisions occurred during daylight hours with clear weather conditions and a dry roadway.

Table 1-3 summarizes the collision rates for the intersections listed in Table 1-2.

Table 1-3. TASAS Intersection Collision Summary (January 2011 to December 2013)

Location/Description (PM Limits)	Project Location Actual Accident Rate (# of accidents/million vehicles+)			State Average Accident Rate (# of accidents/million vehicles+)		
	Fatal	F+I	Total	Fatal	F+I	Total
Still Meadow Road-RT (PM 22.056)	0.000	0.13	0.26	0.003	0.07	0.16
Paul Bunyan/Five Mile Road (PM 22.840)	0.000	0.04	0.22	0.005	0.10	0.23
Camino Heights Drive-RT (PM 23.241)	0.000	0.12	0.12	0.003	0.07	0.16
Lower Carson Road/Sierra Blanca Road (PM 23.400)	0.000	0.04	0.08	0.005	0.10	0.23
Upper Carson Road-LT (PM 24.050)	0.000	0.08	0.13	0.003	0.07	0.16
Smith Flat to Camino (PM 20.0/26.0)	0.007	0.28	0.70	0.008	0.24	0.60

Ten of the 22 intersection collisions listed in Table 1-2 occurred in and are included in the collision total listed in Table 1-1 for the highway segment PM R21.95/24.45.

1.3 Project Description

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are Alternative 1C, Alternative 4.5A, Alternative 4.5C, Alternative 4.7, and the No-Build Alternative.

The project is located in El Dorado County on US 50 from PM 21.95 to PM 24.45. The total length of the project is approximately 2.4 miles. Within the limits of the proposed project, US 50 is a four-lane expressway with a striped median that separates opposing traffic lanes. The surrounding portion of US 50 in this area is a multi-lane facility. A median barrier exists at each of the limits of this project. US 50 also contains 12-foot-wide lanes with shoulders that vary from 1 foot to 8 feet. The purpose of this project is to improve safety on US 50 in the Camino corridor by installing a concrete median barrier that would restrict left-turn movements at at-grade intersections, widening the outside shoulders to standard width, and installing several acceleration/deceleration lanes that would help to reduce collisions within the project limits.

Caltrans prepared a Project Study Report in December 2015 to preliminarily identify viable alternatives that would meet the purpose and need of the project. The project was re-initiated from previous efforts in 2008–2009 and several years prior. The previous efforts examined no less than 25 alternatives and included holding public open houses and Stakeholder Advisory Committee meetings.

After completion of the Project Study Report in December 2015, Caltrans held additional public open house meetings in May 2016, September 2016, December 2016, and August 2017 to discuss project alternatives and receive public input. An Emergency Services Meeting was also held in January 2017. Caltrans incorporated public input received during the meetings into the development and analysis of additional alternatives. During the May 2016 open house, the public

opposed most of the alternatives presented due to their proximity to Camino Hills residents. As a result, at the September 2016 meeting, Caltrans introduced alternatives 1C, 4.5A, 4.5B, 4.6A, and 4.6B, which would move local access to US 50 north and east of the Camino Heights residential area. At the September 2016 meeting, Alternative 4.5A was the most favored alternative. In December 2016, five alternatives were presented and two—Alternatives 4.5B and 4.6B, which both had a north roundabout with modified access to and from Carson Court—were rejected from further study. As a result of input from the December 2016 meeting, a north elliptical roundabout was introduced to the public in January 2017 that would allow access to and from Carson Court. An email outreach in July 2017 followed by a public open house held in August 2017 introduced Alternative 4.7, the alternative at Upper Carson Road. Based on public response, Caltrans removed a proposed roadway connection to Vista Del Mundo from Alternative 4.7 and changed the design to include a frontage road access to US 50. The remaining alternatives, Alternative 1C, 4.5A, 4.5C, and the revised 4.7, have been carried forward and are analyzed in this Initial Study.

1.4 Alternatives

1.4.1 Build Alternatives

1.4.1.1 Features Common to All Alternatives

- Modify access at Still Meadow Road from US 50 through EB right-in/right-out connection to US 50. US 50 would maintain acceleration and deceleration lanes at Still Meadow Road, Paul Bunyon Road/Five Mile Road, Lower Carson Road, and Upper Carson Road. The outside shoulder would be widened to 10 feet on US 50 where there are acceleration/deceleration lanes and it also would be widened to 10 feet in all other locations within the project.
- Restripe 12-foot-wide travel lanes and turn lanes.
- US 50 inside shoulders would be widened to 5 feet from the proposed Type 60 concrete median barrier.
- US 50 would be widened from its existing width an additional 0 to 18 feet to accommodate shoulders and median. The existing pavement would be overlaid with 2-inch hot mix asphalt (HMA) (Type A) and the widened pavement section would be 6-inch HMA-Type A with 12-inch Class-2 aggregate base.
- The widened section of US 50 would have retaining walls varying in heights from 4 to 12 feet with aesthetic treatment and 2:1 side slopes for the end conditions.
- All driveways and intersections would remain open, but left-turn movements will be prohibited at some locations due to the proposed median barrier. Affected driveways and intersections would be slightly regraded to conform to the widened US 50 pavement within state right of way.

- The project also proposes to place two drainage inlets on each side of the proposed Pondorado Road Undercrossing. A proposed 24-inch corrugated steel pipe will connect both drainage inlets and outfall will be via a westbound side ditch.
- The proposed drainage facilities on this project occur between approximately PM 22.00 and 23.46 on US 50. Scuppers are to be installed in the median barrier from PM 22.18 to 22.22 and PM 22.40 to 22.51. A total of approximately 16 Drainage Inlets (DIs) will be installed from PM 22.00 to 23.13. Five (5) new culverts are proposed to be installed between PM 22.22 to 22.90. Six (6) existing cross-culverts will be extended from PM 22.18 to 22.73 and one slotted Corrugated Steel Pipe (CSP) drain along the east-bound side of the median barrier is proposed to be installed from PM 22.00 to 22.07. An existing drainage system between PM 23.46 and 24.10 is adequate and no additional drainage facility is proposed in this section of the Highway.
- Construction would be accomplished as follows:
  - The primary highway widening would occur on the East Bound (EB) side along the first western 3/4 mile of the project, from Still Meadow Road east up to Paul Bunyon Road, work area behind temporary k-rail. The widening of the roadway would be along the southern fill slope.
  - The building of the undercrossing would be accomplished in three stages. Stage 1 would push traffic to north side and build the south 1/3. Stage 2 would split traffic to allow construction to build the middle 1/3. Stage 3 would place traffic south and finish the last northern 1/3. Traffic would be channeled and opposing lanes divided with temporary K-Rail, removal of 1,500' of the existing Type-60 concrete barrier would be necessary for the before mentioned traffic staging.
  - During the same time the undercrossing is being constructed the construction of the local connections and new ramps for US 50 access would be accomplished.
  - Once the widening on the western section is complete and the new undercrossing is in place to allow local traffic circulation, the mainline pavement would be brought up to finish grade. Next, the center concrete barrier would be constructed to eliminate all left-turning movements on US 50. The final paving, striping, and sign placement would occur once the center concrete barrier was in place.

1.4.1.2 Alternative 1C: EB Right-In/Right-Out and Skewed Pondorado Road Undercrossing

This alternative would incorporate all the proposed features common to all alternatives listed in Section 1.4.1.1, *Features Common to All Alternatives*. This section lists the features that may differ from the other alternatives.

This alternative proposes to widen US 50 for the installation of Type 60 concrete median barrier from Still Meadow Road (PM 22.0) to the existing concrete median barrier located at Upper Carson Road (PM 24.01). This alternative would also restripe and conform the mainline pavement to approximately 1,500 lf east of Upper Carson Road. Based on historic accident data, the center median barrier will be continuous through the project area. Carson Road will be realigned and improved to accommodate traffic at this location. A portion of the El Dorado

Irrigation District (EID) main ditch would need to be relocated near the proposed undercrossing. The above features are common to all alternatives as well as the features listed below.

- Maintain access to US 50 from Camino Heights Drive and Pondorado Road, although access to Camino Heights Drive will be right-in only
- Maintain a three-way Intersection at the Vista Tierra Drive/Camino Hills Drive intersection
- Install a 1,400-foot eastbound auxiliary lane on US 50 that would exit at Pondorado Road, which connects to Vista Tierra Drive at a two-way stop-controlled three-way intersection. Eastbound traffic exiting at Pondorado Road would have a free/continuous movement to travel eastbound onto Pondorado Road.
- Modify the Pondorado Road exit into a right-in and right-out access point to US 50
- Vista Tierra Drive would be extended in a northeasterly direction through a proposed undercrossing (PM 23.48) at US 50 with a connection to Carson Road on the north side of US 50

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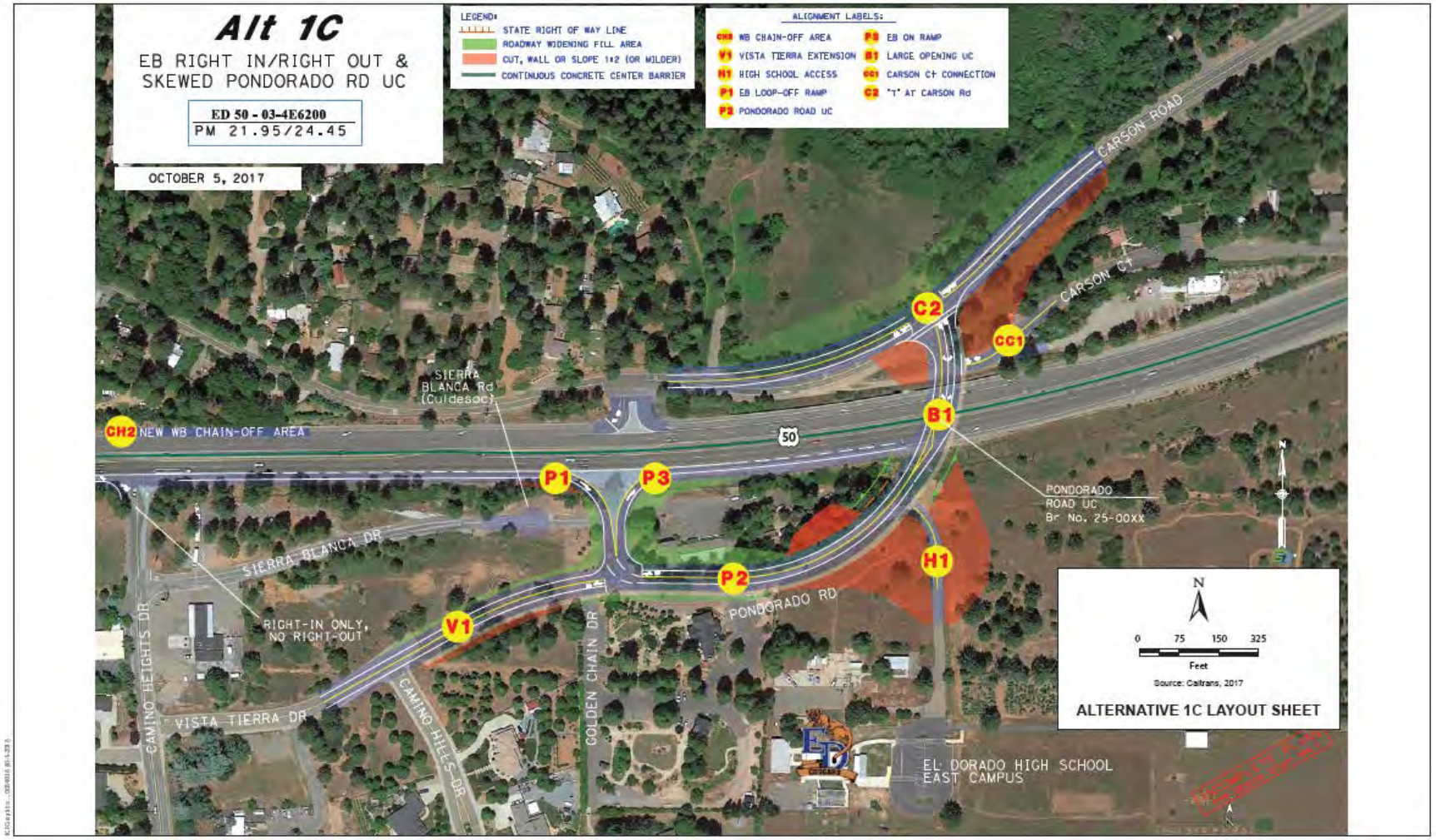

Figure 3. Alternative 1C

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1.4.1.3 Alternative 4.5A: EB Loop Off-Ramp and 3 Leg Inter/"T" Connection

This alternative would incorporate all the proposed features common to all alternatives listed in Section 1.4.1.1. This section lists the features that may differ from the other alternatives.

- Create an East Bound (EB) only loop off-ramp into the new Pondorado Road undercrossing. Install a three-legged intersection at the Sierra Blanca Drive/Pondorado Road intersection.
- Create a new eastbound on-ramp to US 50 from the new intersection off the eastern leg of the new intersection.
- Extend and connect Sierra Blanca Drive to the western leg of the new intersection
- Realign Pondorado Road to El Dorado High School East Campus just south of the new three-legged intersection.
- Connect new undercrossing to Carson Road on the north by way of a three-way stop "T" intersection.

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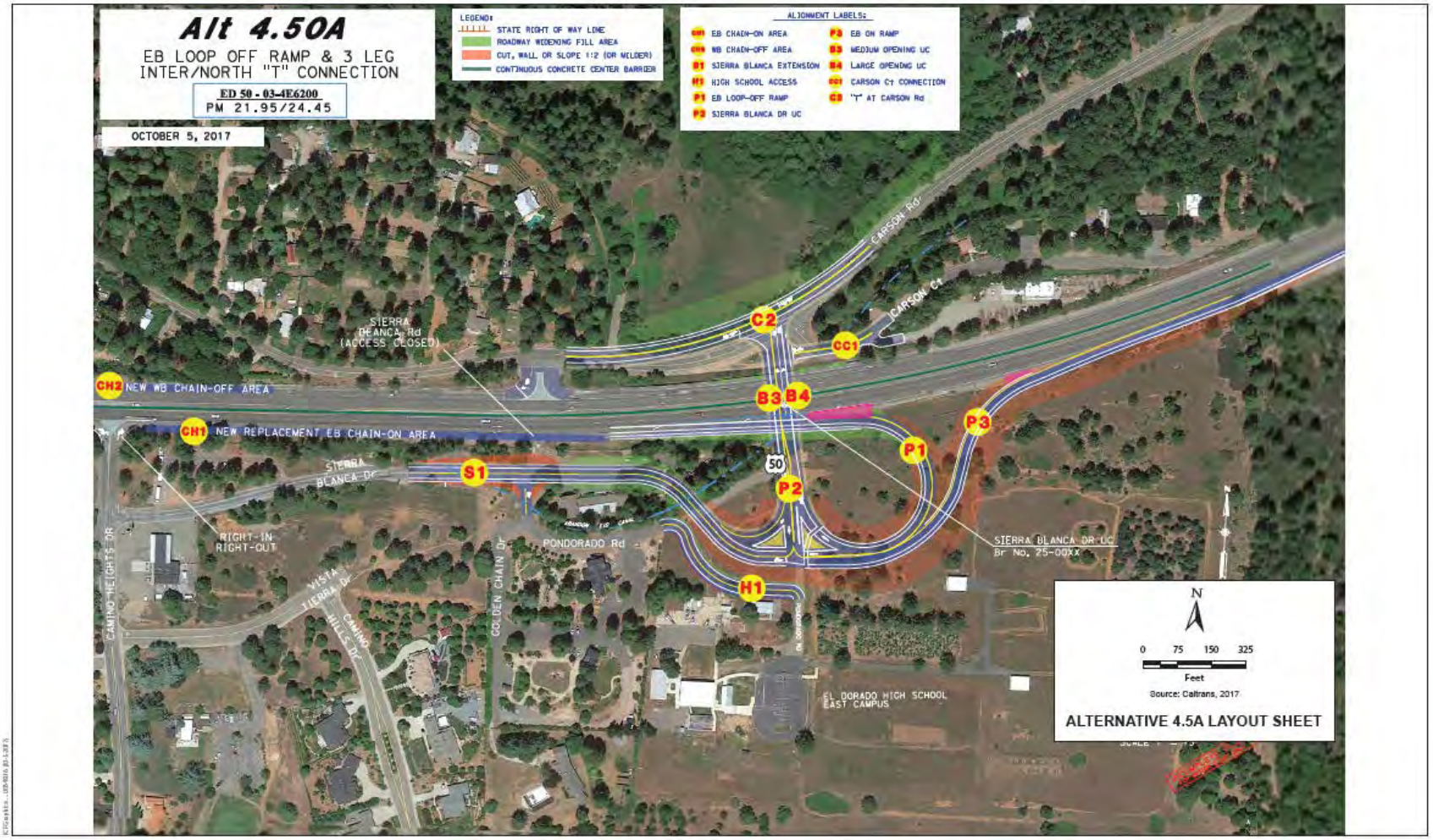

Figure 4 Alternative 4.5A

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1.4.1.4 Alternative 4.5C

This alternative would incorporate all the proposed features common to all alternatives listed in Section 1.4.1.1. This section lists the features that may differ from the other alternatives.

- Create an East Bound (EB)-only loop off-ramp into the new Pondorado Road undercrossing. Install a three-legged intersection at the Sierra Blanca Drive/Pondorado Road intersection.
- Create a new EB on-ramp to US 50 from the new roundabout off the eastern leg of the new intersection. Create a new EB on-ramp to US 50 from the new intersection off the eastern leg of the new intersection.
- Extend and connect Sierra Blanca Drive to the western leg of the new intersection.
- Realign Pondorado Road to El Dorado High School East Campus just south of the new three-legged intersection.
- Connect new undercrossing to Carson Road on the north by way of an elliptical roundabout intersection.

Alternatives 1C, 4.5A, and 4.5C will have a continuous median barrier which will eliminate left hand turns at Still Meadow Road and Upper Carson Road.

Any new eastbound on-ramp from the new undercrossing would affect the existing “chain-on area”. This area is on the eastbound shoulder that would require replacement to the west of the new UC. Because of this chain-on area impact, the Camino Heights Drive connection to US 50 may need to be modified. There may be a need, due to Apple Hill seasonal traffic conditions, to implement temporary traffic control and close this new undercrossing and to route the traffic 2.44 miles east to the Cedar Grove interchange as is currently being done for high-volume weekends.

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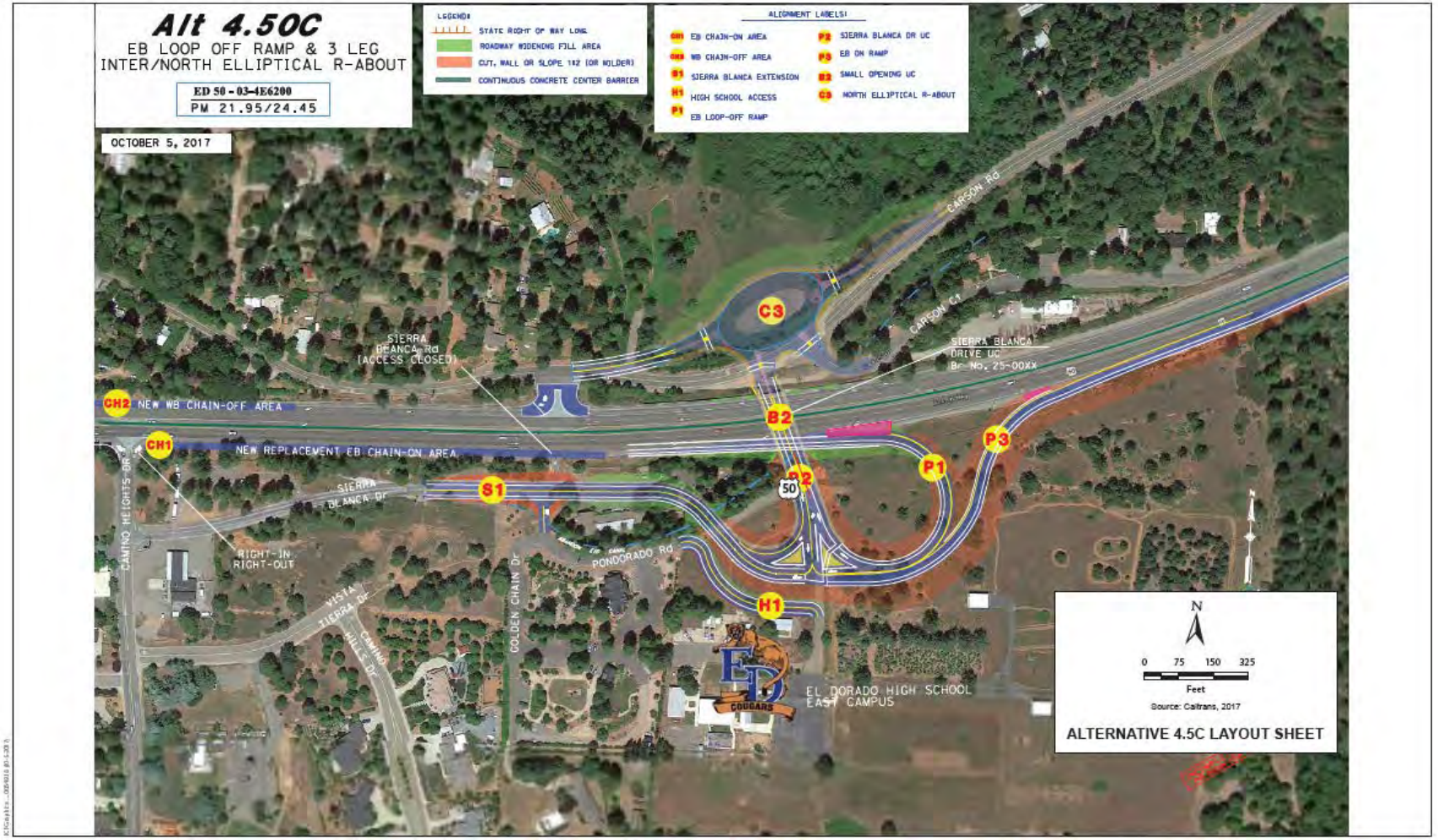

Figure 5. Alternative 4.5C

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1.4.1.5 Alternative 4.7

This alternative would incorporate all of the proposed features common to all alternatives listed in Section 1.4.1.1. This section lists the features of Alternative 4.7 that may differ from the other alternatives.

- An undercrossing would be constructed to provide north/south access to Upper Carson Road to provide local access mitigation from the construction of a new center median barrier.
- This alternative would create a new roundabout with eastbound on/off ramps that would connect a 0.71 mile frontage extension of Pondorado Road from the Camino Heights neighborhood.
- The south side of the undercrossing will connect to the new roundabout.
- The north side of the undercrossing would connect to Upper Carson Road with a "T" intersection.
- Westbound on/off ramps would be constructed on the north end of the undercrossing.
- Eastbound on/off ramps would be constructed on the south end of the undercrossing.
- This alternative would also provide a crossing and continuity for the El Dorado Trail for bike traffic.
- This alternative would realign US 50 slightly south of the existing alignment, this alignment would be required to achieve proper roadway geometrics. Additionally, the construction of the new UC on a new alignment would also have staging benefits to normal traffic flow.

For Alternative 4.7, there may be a need, due to Apple Hill seasonal traffic conditions, to implement temporary traffic control and close this new UC and to route the traffic 1.8 miles east of the Cedar Grove interchange, which is currently being used for high volume weekends.

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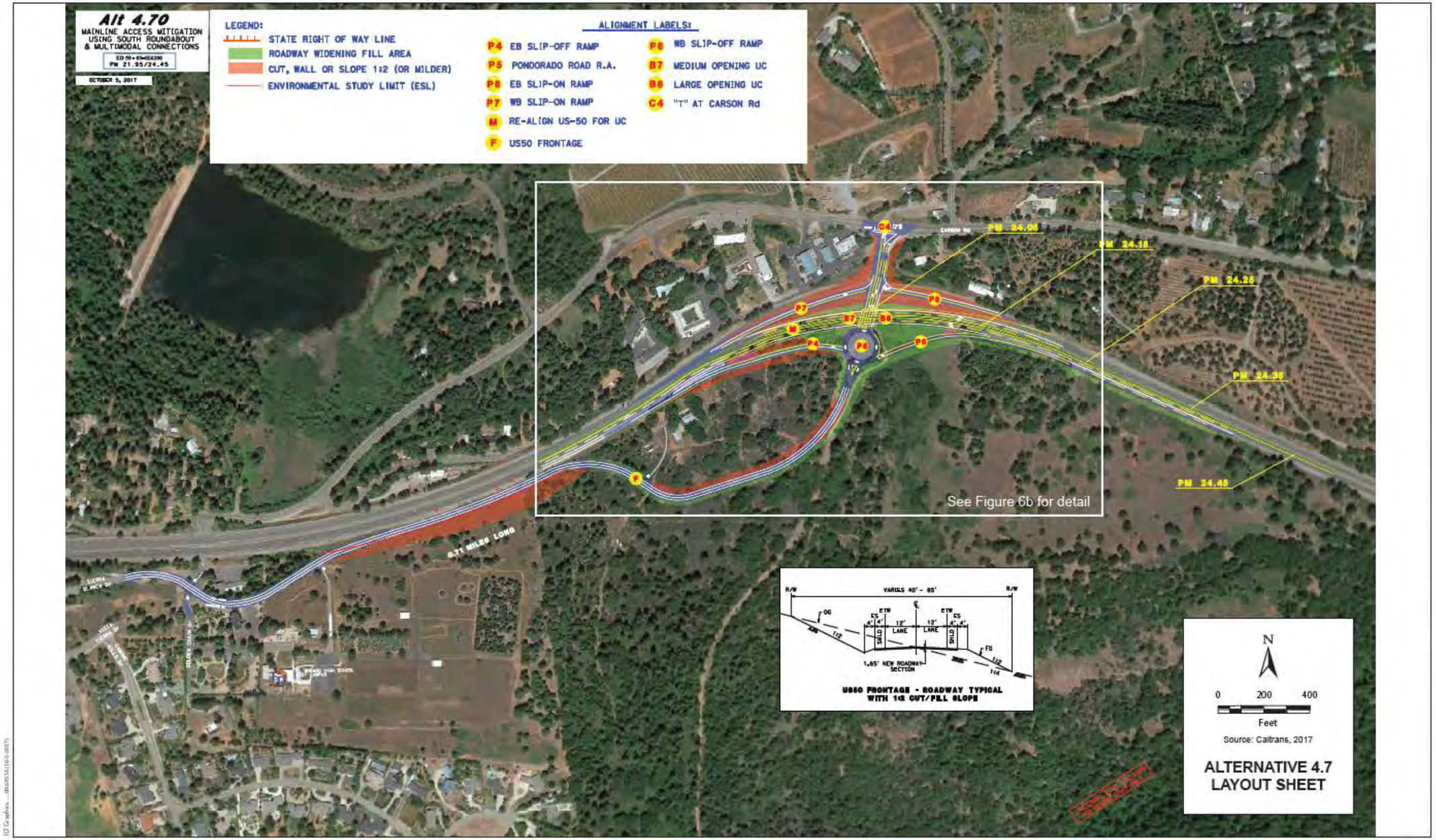

Figure 6a. Alternative 4.7

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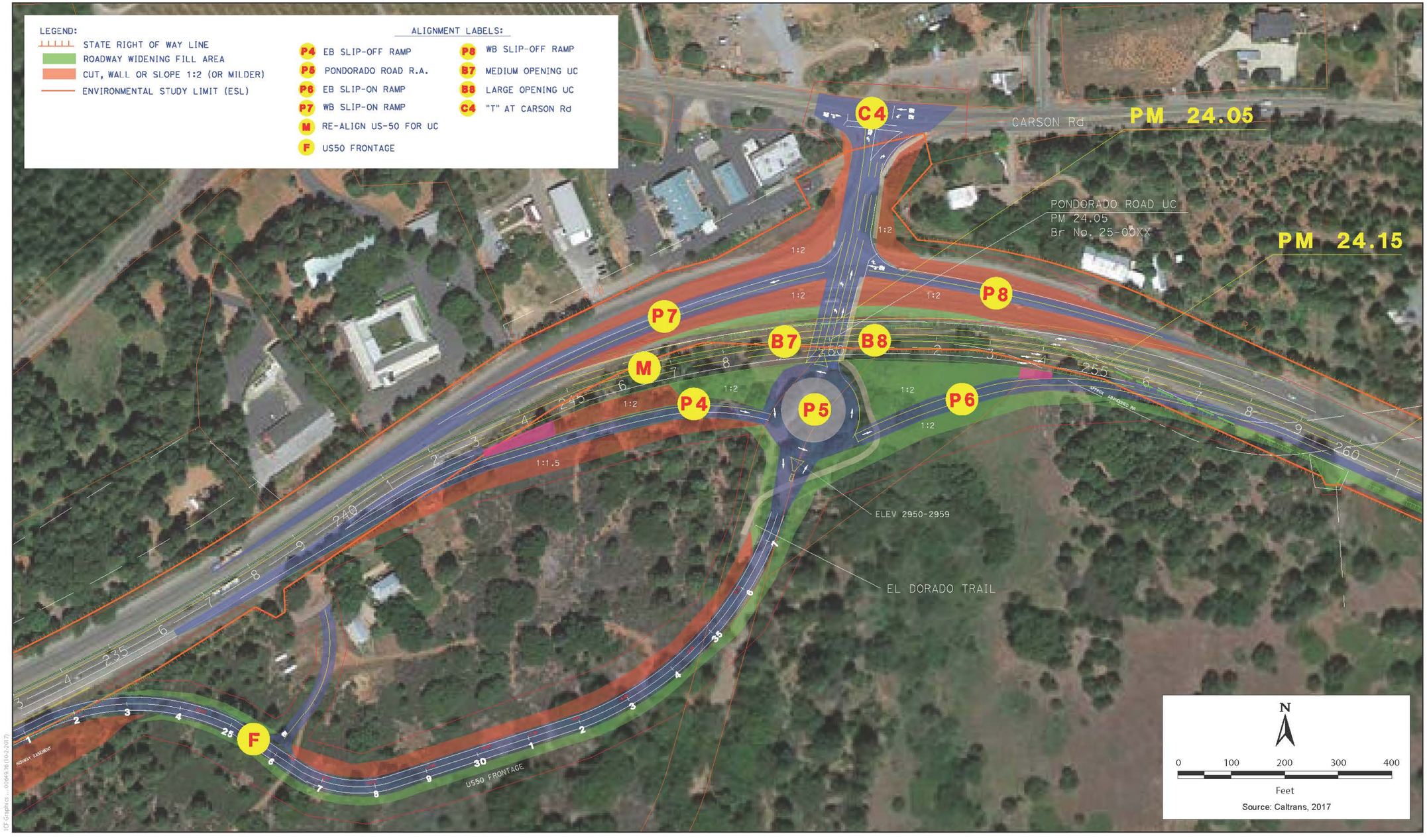

Figure 6b. Alternative 4.7 (Detail)

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1.4.2 No-Build Alternative

The No-Build Alternative would result in no changes to US 50.

1.4.3 Identification of a Preferred Alternative

After the public circulation period, all comments were considered and after comparing and weighing the benefits and impacts of all feasible alternatives, the Project Development Team has identified Alternative 4.7 as the preferred alternative.

1.4.4 Alternatives Considered but Eliminated From Further Discussion Prior to the "draft" Initial Study

Alternative "B" was proposed in the 2009 Project Initiation Document. This alternative proposed to widen US 50 for the installation of a concrete median barrier from Still Meadow Road to approximately 700 feet west of Upper Carson Road. An opening in the median barrier would be maintained for the intersection at Camino Heights Drive and partial access at Still Meadow Road. An eastbound auxiliary road was also proposed at Camino Heights Drive to be preceded by a 600 feet eastbound auxiliary lane on US 50, which diverges onto a separate auxiliary road. A left turn lane from the auxiliary road onto Camino Heights Drive directs vehicles back to US 50. This would allow vehicles turnaround access to westbound US 50.

The 2009 PSR-PDS rejected Alternative "B" for the following reasons:

- The off-ramp auxiliary road configuration that is currently a part of Alternative B's design creates an unexpected move for drivers.
- The turning movements required by Alternative B would create confusion with driver expectations in a rural area.
- Alternatives to the off-ramp/auxiliary road configuration would impact the local road system by routing freeway traffic into the local residential area to make a U-turn or circuitous movement back to US 50.

As also discussed in Section 1.3, Caltrans prepared a Project Study Report in December 2015 to preliminarily identify viable alternatives that would meet the purpose and need of the project. The project was re-initiated from previous efforts in 2008–2009 and several years prior. The previous efforts examined no less than 25 alternatives and included holding public open houses and Stakeholder Advisory Committee meetings.

After completion of the Project Study Report in December 2015, Caltrans held additional public open house meetings in May 2016, September 2016, December 2016, and August 2017 to discuss project alternatives and receive public input. An Emergency Services Meeting was also held in January 2017. Caltrans incorporated public input received during the meetings into the development and analysis of additional alternatives. During the May 2016 open house, the public

opposed most of the alternatives presented due to their proximity to Camino Hills residents. As a result, at the September 2016 meeting, Caltrans introduced alternatives 1C, 4.5A, 4.5B, 4.6A, and 4.6B, which would move local access to US 50 north and east of the Camino Heights residential area. At the September 2016 meeting, Alternative 4.5A was the most favored alternative. In December 2016, five alternatives were presented and two—Alternatives 4.5B and 4.6B, which both had a north roundabout with modified access to and from Carson Court—were rejected from further study. As a result of input from the December 2016 meeting, a north elliptical roundabout was introduced to the public in January 2017 that would allow access to and from Carson Court. An email outreach in July 2017 followed by a public open house held in August 2017 introduced Alternative 4.7, the alternative at Upper Carson Road. Based on public response, Caltrans removed a proposed roadway connection to Vista Del Mundo from Alternative 4.7 and changed the design to include a frontage road access to US 50. The remaining alternatives, Alternative 1C, 4.5A, 4.5C, and the revised 4.7, have been carried forward and are analyzed in this Initial Study.

1.5 Permits and Approvals Needed

Agency	Permits/Approval	Status
State Water Resources Control Board	Section 402 NPDES General Construction Permit	To be obtained prior to construction.
Regional Water Quality Control Board	Section 401 Water Quality Certification	To be obtained prior to construction.
US Army Corps of Engineers	Section 404 Nationwide Permit	To be obtained prior to construction.
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	To be obtained prior to construction.

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

Caltrans prepared a variety of technical studies and evaluated the potential effects of the proposed project on environmental factors. Based on the CEQA checklist, Caltrans determined that the project would have minimal or no effect on geology/soils/seismic/topography, cultural resources, paleontological resources, and plant species.

2.1 Resources That Would Not Be Affected by the Project

As part of the scoping and environmental analysis carried out for the project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

- **Coastal Zone.** This project is outside the coastal zone and not subject to the regulations of any coastal program.
- **Wild & Scenic Rivers.** No nationally or state-designated wild and scenic rivers are within project limits or would be affected by the project.
- **Growth.** The project was evaluated in accordance with Guidance for Preparers of Growth-Related, Indirect Impact Analyses (Guidance document) (California Department of Transportation 2006). A first-cut screening was performed to determine the project's potential to induce growth and the need for further analysis.
  - Installing a concrete median barrier would restrict left -turn movements at the at-grade intersections in the project limits study area. Widening the outside shoulders to standard width and installing several acceleration/deceleration lanes would help to reduce collisions within the project limits. While the project would result in changes in access, the restriction on left-turn movements would improve safety. This type of change in access would not result in land use changes, cause new businesses to relocate to the area, or stimulate additional development. The changes in accessibility, lack of growth pressure in the area, and implementation of this project type in a rural setting make it unlikely that the project would contribute to growth.
  - Based on the first-cut screening analysis, the project would not be growth-inducing, and further analysis of its potential for growth inducement is not necessary. The impact would be less than significant.
- **Farmlands/Timberlands.** A Community Impact Assessment (CIA) (May 2017) was prepared for this project. The CIA identified farmland and timberland in the study area, and identified that mainly urban and built-up land is located along the US 50 corridor. Changes in land use patterns, including farmland and timberland, would not occur as a result of the

proposed project, and it is not anticipated that land designated as farmland or timberland would be acquired as part of the ROW take for the project alternatives. No impacts to farmland and timberland are anticipated.

- **Hydrology and Floodplain.** This project site is not within a Federal Emergency Management Agency (FEMA) 100-year floodplain. The project alignment is within Zone X (unshaded), areas of minimal flood hazard, usually depicted on Flood Insurance Rate Maps (FIRMs) as above the 500-year flood level (California Department of Transportation 2017c). The project does not have any bridges over waterways and does not border any floodplains.
  - Impacts from construction activities would be avoided or minimized because all construction activities would comply with the necessary permits and requirements from regulatory agencies, including the State Water Resources Control Board, Central Valley Regional Water Quality Control Board, United States Army Corps of Engineers, and El Dorado County. In addition to agency coordination and permit compliance, project drainage has been considered in the design which may include retention/detention areas, vegetated slopes, and reconstructed ditches. Prior to the start of construction, existing drainage facilities should be identified and protected by the application of appropriate temporary construction site BMPs. The minimal increase in impervious area would not cause on- or off-site flooding.
- **Geology/Soils/Seismic/Topography**. The project would be designed according to Caltrans seismic standards, as provided in the Highway Design Manual (HDM), minimizing the risk to construction workers or the traveling public from rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, landslides, soil erosion or loss of topsoil, unstable geologic units or soils, expansive soils, or disposal of waste water.
- **Paleontological Resources**. Though fossil bearing geologic units may be present within the project area, implementation of Standard Specifications Section 14-7 would address the potential for accidental discovery and would ensure any resources discovered were treated appropriately. Therefore, no adverse effects to paleontological resources are anticipated.
- **Noise.** Traffic noise impact is not predicted to occur, therefore, noise abatement is not considered for this project. This project is considered a Type III project and is exempt from traffic noise impact analysis under Title 23, Part 772 of the Code of Federal Regulations (23CFR772). FHWA defines a Type I project as a proposed Federal highway project for the construction of a highway on a new location, addition of through-traffic lane(s), the physical alteration of an existing highway where there is either a substantial horizontal or substantial vertical alteration. Projects that do not meet the classification of Type I, based on the scope of work, are considered Type III. The proposed project is considered a Type III. Construction noise would be controlled by Caltrans Standard Specification Section 14-8.02, "Noise Control," which states that construction will not exceed the 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m., and to control and monitor noise resulting from work activities.
- **Plant Species**. A Natural Environment Study (NES) was completed for this project in May 2017. Research conducted prior to field surveys developed a focal list of sensitive plant species that had the potential to occur within the Environmental Study Limit (ESL). Field

surveys were conducted to determine and map the vegetative communities in the project ESL, to provide an inventory of plant species present within the ESL, and to determine the presence of special-status plant species or communities. Field botanical surveys were conducted on July 6, 2016, and August 16, 2016, following the floristic survey protocol recommended by the California Native Plant Society (CNPS) (2001) to locate and identify plant species located within the ESL. An additional survey was conducted in June 2017 to look for species that have blooming periods outside the original survey window. Due to the project area ESL being outside the range of the species, the lack of suitable habitat or habitat components in the ESL, the lack of detection during recent Caltrans surveys or because the project would not harm individuals or alter the species' habitat, it is Caltrans' determination that the proposed project will have "no effect" on Federally or State listed species, California "rare" plant species, or plant species protected by the California Native Plant Protection Act.

- **Threatened and Endangered Species**. As discussed in the NES prepared for this project in May 2017, six federally or State listed threatened or endangered species had the potential to occur within the project vicinity based on database searches and were therefore considered for environmental review. Those species were Delta smelt, Central Valley Evolutionary Significant Unit (ESU) steelhead, fisher – West Coast DPS, California red-legged frog, Sierra Nevada yellow-legged frog, bank swallow (nesting). No suitable habitat for these threatened or endangered species is present within the ESL; therefore, the proposed project will have no significant impacts on federal or state listed threatened or endangered species.

2.2 Human Environment

2.2.1 Land Use

The purpose of this project is to improve safety on US 50 in the Camino corridor by modifying the roadway. This would be done by installing a concrete median barrier that would restrict left turn movements from US 50 to local roads. Widening the outside shoulders to standard width and installing several acceleration/deceleration lanes would help to reduce collisions within the project limits. The improvements would provide safe east-west access on and off the highway. The analysis of land use is based on the *Community Impact Assessment* conducted for the project (California Department of Transportation 2017a). The Community Impact Assessment study area is shown in Figure 2.2.1-1.

Existing and Future Land Use

The area surrounding the proposed project consists primarily of agricultural, residential, and commercial land uses. As shown in the County of El Dorado's General Plan Land Use Map, most of the land north of US 50 is designated Agricultural Lands (AL). South of US 50 in the central portion of the project area are low density residential (LDR) and high density residential (HDR) land uses, as well as scattered commercial land uses (C). General plan land use designations are shown in Figure 2.2.1-2.

North of US 50, the area surrounding the proposed project is zoned as R20K (single unit residential, 20,000 square feet), RL20 (rural lands), PA20 (planned agriculture), TPZ (timber production zone), CC (commercial community) and CL (commercial limited). This portion of the study area is known as the Apple Hill agricultural region. It contains orchards, vineyards, Christmas tree farms and associated uses, as well as single-family residences. Apple Hill is a popular tourist area between Labor Day weekend and Christmas, although some orchards and vineyards are open year-round.

The area south of US 50 is zoned as CL, CC, R20K, RE10 (residential estate), OS (open space), and R1 (single-unit residential). It mainly contains single-family residences, as well as Camino Heights Golf Course and El Dorado High School East Campus, on Golden Chain Drive.

Overall land use patterns in the study area would remain the same, and the project would improve the traffic safety throughout the project area.

Consistency with State, Regional, and Local Plans and Programs

Land use planning in the study area is governed by the County of El Dorado General Plan, which was adopted in July 2004.

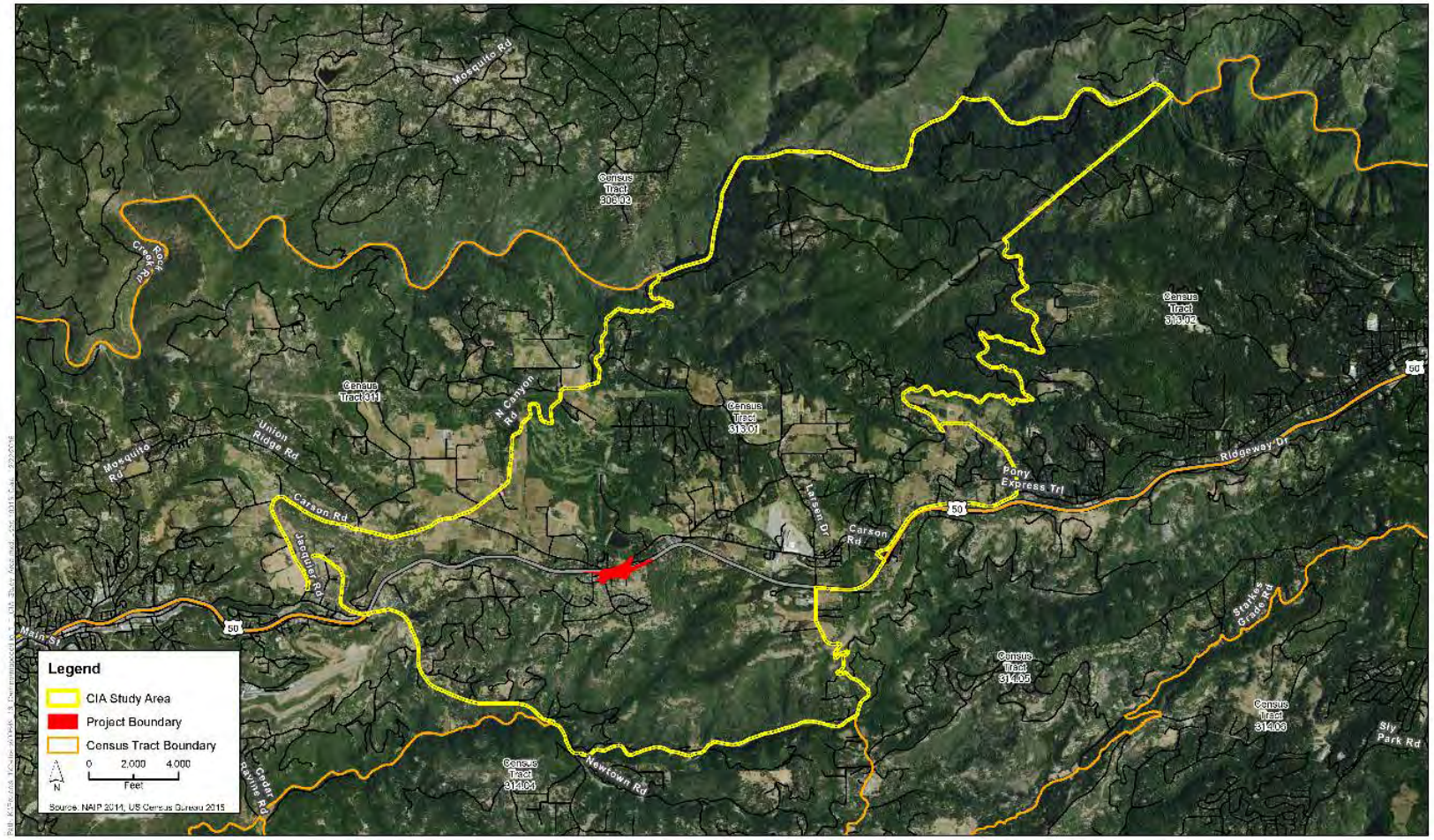

Figure 2.2.1-1. Community Impact Assessment Study Area

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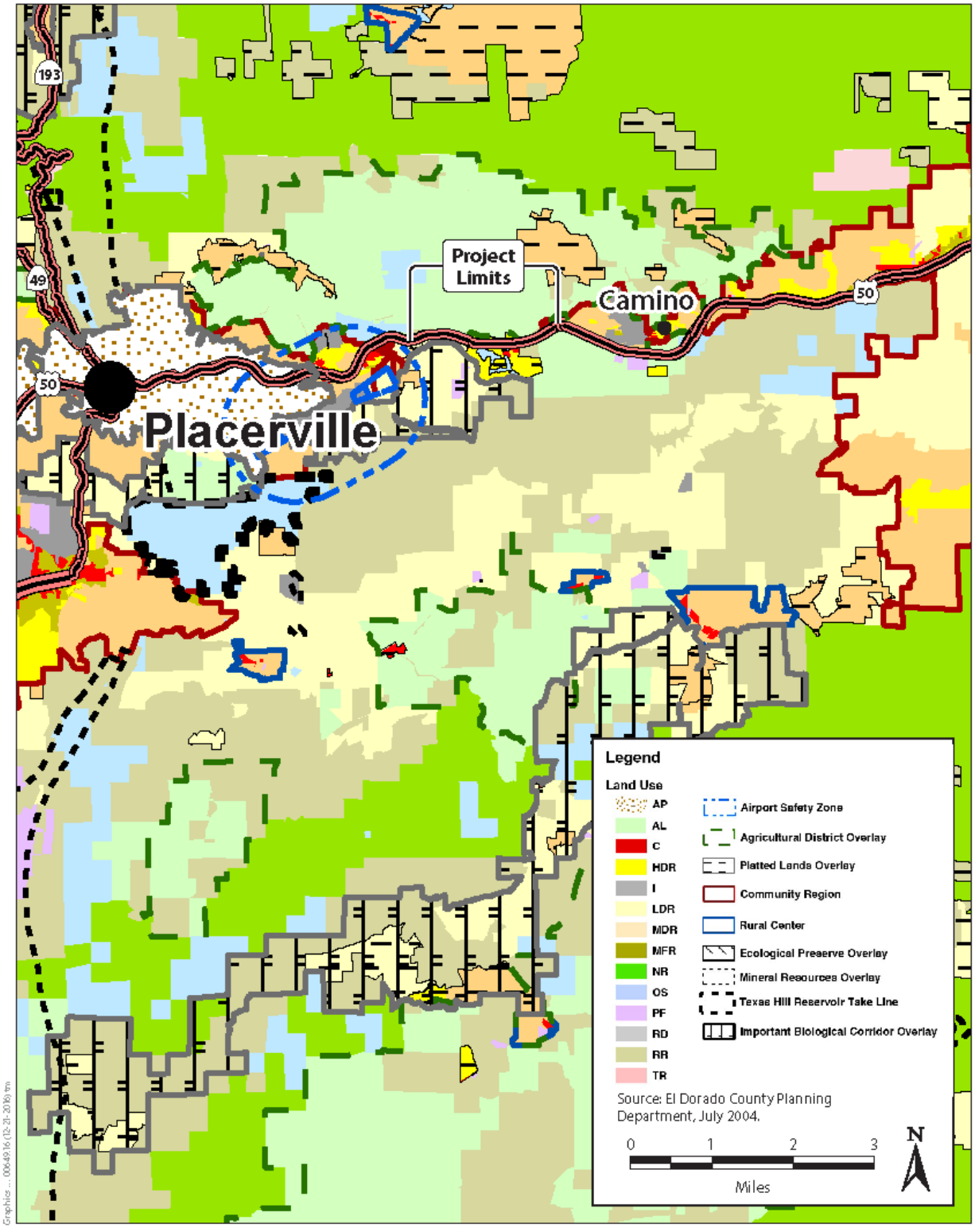

Figure 2.2.1-2. Land Use Map

This project is included in the 2016 Federal Statewide Transportation Improvement Program (FSTIP) and is proposed for funding from the Highway Safety Improvement Program (HSIP), local transportation funds, and SHOPP – Collision Reduction AC. It is also included in the Sacramento Area Council of Governments (SACOG) 2016 (covering 2012–2036) Metropolitan Transportation Plan (MTP) and the 2016 cost-constrained Metropolitan Transportation Improvement Program (MTIP) (California Department of Transportation 2017a).

Environmental Consequences

Table 2.2.1-1. Consistency with State, Regional, and Local Plans and Programs

Plan or Policy	Build Alternatives	No-Build Alternative
El Dorado County General Plan		
GOAL 2.1: LAND USE: Protection and conservation of existing communities and rural centers; creation of new sustainable communities; curtailment of urban/suburban sprawl; location and intensity of future development consistent with the availability of adequate infrastructure; and mixed and balanced uses that promote use of alternate transportation systems.	**Consistent.** The build alternatives would improve highway safety by installing a median barrier. Build alternatives 1C, 4.5A,4.5C and 4.7 would also improve connectivity between the north and south sides of US 50 with a new undercrossing. The changes to highway infrastructure would not promote sprawl. Safety improvements would support use of alternate transportation systems.	**Consistent.** The No-Build Alternative would not change existing highway infrastructure. Connectivity between the north and south sides of the highway would not change. Safety improvements that facilitate alternative transportation would not be made.
GOAL 2.4: EXISTING COMMUNITY IDENTITY: Maintain and enhance the character of existing rural and urban communities, emphasizing both the natural setting and built design elements which contribute to the quality of life, economic health, and community pride of County residents.	**Consistent.** A new median barrier on US 50 would block several existing left-turn lanes but motorists would benefit from improved safety and connectivity. None of the build alternatives would change the rural, natural setting or conflict with the goal of maintaining community identity.	**Consistent.** No safety improvements would be made, and the risk of left-turn related accidents would not be reduced. Community identity would not change.
GOAL 7.4: WILDLIFE AND VEGETATION RESOURCES: Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value. *OBJECTIVE 7.4.2: IDENTIFY AND PROTECT RESOURCES: Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.*	**Consistent.** The median barrier will be designed with deer and animal crossings. Stormwater and all highway runoff will be contained and appropriately treated to protect wetlands and other waters and avoid local flooding.	**Not Consistent** US 50 in the project area would continue to be an obstacle and danger to wildlife movement. Current stormwater and runoff management practices would remain the same.
TRANSPORTATION ELEMENT GOAL TC-1: To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the	**Consistent.** All build alternatives would modify the highway facilities in the project area to improve safety. Build alternatives 1C,	**Not Consistent.** The No-Build Alternative would leave the highway in its current condition and would not resolve the operations and safety issues

Plan or Policy	Build Alternatives	No-Build Alternative
safe, orderly, and efficient movement of people and goods.	4.5A, 4.5C, and 4.7 would improve connectivity for motorists, bicyclists, and pedestrians with a new undercrossing. The changes would support this goal.	that lead to conflicts and collisions at existing intersections. Safety and connectivity between the north and south sides of US 50 within project limits would not improve.
GOAL 8.2: AGRICULTURAL PRODUCTION: A healthy, stable, and competitive environment necessary to sustain agricultural industry. *POLICY 8.2.2.4: Agricultural activities shall be protected from the encroachment of incompatible land use by the Right to Farm Ordinance, which recognizes that nuisances such as noise, odors, dust, fumes, smoke, and chemical usage are a part of recognized acceptable agricultural practices and production.*	**Consistent** The proposed safety improvements would not cause changes in agricultural land uses or conflict with Policy 8.2.2.4.	**Consistent** No changes to the highway system would be made and no changes in land use would occur.
GOAL 8.3: FOREST LAND CONSERVATION: Maintain healthy sustainable forests that provide for raw materials while limiting the intrusion of incompatible uses into important forest lands. *OBJECTIVE 8.3.2: CONSERVATION OF FOREST LANDS: Protect and conserve lands identified as suitable for commercial timber production within the County that are important to the local forest product industry and forest lands that serve other values such as watershed, wildlife habitat, recreation, hydroelectric power generation, grazing, mineral extraction, or other resource based uses.*	**Consistent.** The proposed safety improvements would not affect timber resources.	**Consistent.** The No-Build Alternative would not affect timber resources.
Other Regional Plans		
Sacramento Area Council of Governments 2012–2036 Metropolitan Transportation Plan	**Consistent** The project is included in the SACOG MTP/SCS.	**Not Consistent** If the project is not built, it would not accomplish the goals of the MTP/SCS.
El Dorado County Bicycle Transportation Plan	**Consistent** The project would not affect development of the Class II bike lane planned to follow the historic route of the Pony Express National Historic Trail.	**Consistent** Not building the project would not affect development of the Class II bike lane planned to follow the historic route of the Pony Express National Historic Trail.
El Dorado County Parks and Trails Master Plan	**Consistent** The project would not affect access to, use of, or views from the El Dorado Trail/Pony Express National Historic Trail. The sight of construction equipment and noise from construction would be intermittent and temporary.	**Consistent** Not building the project would not affect the El Dorado Trail/Pony Express National Historic Trail.

Sources: El Dorado County 2004(2015); El Dorado County Transportation Commission 2010; El Dorado County 2012; California Department of Transportation 2017a, b.

County of El Dorado Adopted General Plan

All of the proposed alternatives would be consistent with the relevant goals, objectives, and policies of the County of El Dorado's General Plan. All build alternatives would improve safety for motorists by installing a median barrier along US 50. Build alternatives 1C, 4.5A, 4.5C, and 4.7 would improve community connectivity between the north and south sides of US 50 with a new undercrossing and improve safety for motorists, bicyclists, and pedestrians. It would not alter the rural, natural, or agricultural character of the community.

General Plan Policy 7.4.2.8 establishes the El Dorado County Integrated Natural Resources Management Plan, and instructs the County to consider wildlife movement for four- and six-lane roadway projects (El Dorado County 2010:2). The policy contains habitat management recommendations including "… construction of roadway under and overcrossing that would facilitate movement by terrestrial wildlife …" (El Dorado County 2004[2015]:146, 148). The proposed project would incorporate wildlife crossing opportunities in the design of the median barrier.

Other Regional and Local Plans

The project does not conflict with the *El Dorado County Bicycle Transportation Plan* or *the El Dorado County Parks and Trails Master Plan*, as described in Section 2.1.1.3, *Parks and Recreation* and the Section 4(f) analysis in Appendix B (California Department of Transportation 2017b).

The project will take place primarily within existing Caltrans right-of-way; while some property acquisitions may be necessary, they are not expected to affect existing land uses (California Department of Transportation 2017a). The town of Camino is currently divided by US 50, yet it is a tight-knit community. None of the build alternatives would further physically divide the established community. There would be no impact.

None of the build alternatives would conflict with any applicable adopted land use plan, policy, or regulation of an agency with jurisdiction over the project. There would be no impact.

Avoidance, Minimization, and Mitigation Measures

No potential conflicts with current or planned land uses in the study area are anticipated. Therefore, no measures are proposed to reduce impacts related to land use.

2.2.1.2 Parks and Recreational Facilities

Parks and recreational resources within 0.5 mile of the proposed project were evaluated in accordance with Caltrans guidance on complying with Section 4(f) regulations (California Department of Transportation 2013) and CEQA.

No existing parks, historic properties, or wildlife or waterfowl refuges were identified within 0.5 mile of the proposed project. Only recreational facilities were identified within the study area.

Regulatory Setting

State

CEQA (Appendix G of the CEQA Guidelines) requires analysis to determine if (a) a project would increase the use of existing parks or recreational facilities so as to cause or accelerate their substantial physical deterioration; and (b) whether the project includes or requires construction of recreational facilities that would have an adverse physical effect on the environment.

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Affected Environment

The primary recreational resource in the study area is Apple Hill, which is a regional tourist attraction. Over 500,000 people visit Apple Hill annually (El Dorado County 2003). The County of El Dorado operates three parks that are located in Shingle Springs, Lotus, and Somerset, but these parks are not within the project vicinity. The following other recreational facilities were identified within 0.5 mile of the proposed project.

Camino Heights Golf Course

Camino Heights Golf Course is a privately owned golf course located at 3020 Vista Tierra Road, south of US 50 (Camino Heights Golf Course 2016).

El Dorado High School–East Campus

The El Dorado High School–East Campus (East Campus) is at 3240 Pondorado Road, south of US 50 within the project limits. The campus is owned by the El Dorado Union High School District. The campus is fenced and there are no sports fields except for an outdoor basketball court. No community service districts or parks and recreation districts serve the project area with potential joint-use agreements for public recreation access at the campus, nor does the County of El Dorado enter into joint-use agreements for public recreation access outside areas served by local park providers (El Dorado County 2012).

El Dorado Trail

The El Dorado Trail is an existing multi-use Class I bike path planned to eventually extend the length of El Dorado County and provide a connection between the Sacramento Valley and the Tahoe Basin. The paved portion of the existing trail is approximately 4.6 miles long, extending east from Clay Street in Placerville, crossing US 50 on an overpass, and ending south of US 50 opposite the Upper Carson Road exit, with several access points along the way. The trail traverses both paved and improved gravel/dirt road sections; the section of trail from Los Trampas Drive east to Halcon Road, approximately 1 mile, is proposed for paving and construction in 2017 (El Dorado County Transportation Commission 2017). El Dorado County

owns the extent of the trail in the project vicinity. As shown on Figure 2.2.1-3, the trail is south of and outside the project area except near the easternmost portion, near the exit to Upper Carson Road where the trail ends (El Dorado County 2012).

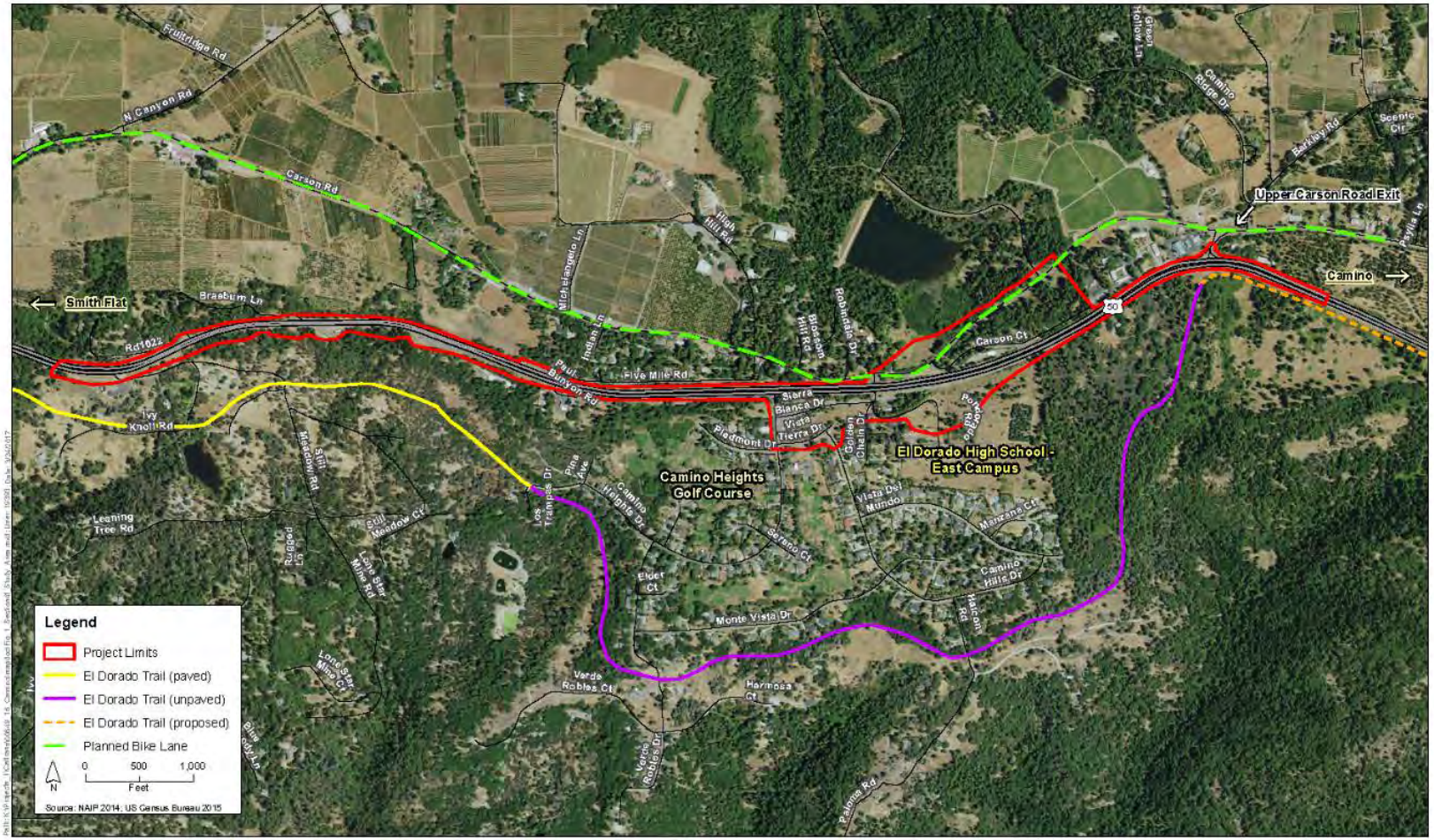

Figure 2.2.1-3. Trails and Bicycle Facilities

Alternatives 1C, 4.5A, 4.5C

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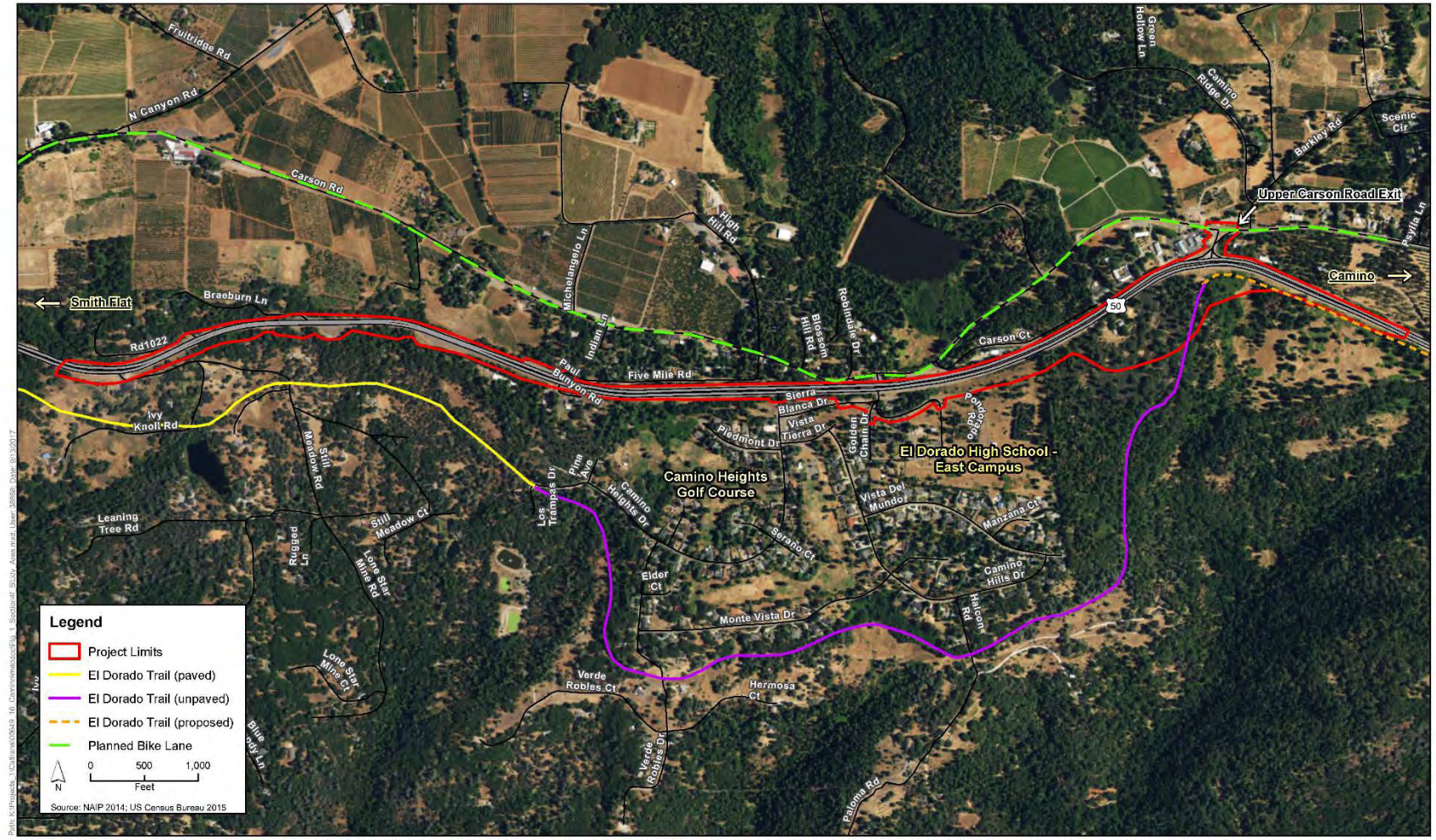

Figure 2.2.1-4. Trails and Bicycle Facilities Alternative 4.7

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The alignment for the planned extension of the trail east towards the Tahoe Basin has not been determined, although the County of El Dorado has identified potential alignments from Camino Heights to Pacific House, approximately 13 miles east of the project limits. The *Parks and Trails Master Plan* (El Dorado County 2012) and the *Bicycle Transportation Plan - 2010 Update* (El Dorado County Transportation Commission 2010) show the proposed portion of the trail located adjacent to the south side of US 50 extending from the trail's existing terminus opposite the exit to Upper Carson Road to Snows Road in Camino, approximately 1 mile east of the project limits (El Dorado County 2012).

Planned Bike Lane/Pony Express National Historic Trail

Review of El Dorado County's *Parks and Trails Master Plan* (El Dorado County 2012) and the El Dorado County Transportation Commission's *Bicycle Transportation Plan - 2010 Update* (El Dorado County Transportation Commission 2010) found one planned Class II bike lane within the 0.5-mile analysis area. Class II bike lanes are located within the right-of-way and designated by pavement striping for one-way travel. This bike lane is planned to follow the historic route of the Pony Express National Historic Trail (NHT). The Pony Express NHT generally follows routes adjacent to US 50, and as noted in the 2012 *Parks and Trails Master Plan*, "generally corresponds" to the El Dorado Trail. In the project vicinity, the bike lane is planned north of US 50 on Carson Road between Smith Flat and Snows Road.

Environmental Consequences

The purpose of this project is to improve safety on US 50 in the Camino corridor by installing a median barrier, widening shoulders, and installing acceleration/deceleration lanes. Alternatives 1C, 4.5A, and 4.5C would not trigger Section 4(f) protection for resources identified within 0.5 mile of the proposed project because the resources 1) are not publicly owned; 2) are not open to the public; 3) are not eligible historic properties; 4) the project does not permanently use the property and does not hinder the preservation of the property; or 5) the proximity impacts do not result in constructive use. Alternative 4.7 would have a de minimis impact on the El Dorado Trail. See Appendix A for additional details on the Section 4(f) analysis and the *Community Impact Assessment* for more on parks, recreation, and community characteristics in the project area (California Department of Transportation 2017a, b). The effects on each identified resource are as follows.

While the project would not directly affect the orchards, vineyards, and other tourist attractions associated with Apple Hill, the project would change access at several intersections that tourists and residents currently use to access the area. Alternatives 1C, 4.5A, and 4.5C would all entail a new undercrossing that would provide access to Carson Road. Alternative 4.7 would entail a new undercrossing at Upper Carson Road. Although there would be some changes in access, tourists who are traveling to Apple Hill from other areas are unlikely to be deterred by this change, and it would not result in the deterioration of existing recreational resources or addition of new recreational facilities. While temporary traffic control (detour) may be necessary during construction, visitors would not experience any loss of access to or use of the area.

Camino Heights Golf Course is privately owned. Visitors to the golf course could experience temporary construction-related noise effects; however, the golf course is already exposed to noise levels from its proximity to US 50 and the construction-related impacts would be intermittent and short term. Visitors would not experience any loss of access or use of the recreational facilities.

The East Campus school grounds are not open to the public. El Dorado Trail would not be directly affected by Alternatives 1C, 4.5A, and 4.5C, but there is potential for proximity impacts. There would be no changes in access to the trail from outside the project area or at locations where the trail crosses several roads south of US 50 and outside the project boundary. There would be no change in views from the trail as a result of the project, because of the intervening vegetation and trees, difference in grade, and distance from US 50. The trail is closest to US 50 as it approaches the highway opposite the Upper Carson Road exit, where it is still separated from the roadway by vegetation and trees. During construction, trail users would have direct views of construction equipment and activities where roadway widening would occur. This would be a temporary construction-related impact (see Section 2.1.7, *Visual/Aesthetics*). Trail users (i.e., walkers, runners, bicyclists) already hear traffic noise from portions of the trail that are close to US 50; additional construction noise would be noticeable but would be short-term and intermittent, and would not impair use of the trail. The proposed project would not substantially impair the activities, features, or attributes of the trail.

The planned Class II bike lane is designated in the El Dorado County Bicycle Transportation Plan and Parks and Trails Master Plan and is a potential resource. The proposed improvements to US 50 would not interfere with future development of the planned facility or potentially interrupt the continuity of the planned bike lane.

Section 6(f) Consideration

The California State Parks Land and Water Conservation Fund grants list was reviewed for El Dorado County (California State Parks 2013). No recreational facilities in the project vicinity were found to have been developed or improved with grants from the Land and Water Conservation Fund Act. The project would not trigger the provisions of Section 6(f).

Under CEQA, the proposed project would not increase the use of parks or recreational facilities or lead to their substantial degradation. There would be no impact.

The project does not include new recreational facilities, and would not require the construction or expansion of existing facilities so as to cause an adverse physical effect on the environment. There would be no impact.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures related to parks and recreational facilities are required.

During construction, there will be ample signage to direct visitors into the Apple Hill area. Information will be posted on the project website as well. In addition, a traffic management plan will be implemented to reduce impacts on traffic during construction.

2.2.2 Community Impacts

The analysis of community impacts is based primarily on the Community Impact Assessment conducted for the project (California Department of Transportation 2017). This chapter summarizes the findings of the Community Impact Assessment for community character and cohesion; relocations and real property acquisition; and environmental justice. Other sources of data are cited in the text.

2.2.2.1 Community Character and Cohesion

Regulatory Setting

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

Because the area surrounding the proposed project is primarily rural, the study area for the Community Impact Assessment consists of one U.S. Census tract, 313.01 (Figure 2.2.2-1). Land uses are primarily agricultural north of US 50, and low-density and high-density residential south of US 50, with scattered commercial parcels.

According to American Community Survey 2008–2012 5-year estimates, the 2012 population of Census Tract 313.01 was 3,387. The median age of residents was 52.7. Non-Hispanic White was the largest racial/ethnic group in the study area (U.S. Census 2017a). Nearly 75% of Camino residents live in owner-occupied housing, and 62% of occupants have lived in Camino since before 2010 (U.S. Census 2017b).

Leisure and tourism is El Dorado County's largest industry (California Employment Development Department 2016). The area north of US 50 in the project area is known as the Apple Hill agricultural region, and is a popular seasonal tourist destination (see Section 2.1.1, *Land Use*). As such, it supports local business activity and jobs related to agritourism (El Dorado County Transportation Commission 2014). Jodar Vineyard and Winery tasting room and several other businesses are located on Carson Court, adjacent to the north side of US 50, and close to the current exit to Carson Road. The winery and other area businesses rely primarily on income generated during the Apple Hill tourist season.

On the south side of US 50 in the study area, other community activity centers are Camino Heights Golf Course, El Dorado High School East Campus, Western Sierra Medical Center, and Sierra Banquet Center.

Of major employment centers in El Dorado County, Placerville is the closest to the study area. Likely sources of employment for study area residents are county government offices, El Dorado County Sheriff's office, El Dorado Irrigation District, Raley's Supermarket, and Cyber Quest-Red Hawk Casino (California Employment Development Department 2016). The unemployment rate in El Dorado County was 4.8% as of November 2016.

US 50 already divides the unincorporated community of Camino in the project area. Drivers must cross US 50 by using one of the seven at-grade intersections along the highway. Despite the presence of the highway, the small rural community is relatively cohesive; residents are likely to know each other, attend the same schools and other public facilities, and patronize local businesses.

Environmental Consequences

The build alternatives involve modifying US 50 in the study area to improve safety. In the short term, construction would cause some traffic delays and detours, especially during the busy tourist season, but, with implementation of TRA-1 for a Traffic Management Plan, ample signage and traffic management would direct visitors to the Apple Hill growing area. Local residents who currently use the at-grade intersections in the project area would have to use alternate routes, and may experience longer travel times. In the long term, local access points for residents and tourists would change, but entering, exiting, and crossing the highway would be smoother and safer as a result of the improvements. The project would not result in land use changes or cause businesses to have to relocate. Accordingly, the project is not anticipated to have a negative effect on regional economy, employment, or income.

US 50 already runs through the community; the project would improve connectivity between the north and south sides of the highway. Residences would not become separated from community facilities. The project would not increase urbanization or isolation.

Currently, visitors access the Jodar Vineyard and Winery tasting room and other businesses by turning right from Carson Road onto Carson Court. Changes in access could affect the businesses on Carson Court if access is obstructed or becomes more inconvenient, or if businesses become less visible.

This safety improvement project would not induce growth. Improving connectivity and traffic safety by eliminating turn-movement conflicts would improve quality of life in the area.

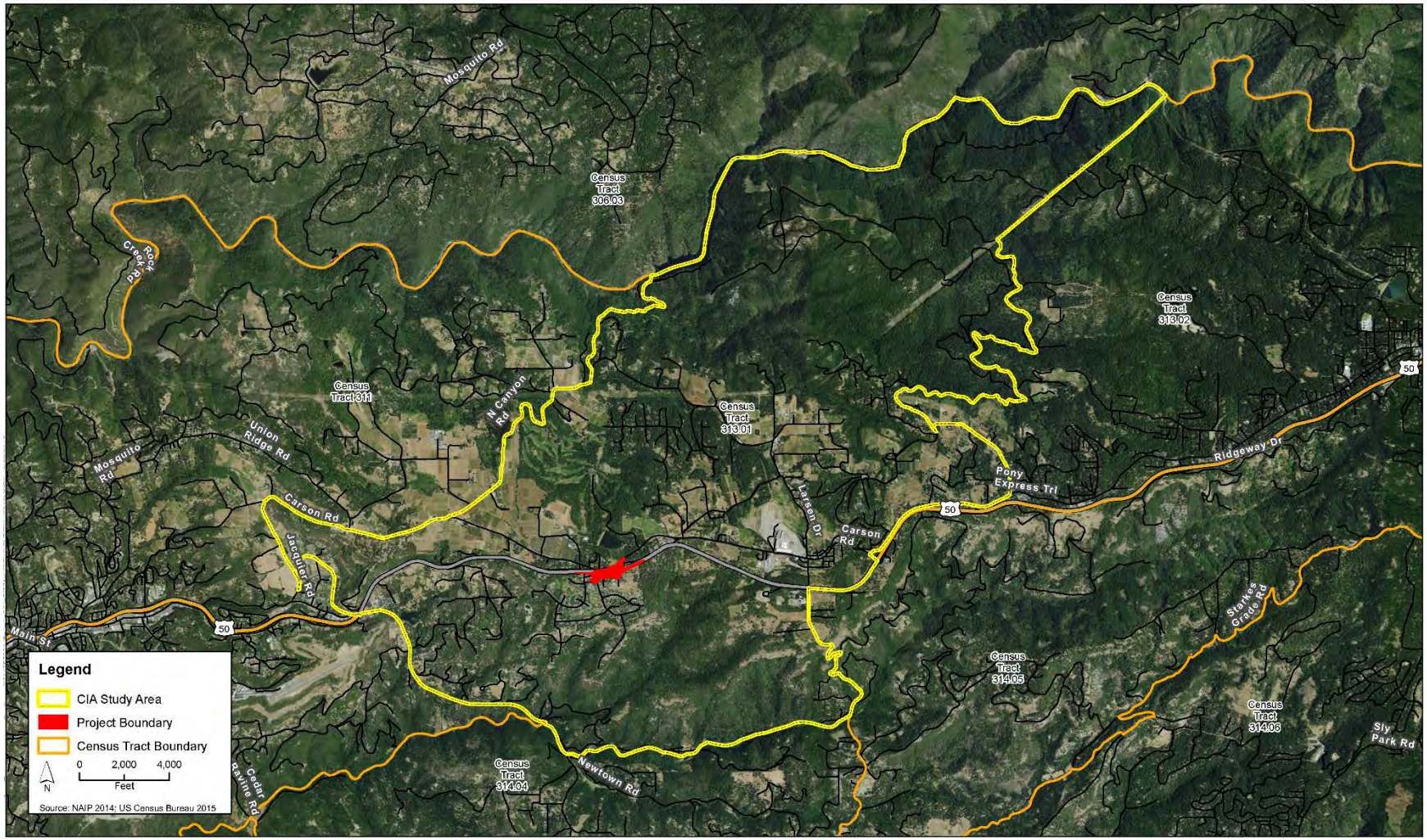

Figure 2.2.2-1. Community Impact Assessment Study Area, Census Tract 313.01

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Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

CIA-1: Provide temporary signage directing visitors to area attractions and businesses

During construction, ample signage will be provided to guide drivers to local tourist attractions and other businesses.

TRA-1: Implement a Traffic Management Plan during Construction

A TMP is a program of activities for alleviating or minimizing work-related traffic delays by applying traditional traffic handling practices and innovative strategies including public awareness campaigns, motorist information, demand management, incident management, system management, construction methods and staging, and alternate route planning. TMP strategies also strive to reduce overall duration of work activities where appropriate. Typical components of a TMP can include measures such as the implementation of staging, traffic handling, and detour plans; restricting construction work to certain days and/or hours to minimize impacts to traffic and pedestrians; coordination with other construction projects to avoid conflicts; and the use of portable changeable message signs to inform the public of construction activities.

Implementation of the measures in the TMP would reduce the temporary access and circulation impacts of the project caused by potentially lengthy construction delays. In addition to the measures described above, the TMP will include the following measures:

- Any emergency service agency whose ability to respond to incidents will be affected by any lane closure will be notified prior to that closure.
- Work will be coordinated with the local busing system (including school buses and public systems) to minimize impacts on their bus schedules.
- Caltrans will provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction.

Mitigation Measures

No mitigation measures related to community character and cohesion are required.

2.2.2.2 Relocations and Real Property Acquisition

Regulatory Setting

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that

persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix D for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 United States Code [USC] 2000d, et seq.). Please see Appendix C for a copy of the Department's Title VI Policy Statement.

Affected Environment

Right-of-way (ROW) acquisition of small portions of property adjacent to the project would be necessary under all build alternatives. TCE and ROW take locations are shown in Table 2.2.2-1. TCE and ROW acquisitions are also depicted for each alternative in Figures 2.2.2-2 through 2.2.2-4. Exact locations of new ROW will be determined in the design phase.

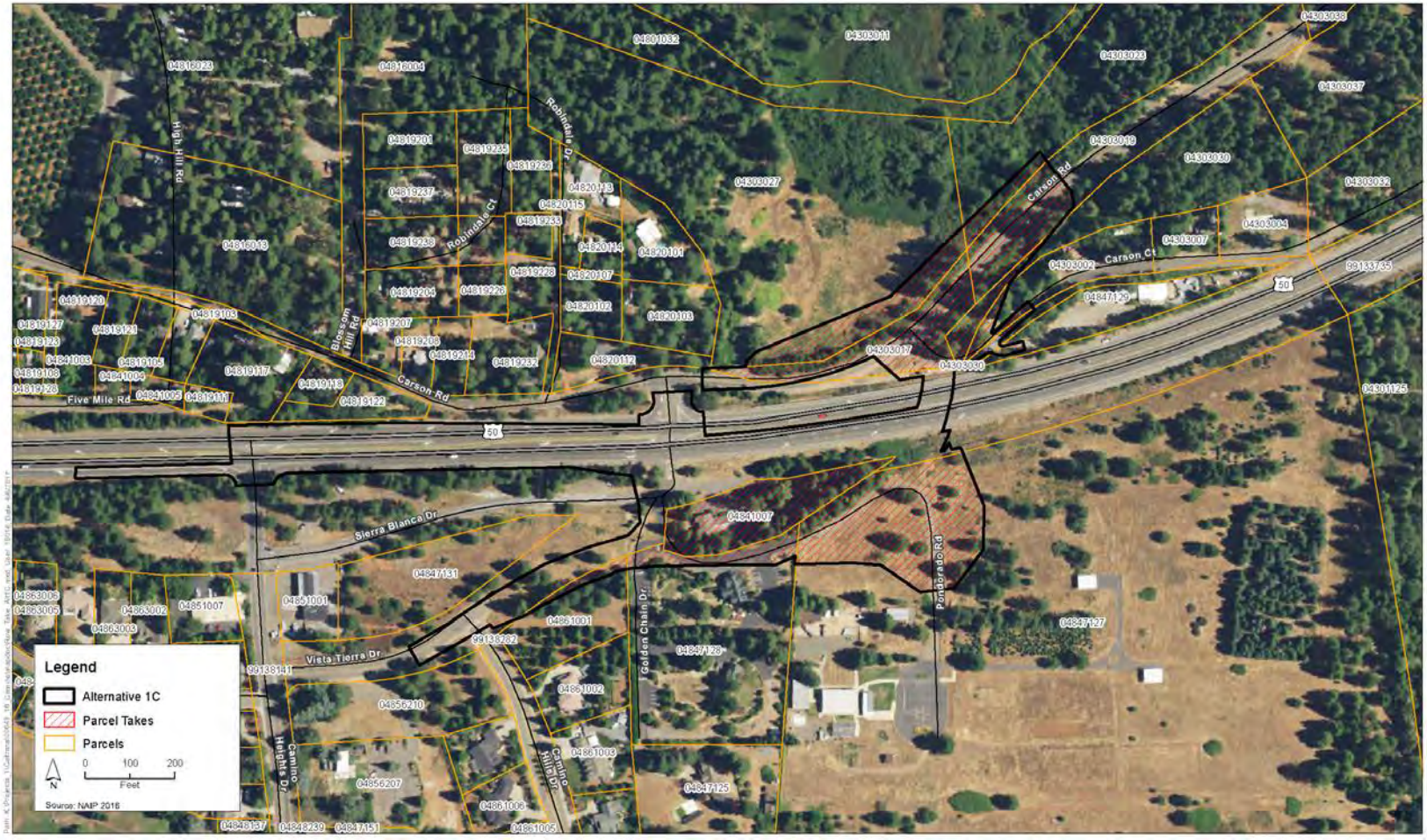

Figure 2.2.2-2. Right of Way Acquisition, Alternative 1C

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Figure 2.2.2-3. Right of Way Acquisition, Alternative 4.5A

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Figure 2.2.2-4. Right of Way Acquisition, Alternative 4.5C

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Figure 2.2.2-5. Right of Way Acquisition, Alternative 4.7

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Table 2.2.2-1. Temporary and Permanent ROW Acquisitions (acres)

APN	Alternative 1C		Alternative 4.5A		Alternative 4.5C		Alternative 4.7	
	ROW Take	TCE	ROW Take	TCE	ROW Take	TCE	ROW Take	TCE
048-201-03-100	n/a	n/a	n/a	n/a	n/a	0.002	n/a	n/a
048-201-12-100	n/a	n/a	n/a	n/a	0.014	0.022	n/a	n/a
043-030-27-100	0.707	0.283	0.714	0.284	1.658	0.288	n/a	n/a
043-030-23-100	0.291	0.081	0.243	0.165	0.170	0.095	n/a	n/a
043-030-30-100	0.301	0.055	n/a	n/a	0.116	0.168	n/a	n/a
043-030-02-100	0.182	0.076	n/a	n/a	0.001	0.036	n/a	n/a
048-410-07-100	1.100	0.000	1.100	n/a	1.100	n/a	n/a	n/a
048-471-28-100	0.190	0.041	0.008	0.011	0.008	0.011	n/a	n/a
048-471-27-100	0.624	n/a	5.467	0.449	5.467	0.449	n/a	n/a
048-011-25-100	2.010	0.333	0.004	0.012	0.004	0.012	n/a	n/a
043-011-05	--	--	--	--	--	--	1.638	--
043-011-25	--	--	--	--	--	--	9.309	--
043-011-35	--	--	--	--	--	--	0.404	--
043-011-38	--	--	--	--	--	--	0.057	--
043-020-19	--	--	--	--	--	--	0.010	--
043-550-62	--	--	--	--	--	--	0.070	--
043-550-63	--	--	--	--	--	--	0.346	--
043-550-64	--	--	--	--	--	--	0.445	--
048-160-29	--	--	--	--	--	--	0.011	--
048-160-31	--	--	--	--	--	--	0.109	--
048-160-39	--	--	--	--	--	--	0.069	--
048-160-42	--	--	--	--	--	--	0.148	--
048-180-26	--	--	--	--	--	--	0.000	--
048-181-17	--	--	--	--	--	--	0.007	--
048-191-11	--	--	--	--	--	--	0.002	--
048-191-17	--	--	--	--	--	--	0.017	--
048-191-22	--	--	--	--	--	--	0.019	--
048-191-22	--	--	--	--	--	--	0.319	--
048-410-07	--	--	--	--	--	--	2.690	--
048-471-27	--	--	--	--	--	--	0.535	--
048-471-28	--	--	--	--	--	--	0.023	--
048-471-31	--	--	--	--	--	--	0.537	--
048-520-27	--	--	--	--	--	--	0.014	--
048-610-01	--	--	--	--	--	--	--	--
991-337-35	--	--	--	--	--	--	--	7.202
991-337-36	--	--	--	--	--	--	0.017	5.853
991-337-38	--	--	--	--	--	--	1.638	
Total	5.406	0.869	7.536	0.921	8.539	1.083	19.28	13.055

Environmental Consequences

There would be land acquisitions under all alternatives. Alternative 4.5C would result in temporary construction impacts on more parcels than Alternatives 1C and 4.5A, approximately

1.083 acres. It would result in approximately 8.539 acres of ROW take. Alternative 1C would entail the least amount of temporary and permanent impacts. Alternative 4.7 would result in temporary construction impacts on 13.055 acres and Alternative 4.7 would result in approximately 19.28 acres of permanent ROW take. Under all alternatives, ROW acquisitions would not result in any relocations. All acquisitions would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the California Relocation Act.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures related to real property acquisitions are required. All acquisitions would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the California Relocation Act.

2.2.2.3 Environmental Justice

Income data from the American Community Survey 2008–2012 was used because it contains information for El Dorado County, the community of Camino, and Census Tract 313.01, encompassing the entire project limits and vicinity. Table 2.2.2-2 shows the number of people below the poverty level compared to the rest of the county in that time period.

Table 2.2.2-2. Poverty Levels

Place	Number of Residents Below the Poverty Level	% of Residents Below the Poverty Level
El Dorado County	14,439	8%
Camino	175	9.06%
CT 313.01	175	9.1%
Source: U.S Census 2017a		

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2017, the poverty level was $24,600 for a family of four (U.S. Department of Health and Human Services 2017a, 2017b).

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. The Department's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix C of this document.

Affected Environment

El Dorado County, Camino, and Census Tract 313.01 have significantly higher median household incomes ($70,117, $64,219, and $67,500, respectively, in 2012 [U.S. Census Bureau 2012]) than the 2012 poverty level for a household of four. The percentage of individuals living below the poverty threshold is slightly higher in Camino and Census Tract 313.01 than it is for the county as a whole (Table 2.2.2-2).

The study area is more than 98% white. Hispanics (of any race) compose approximately 3.5% of the study area population, less than the proportion of the Hispanics in El Dorado County as a whole. Few individuals of other ethnic groups reside in the study area (U.S. Census Bureau 2017a).

No minority or low-income populations that would be adversely affected by the proposed project have been identified as determined above. Therefore, this project is not subject to the provisions of EO 12898.

Environmental Consequences

No environmental justice populations would be disproportionately affected by the proposed project. The temporary construction impacts, as well as the benefits, of the proposed project

would accrue to all roadway users, including local residents. Implementation of the proposed project would improve the roadway safety for all users of the transportation system, regardless of income, race, or ethnicity. Although substantial adverse impacts were not identified, minor impacts associated with construction-period delays, noise, and air quality would not be borne disproportionately by low-income or minority populations.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures related to environmental justice are required.

Potential effects of a project are typically experienced in the area adjacent to and immediately surrounding the project location. Overall, due to the distance of the proposed project from established neighborhoods and the lack of environmental justice communities, the potential for community impacts is considered to be minimal. The impact would be less than significant.

2.2.3 Utilities/Emergency Services

Regulatory Setting

No state or federal laws directly concerning utilities or emergency services apply to the proposed project. California Public Utilities Commission General Order 131-D, dated August 11, 1995, directs that major relocations of power lines and substations operating at voltages in excess of 50 kilovolts must be reviewed under CEQA at both the project planning phase and the relocation plan phase, in order to qualify for an exception in compliance with Section IX.B of the General Order. This direction may apply if utility relocations are required for the proposed project.

Affected Environment

Information in the section is drawn primarily from the *Camino Safety Project Community Impact Assessment* (California Department of Transportation 2017a). Other sources are cited in the text.

Public Services

Fire protection is provided by the El Dorado County Fire District. The Fire District has 88 uniformed personnel, 5 support staff, and 45 active volunteer firefighters. The station nearest to the study area is Station 19, located at 4429 Pleasant Valley Road in Placerville.

The El Dorado County Sheriff's Department, with headquarters at 300 Fair Lane in Placerville, provides police protection in the study area. In 2015, the Sheriff's Department received 72,302 calls for service, with the most common being for medical and fire assists. The California Highway Patrol (CHP) also provides law enforcement services along the US 50 corridor. The nearest office is at 3031 LoHi Way in Placerville.

The study area is served by El Dorado Union High School District. The nearest school to the project limits is El Dorado High School East Campus, located just south of the project limits on Golden Chain Drive.

The El Dorado Trail and related Pony Express National Historic Trail are located at and adjacent to the project site. No other public parks or other public facilities were identified within 0.5 mile of the proposed project (California Department of Transportation 2017b).

Utilities and Service Systems

Utilities in the study area include gas lines, overhead electric lines, underground electric lines, fiber optic cables, water lines, sewer lines, and storm drain lines.

The El Dorado Irrigation District (EID) provides both raw and treated water and wastewater services to the study area (El Dorado Irrigation District 2011). The proposed project lies in the EID's eastern water supply region (El Dorado Irrigation District 2013: 41). The EID's Main Irrigation Canal passes through the project location (California Department of Transportation 2017c).

The EID's Camino Heights Wastewater Treatment Plant serves an estimated 280 people and 106 single-family residential home connections (El Dorado Irrigation District 2011: 4-16).

El Dorado County Environmental Management Department provides solid waste disposal services in the service region that includes Camino, through a franchise contract with El Dorado Disposal (El Dorado County).

Environmental Consequences

Public Services

Lane closures would be required during construction, but are proposed to take place during non-peak traffic hours. Emergency service vehicles could use local and frontage roads parallel to US 50 as alternate routes when necessary. Coordination with emergency service providers and implementation of a TMP would minimize service delays.

Once operational, the project is intended to reduce traffic accidents that result from turning conflicts; fewer accidents would relieve some proportion of police, fire, and medical emergency calls to the project vicinity. The project would not physically affect police and fire facilities, which are located in Placerville, outside the project area, or lead to constructing new or altering existing such facilities. The median barrier would change access to the study area, including emergency access. The concrete median barrier would restrict existing left turn movements from US 50 to local roads for approximately 2.4 miles. Instead of making left turns at at-grade intersections off the highway, emergency access vehicles would access the study area through the new off ramps and undercrossing and the emergency opening in the concrete barrier. This could account for a slight change in response times. However, concrete median barriers are already present at the eastern and western portions of the project, and are a common highway safety feature. While the new median barrier would result in some changes in access, the study

area would still be accessible to emergency response vehicles, and overall safety would be improved throughout the study area. Accordingly, impacts on emergency services would be less than significant.

El Dorado High School East Campus could be temporarily affected by construction delays during the school year. A detour would provide access when school is in session, and the project proponents would coordinate with the school districts to ensure that buses have access to the school. No school facilities would need to be constructed or altered. The impact would be less than significant.

There are no public parks in the project area. There would be no impact.

There are no other public service facilities in the immediate project vicinity. There would be no impact.

Utilities and Service Systems

Project construction would not produce an amount of wastewater that would exceed treatment requirements of the Central Valley Regional Water Quality Control Board. Project operation would not create new sources of wastewater, and therefore would not cause wastewater to exceed applicable treatment requirements.

Surface water drains off the highway into tapered drains located at the edge of pavement. The project would add additional impervious surface area (how much depends on which alternative is selected), which may increase flows. However, under all alternatives, the project proposes installation of two new drainage inlets on each side of the proposed Pondorado Road Undercrossing, connected by a 24-inch CSP. The project would implement permanent stormwater runoff best management practices (BMPs) to collect and retain or detain the additional flows within the project limits, as required by the Caltrans National Pollution Discharge Elimination System municipal separate storm sewer systems (MS4) permit and a Storm Water Management Plan. For additional detail, see Section 2.2.1, Hydrology and Floodplain. With these drainage features and stormwater control measures, the impact would be less than significant.

The EID's Main Irrigation Canal passes through the project location, and is considered a receiving water that could be affected by stormwater and other water discharges from project activities (California Department of Transportation 2017c). As noted above, all stormwater BMPs and permits would be observed. The project would not require or result in the construction of new water or stormwater treatment facilities, or the expansion of existing facilities that would cause significant environmental effects. The impact would be less than significant.

Utility relocations would be coordinated with the appropriate service providers. Any required utility coordination and service disruptions would be minimized to the extent feasible and would be communicated with customers in advance of any disruption to allow for alternative service arrangements.

Avoidance, Minimization, and/or Mitigation Measures

Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses. Implementing a TMP during construction would ensure uninterrupted access to emergency vehicle and school bus routes, and minimize traffic delays.

2.2.4 Traffic and Transportation/Pedestrian and Bicycle Facilities

Affected Environment

Traffic analyses were conducted in January 2017 using SimTraffic. The existing baseline, four build alternatives, and the no-build alternative were analyzed at eight study intersections. The traffic study area consists of US 50 between post mile 21.95 and24.45 and segments of Still Meadow Road, Five Mile Road, Paul Bunyon Road, Camino Heights Drive, Sierra Blanca Drive, Vista Tierra Drive, Carson Road, Lower Carson Road, and Upper Carson Road as shown in Figure 2.2.6-1. The study intersections were the following:

1. Still Meadow Road/US 50,
2. Paul Bunyon Road/5 Mile Road/US 50,
3. Camino Heights/US 50,
4. Sierra Blanca Road/Carson Road/US 50,
5. Upper Carson Road/US 50,
6. Upper Carson Road,
7. Lower Carson Road,
8. Camino Heights/Tierra Vista.

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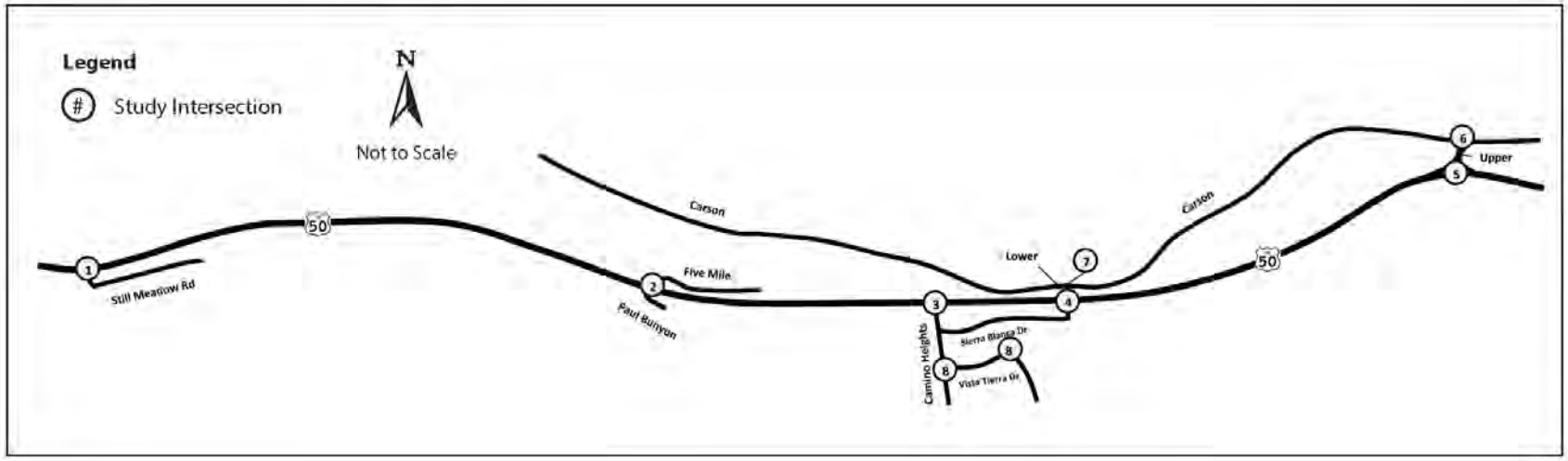

Figure 2.2.4-1. Traffic Study Intersections for the Existing Condition

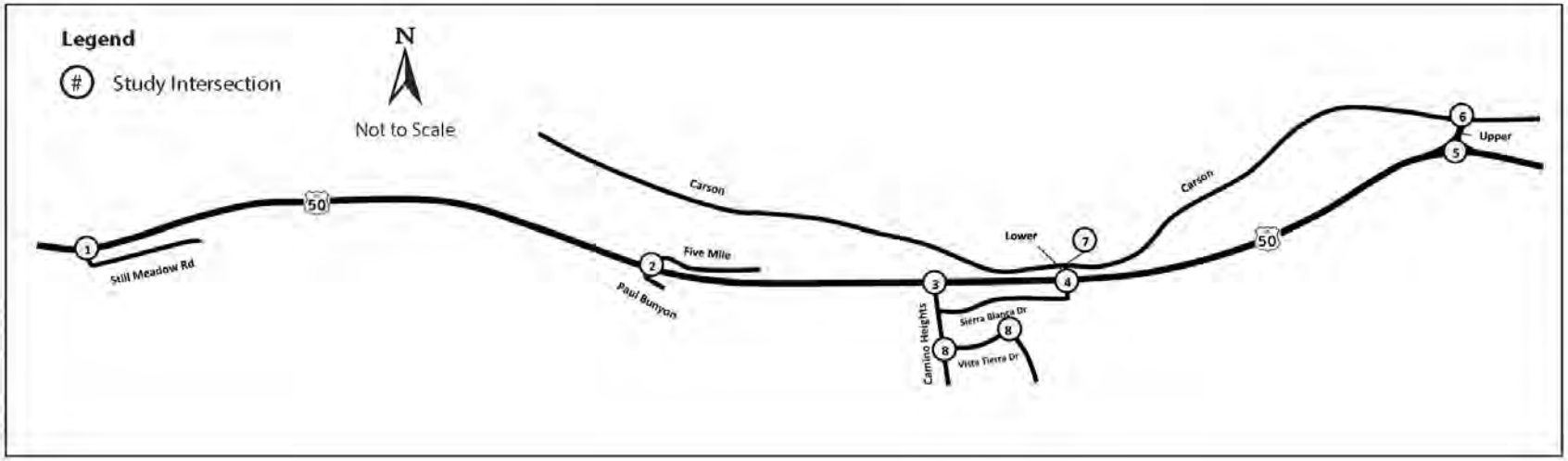

Figure 2.2.4-2. Traffic Study Intersections for No-Build.

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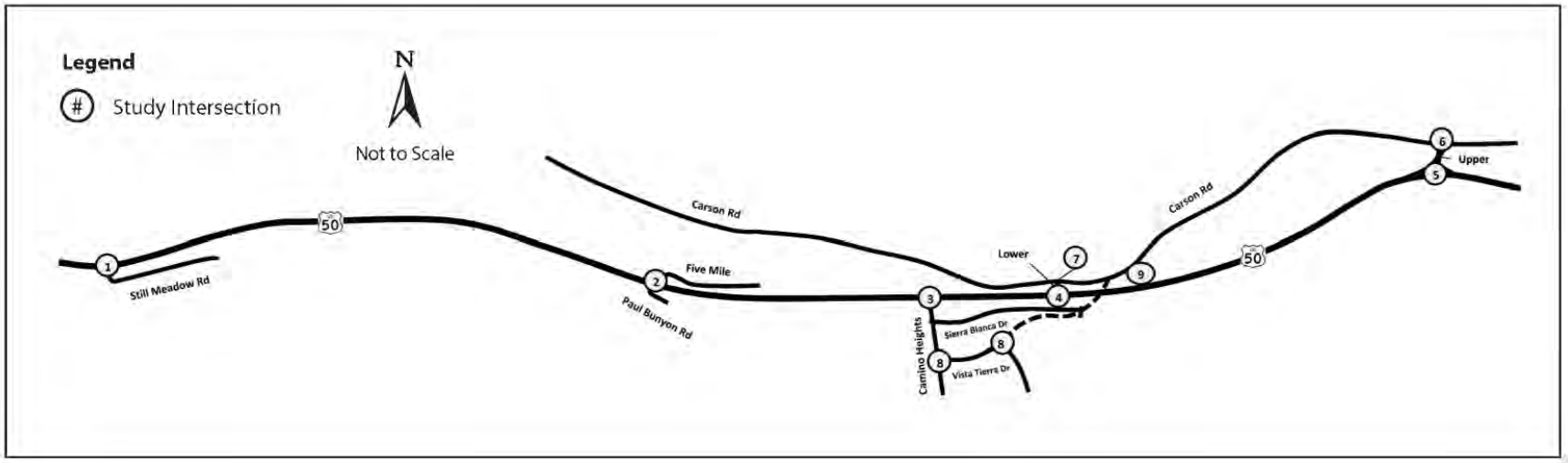

Figure 2.2.4-3. Traffic Study Intersections for Alternative 1C

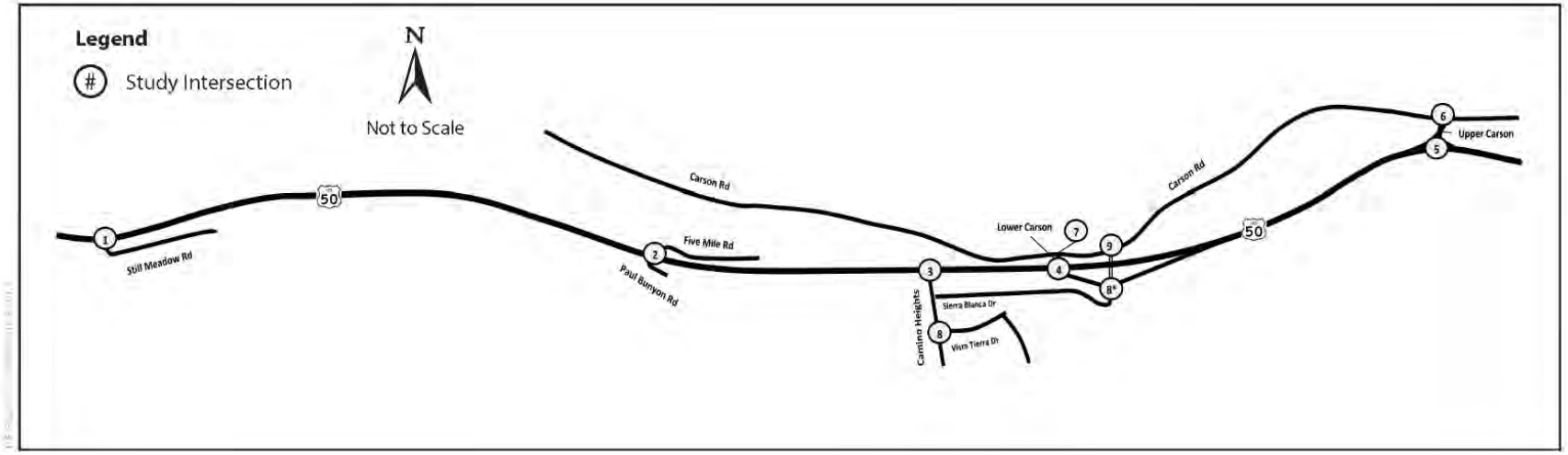

Figure 2.2.4-4. Traffic Study Intersections for Alternatives 4.5A and 4.5C

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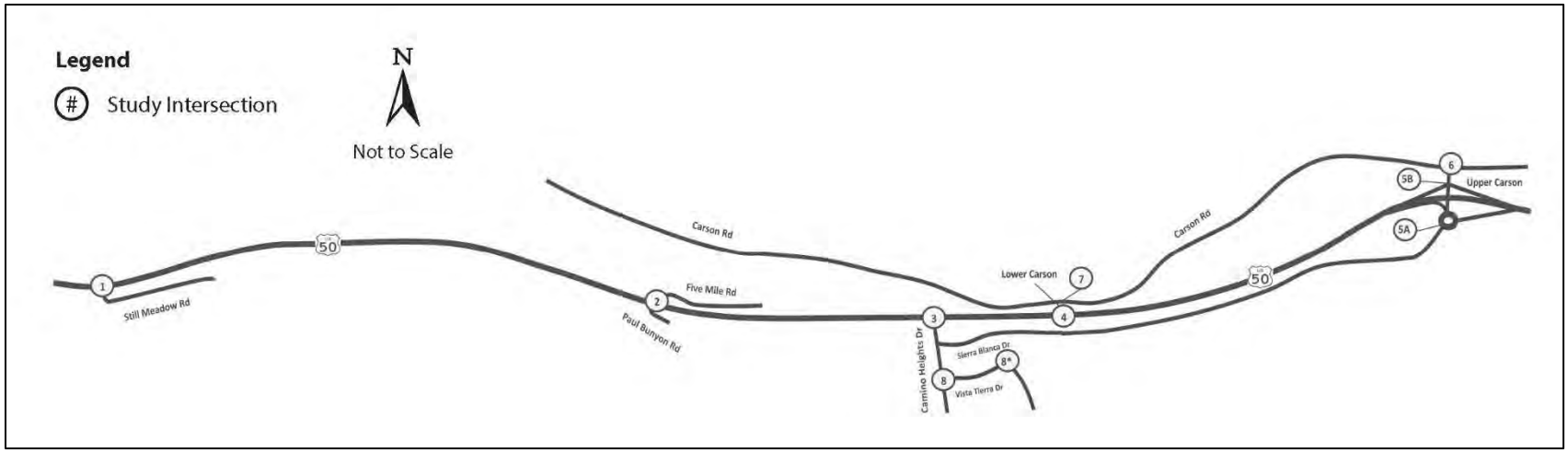

Figure 2.2.4-5. Traffic Study Intersections for Alternative 4.7

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Existing Conditions

US 50 is a major east-west highway connecting the community of El Dorado Hills at the western limits of the county to the city of South Lake Tahoe at the eastern limits of the county. Within the study area, direct access is available to and from US 50 via direct right turns or left turn lanes at Still Meadow Road, Paul Bunyon Road, Five Mile Road, Camino Heights Drive, Lower Carson Road, and Upper Carson Road. Average daily traffic along US 50 is up to approximately 12,805 vehicles traveling westbound and up to approximately 12,450 vehicles traveling eastbound between the Still Meadow Road/US 50 and Paul Bunyon/5 Mile Road/US 50 intersections.

Table 2.2.4-1. Existing Average Daily Traffic

Segment	Eastbound	Westbound
Between 1. Still Meadow Road/US 50 to 2. Paul Bunyon Road/5 Mile Road/US 50	12450	12730
2. Paul Bunyon Rod/5 Mile Road/US 50 to 3. Camino Heights/US 50	12059	12805
3. Camino Heights/US 50 to 4. Sierra Blanca Road/Carson Road/US 50	11741	12744
4. Sierra Blanca Road/Carson Road/US 50 to 5. Upper Carson Road/US 50	10545	11602
5. Upper Carson Road/US 50 to 6. Upper Carson Road	2117 (northbound)	2812 (southbound)
6. Upper Carson Road to 7. Lower Carson Road	2046	2259

Table 2.2.4-2. Year 2021 No-Build Average Daily Traffic

Segment	Eastbound	Westbound
Between 1. Still Meadow Road/US 50 to 2. Paul Bunyon Road/5 Mile Road/US 50	12870	13103
Between 2. Paul Bunyon Rod/5 Mile Road/US 50 to 3. Camino Heights/US 50	12432	12838
Between 3. Camino Heights/US 50 to 4. Sierra Blanca Road/Carson Road/US 50	12098	12467
Between 4. Sierra Blanca Road/Carson Road/US 50 to 5. Upper Carson Road/US 50	10872	11952
Between 5. Upper Carson Road/US 50 to 6. Upper Carson Road	2177 (northbound)	2878 (southbound)
Between 6. Upper Carson Road to 7. Lower Carson Road	2089	1717

Table 2.2.4-3. Year 2040 No-Build Average Daily Traffic

Segment	Eastbound	Westbound
Between 1. Still Meadow Road/US 50 to 2. Paul Bunyon Road/5 Mile Road/US 50	14094	14285
Between 2. Paul Bunyon Rod/5 Mile Road/US 50 to 3. Camino Heights/US 50	13610	14015
Between 3. Camino Heights/US 50 to 4. Sierra Blanca Road/Carson Road/US 50	13226	13599
Between 4. Sierra Blanca Road/Carson Road/US 50 to 5. Upper Carson Road/US 50	11907	13060
Between 5. Upper Carson Road/US 50 to 6. Upper Carson Road	2367 (northbound)	3090 (southbound)
Between 6. Upper Carson Road to 7. Lower Carson Road	2224	1797

Environmental Consequences

Level of Service (LOS) was analyzed at the study intersections as well as the Vista Tierra ramps. LOS generally indicates density of traffic on the roadway. LOS "A" indicates "free-flow" traffic conditions, LOS "B" indicates reasonably free flow, LOS "C" indicates near free flow, LOS "D" indicates approaching unstable flow, LOS "E" indicates unstable flow and operating at capacity, and LOS "F" indicates congestion and breakdown of flow. Table 2.2.4-4 shows delay in seconds per vehicle and LOS for the study intersections indicated. Table 2.2.4-4 summarizes the projected LOS with the median barrier fully closed.

Table 2.2.4-4. Study Intersection Level of Service-Barrier Fully Closed

Study Intersection	Existing	2021				2040			
		1C	4.5A	4.5C	4.7	1C	4.5A	4.5C	4.7
1. Still Meadow Road/US 50,	6.3/A	3.8/A	2.8/A	3.6/A	3.5/A	3.8/A	3.7/A	3.5/A	3.1/A
2. Paul Bunyon Road/5 Mile Road/US 50,	5.8/A	3.0/A	4.0/A	4.3/A	3.4/A	2.9/A	4.6/A	4.5/A	3.6/A
3. Camino Heights/US 50,	3.8/A	1.3/A	--	--	1.5/A	1.3/A	--	--	1.6/A
4. Sierra Blanca Road/Carson Road/US 50,	1.8/A	1.8/A	0.5/A	0.5/A	0.4/A	1.9/A	0.5/A	0.5/A	0.3/A
5. Upper Carson Road/US 50,	3.7/A	1.9/A	2.0/A	1.9/A	--	--	--	2.0/A	--
5A Upper Carson/EB Ramps	--	--	--	--	4.5/A	--	--	--	4.7/A
5B Upper Carson/WB Ramps	--	--	--	--	3.4/A	--	--	--	3.8/A

Study Intersection	Existing	2021				2040			
		1C	4.5A	4.5C	4.7	1C	4.5A	4.5C	4.7
7. Lower Carson Road/Carson Road	6.7/A	8.5/A	8.3/A	7.4/A	6.7/A	8.5/A	8.6/A	7.4/A	6.8/A
6. Upper Carson/Carson Road	2.5/A	1.6/A	2.0/A	1.2/A	2.3/A	1.8/A	2.5/A	2.5/A	2.4/A
8. and/or 9. Undercrossing /Carson Road	--	7.4/A	9.1/A	4.5/A	--	7.3/A	9.1/A	4.8/A	--
8.Vista Tierra at Ramps	--	6.1/A	2.4/A	2.4/A	--	6.5/A	2.5/A	2.4/A	--

Build Alternative 1C

Year 2021

Under Build Alternative 1C all study intersections would operate at an acceptable LOS A in Year 2021. All study intersections would also operate at an acceptable LOS A in Year 2021. Vehicle miles traveled are estimated to be 7,865.

Year 2040

Under Build Alternative 1C all study intersections would operate at an acceptable LOS A in Year 2040 except for the Still Meadow intersection and the Vista Tierra ramp intersection, which would both operate at an acceptable LOS B. All study intersections would also operate at an acceptable LOS A in Year 2040. Vehicle miles traveled are estimated to be 8,483.

Build Alternative 4.5A

Year 2021

Under Build Alternative 4.5A all study intersections would operate at an acceptable LOS A in Year 2021. Vehicle miles traveled are estimated to be 7,690.

Year 2040

Under Build Alternative 4.5A all study intersections would operate at an acceptable LOS A in Year 2040. Vehicle miles traveled are estimated to be 8,365.

Build Alternative 4.5C

Year 2021

Under Build Alternative 4.5C all study intersections would operate at an acceptable LOS A in Year 2021. Vehicle miles traveled are estimated to be 7,593.

Year 2040

Under Build Alternative 4.5C all study intersections would operate at an acceptable LOS A in Year 2040. Vehicle miles traveled are estimated to be 8,455.

Build Alternative 4.7

Year 2021

Under Build Alternative 4.7all study intersections would operate at an acceptable LOS A in Year 2021. Vehicle miles traveled are estimated to be 7,679.

Year 2040

Under Build Alternative 4.7 all study intersections would operate at an acceptable LOS A in Year 2040. Vehicle miles traveled are estimated to be 8,367.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measure

TRA-1: Implement a Traffic Management Plan during Construction

A TMP is a program of activities for alleviating or minimizing work-related traffic delays by applying traditional traffic handling practices and innovative strategies including public awareness campaigns, motorist information, demand management, incident management, system management, construction methods and staging, and alternate route planning. TMP strategies also strive to reduce overall duration of work activities where appropriate. Typical components of a TMP can include measures such as the implementation of staging, traffic handling, and detour plans; restricting construction work to certain days and/or hours to minimize impacts to traffic and pedestrians; coordination with other construction projects to avoid conflicts; and the use of portable changeable message signs to inform the public of construction activities.

Implementation of the measures in the TMP would reduce the temporary access and circulation impacts of the project caused by potentially lengthy construction delays. In addition to the measures described above, the TMP will include the following measures:

- Any emergency service agency whose ability to respond to incidents will be affected by any lane closure must be notified prior to that closure.
- Work will be coordinated with the local busing system (including school buses and public systems) to minimize impacts on their bus schedules.
- The lead agency will provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction.

Mitigation Measures

No mitigation measures related to Traffic and Transportation/Pedestrian and Bicycle Facilities are required.

2.2.5 Visual/Aesthetics

The proposed project was evaluated through a scenic resources evaluation of the existing conditions, in lieu of an abbreviated or fully developed visual impact assessment (VIA) under Chapter 6, Article 19, Section 15301(c) of CEQA. The Preliminary Environmental Analysis Report determined that an abbreviated or fully developed VIA is not required and a visual impact assessment memorandum (VIAM) was deemed sufficient for evaluating project impacts (California Department of Transportation 2015). This analysis draws on the VIAM (California Department of Transportation 2017a).

Regulatory Setting

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

Affected Environment

The project corridor starts on US 50 at PM 21.95, roughly 3.7 miles east of Placerville, and extends 2.4 miles west to PM 24.45. Throughout the corridor, US 50 is a four-lane highway with eastbound and westbound traffic separated by a concrete median barrier at the east and west ends of the project and double yellow lines separating traffic in between. Auxiliary turning lanes are present at six road intersections. The project corridor is viewed daily by motorists using US 50 for commuting and accessing recreational areas, and by local traffic using residential and collector roads adjacent to US 50. Motorists on US 50 are the largest viewer group for the proposed project.

The western half of the project corridor features foothill vegetation, including oak woodlands with intermixed stands of ponderosa pine. US 50 follows a contour along the south side of a ridge, which creates views of steep road cuts on the northern side of the highway and, where thick tree cover is not present, offers occasional scenic vista views to lower elevations in the valley to the south. Cut areas to the north of US 50 are primarily vegetated with grasses and shrubs, but exposed areas of soil and rock are not uncommon.

The eastern half of the project corridor transitions to predominately ponderosa pine forest, where US 50 runs along the top of a ridge and dense stands of trees along the highway create a channelized view. Rural character typifies the project corridor, with low-density commercial properties, including hotels and restaurants, present throughout. A few residential structures are also visible from US 50. The surrounding landscape features subdivisions, orchards, and two reservoirs; however, terrain and vegetation prevent views to these features. The most heavily

developed areas within the project corridor are near the at-grade intersections for Camino Heights Drive and Sierra Blanca Road. Most views along the project corridor consist of the bordering roadside terrain, low-density commercial buildings, adjacent hillsides, and vegetation.

US 50 is an Officially Designated State Scenic Highway, protected for maintaining and enhancing its scenic viewsheds (California Department of Transportation 2016). In addition, the County of El Dorado considers eastbound US 50 passing near the project site to be a corridor with important scenic viewpoints for its views of the Sacramento Valley (El Dorado County 2003, 2015). As described in the *Camino Safety Project Section 4(f) De Minimis Determination*, Alternative 4.7 would have a de minimis impact on the El Dorado Trail and Pony Express National Historic Trail. The County of El Dorado Parks Division provided concurrence on the de minimis determination on January 2, 2018 (Appendix A, Attachment 1).

Environmental Consequences

Construction of the proposed project would result in minor visual impacts from construction activities, equipment, and staging areas. However, construction would occur along limited locations within the project corridor and construction would be completed relatively quickly, considering the simple nature of the proposed project actions. Visual impacts that would result from the proposed project can be grouped according to four main proposed actions: installation of the concrete median barrier, cut and fill, drainage improvements, and specific impacts of the alternatives at Camino Heights Drive, Ponderado Road, and Upper Carson Road.

Concrete median barriers are a minor, common visual element associated with the project corridor; they are passed quickly at highway speeds and do not stand out as notable. The installation of concrete median barriers would not alter the character of the project corridor because concrete median barriers are already present at the eastern and western portions of the project. In addition, concrete median barrier installation would require little or no grading and would not substantially affect visual resources along the project corridor.

Minor impacts on the visual conditions of the project corridor would result from cut and fill required to construct the project. The western third of the project corridor would be most affected by grading activities. Flattening existing slopes by using fill or cuts would result in a limited amount of vegetation removal. However, cut-and-fill activities would result in an appearance similar to existing locations along the project corridor. Although tree removal would result in slight changes to visual resources in isolated locations, the changes are only incremental to the existing conditions and would not result in a substantial change in the visual character of the project corridor. In some areas along the western third of the project, vegetation removal would open views to the valley floor, providing more pleasing visual conditions and additional scenic vista views. Cuts would slightly increase the number of areas along the project corridor that have exposed soil and rock that cannot sustain revegetation. However, these conditions are an existing element common to the project corridor. Graded slopes that could be vegetated would not differ noticeably from the existing conditions once grasses from hydroseeding applications are established. Therefore, changes associated with the proposed cut-and-fill actions would result in an appearance similar to the existing conditions along the project corridor.

The project's proposed drainage features are minimal in scope and limited to scuppers, drain inlets, culverts, and one corrugated steel pipe drain, which would all be installed at the edge of pavement along the road shoulder. These project features are minor visual elements, barely noticeable at highway speeds. Additionally, most culverts are not visible to highway users and neighbors. Drainage features would not substantially affect visual resources along the project corridor.

The proposed undercrossing with any of the build alternatives would be the only below-grade crossing within the project corridor and would introduce a new visual element into the landscape that would include cut-and-fill slopes and the undercrossing structure. Views to adjacent roadways and cut-and-fill slopes are common throughout the project area and this new element would not be incongruous. As with other cut-and-fill areas, graded slopes associated with the undercrossing would be hydroseeded and would not differ noticeably from existing conditions once grasses from hydroseeding applications are established. From off-highway locations, local traffic would also have direct views of the undercrossing structure, which would consist of retaining walls and tunnel under US 50. The undercrossing structure would use aesthetic treatments for retaining walls to improve its appearance.

Under all of the alternatives, eastbound US 50 users would see foreground views of the expanded Ponderado Road, new on- and off-ramps, reconfigured intersections, and views of the cut slopes and retaining walls for the proposed undercrossing. Westbound views from US 50 would be less affected, but would include views of cut-and-fill slopes. Foreground vegetation would be minimally affected on both sides of US 50, helping to screen some of the new construction. Of the alternatives presented with an undercrossing, Alternative 1C would result in the least visual change because less roadway would be constructed in the project corridor, which would minimize the cut-and-fill areas. Alternative 4.5A would result in more prominent visual changes to the south of US 50 by having a larger footprint for the Ponderado Road/Sierra Blanca Drive intersection. Alternative 4.5A would also slightly realign Carson Road to the north of US 50. Alternative 4.5C would construct the Ponderado Road/Sierra Blanca Drive intersection in a manner very similar to Alternative 4.5A. Alternative 4.5C would result in a more prominent visual change because, in addition to the Ponderado Road/Sierra Blanca Drive intersection, a roundabout would be constructed north of US 50 in lieu of slightly realigning Carson Road. The roundabout would have a larger footprint but landscaping would be incorporated to minimize visual impacts. Alternative 4.7 would result in the most prominent visual changes because it would construct an undercrossing and associated improvements and a roundabout further east compared to the undercrossing and associated improvements associated with the other three alternatives. US 50 would be slightly realigned to the south to accommodate the new undercrossing, which would require tree removal and areas of cut and fill. A frontage road would be constructed south of US 50 to connect Sierra Blanca Drive and intersecting roadways to the new roundabout. The frontage road alignment would be located in ponderosa pine forest, also requiring tree removal and cut and fill. However, some areas of vegetation removal are not likely to be visible from certain portions of US 50 because an existing berm along the highway corridor and the remaining vegetation would limit views of the frontage road and vegetation removal. Vegetation removal would likely be visible where the frontage road alignment is closer to and parallels US 50. The roundabout would realign the terminus of the El Dorado Trail, but it would also construct an extension that creates a safe crossing for the trail over US 50 that does not currently exist, and the roundabout would incorporate landscaping to minimize visual impacts.

Overall, Alternative 4.7 occupies a larger footprint than the other alternatives and would result in a greater degree of change to the visual landscape because the other alternatives would not require US 50 to be realigned and would not require as much infrastructure, cut and fill, or vegetation removal.

The actions described for all alternatives would not substantially affect visual resources along, or alter the visual quality associated with, the project corridor. Therefore, these changes would not negatively affect the State Scenic Highway designation, nor the County of El Dorado's designation of US 50 as a corridor with important scenic viewpoints.

Project construction would occur year-round, Monday through Friday between the hours of 7:00 a.m. and 7:00 p.m. and Saturday between the hours of 8:00 a.m. and 6:00 p.m. Because construction would largely occur during daylight hours, high-intensity lighting needed for nighttime construction work would not likely be used. However, if needed, such lighting would not result in substantial effects because sensitive residential areas are far enough away to not be disturbed, or are not within sight of the construction area. Roadway travelers would be exposed to such lighting very briefly. Although vegetation removal would result in very slight increases in glare at isolated locations, the changes are only incremental to the existing conditions and would not result in a substantial change in the level of existing glare present along this stretch of US 50.

Project construction activities would result in only minor visual effects within the project corridor. Visual effects would result from cut-and-fill slopes and associated loss of vegetation required to expand shoulders and auxiliary lanes along US 50. However, these changes to visual resources would be limited in scope, and would not be substantial compared to the existing conditions.

There would be no impact on scenic vistas and State and County scenic route designations.

Proposed improvements, including concrete barrier medians and drainage features, are minor and not noticeable at highway speeds. The construction of wider shoulders, on- and off-ramps, auxiliary lanes, and an undercrossing for the Camino Heights Drive and Ponderado Road alternatives would alter the existing conditions; however, none of these features are incongruous and would only pose minor changes to the visual character of the corridor. Alternative 4.7 would result in a greater degree of change from the US 50 realignment and increased amount of infrastructure, cut and fill, and vegetation removal.

Construction is expected to last no more than 2 years and would be coordinated to reduce temporary impacts from staging, equipment, and supplemental lighting for construction. The project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Although vegetation removal would result in very slight increases in glare at a few locations, the impact would be less than significant.

The project would not result in a substantial change in the visual character of the project corridor. The impact would be less than significant. Short-term and minor long-term impacts on the visual resources of the project corridor are acceptable considering the improved traffic safety anticipated from this project.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measure

VIA-1: Visual impacts will be reduced by project features such as revegetating slopes and providing aesthetic treatments for retaining walls, as described in Chapter 1. If an alternative that includes roundabouts is selected, the roundabouts would be landscaped as part of project design. Specific aesthetic and landscape treatments will be developed when an alternative is selected and as project design progresses. No additional avoidance, minimization, and/or mitigation measures are required.

Minimization Measure

No mitigation measures related to visual/aesthetics are required.

2.2.6 Cultural Resources

Regulatory Setting

The term *cultural resources*, as used in this document, refers to the built environment (e.g., structures, bridges, railroads, water conveyance systems), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance.

Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms, including historic properties, historic sites, historical resources, and tribal cultural resources. Laws and regulations that pertain to cultural resources are described below.

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). As defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the National Register of Historic Places (NRHP) listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation

Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU) between the Department and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

Affected Environment

Cultural Resource Studies

A Historic Properties Survey Report (HPSR), Historical Resources Evaluation Report (HRER), and Archeological Survey Report (ASR) were recently completed for prior alternatives in June (Pacific Legacy 2017). These studies covered a portion of the current alternative's Environmental Study Limits (ESL), primarily within Caltrans's right-of-way and proposed western frontage access road adjacent and south of the right-of-way. A partial archaeological pedestrian survey of the remainder of the current alternative's ESL was conducted on August 2–3 and September 8, 2017. Due to dense vegetation and poor visibility, full survey and identification efforts were not possible. A phased approach to finalizing identification of cultural resources within the current alternative will be employed to comply with federal and state laws, pursuant to Stipulation XII of Caltrans's Section 106 PA and Stipulation XI of PRC Section 5024 MOU. Caltrans will enter into a project-level Programmatic Agreement (PA) with the SHPO and interested Native American Tribes. The PA will include a conditional Finding of Effect (FOE) and stipulate the development of a management plan that guides the complete identification and evaluation efforts for the project. Caltrans will complete a final Finding of Effect that documents the results of the finished identification efforts.

Methods Used to Support Studies

Caltrans personnel conducted background archival research and a record search at the North Central Information Center of the California Historical Resources Information System in 2016. Caltrans also consulted the El Dorado County Historical Museum; the Native American Heritage Commission (NAHC; May 2016); the Caltrans Cultural Resources Database (CCRD); and NRHP records[1], California Historical Landmarks (CHL), California Inventory of Historical Resources (CIHR), California Points of Historical Interest (CPHI), and CRHP. Caltrans personnel also conducted research on the Camino, Placerville, and Lake Tahoe Railroad (CP&LTRR) and former Hickman residence at the following facilities: the photographic collections at the El Dorado County Museum in Placerville, California; the Foothills Rails collection[2]; the County of El Dorado offices, and at the California Room of the California State Library and the California State Archives in Sacramento, California. Caltrans personnel conducted additional in-depth studies of the project area for prior alternatives, documented in the HPSR for the Camino Safety Project on US 50 near Camino, El Dorado County; 03-ED-50, PM 21.95/24.3 (Pacific Legacy 2017). This report is on file at Caltrans District 3, Office of Environmental Management, in Sacramento.

[1]http://www.nps.gov/history/nr/research
[2] www.trainweb.org

Two Area of Potential Effects (APE) boundaries will be defined for (1) archaeological resources and (2) architectural resources (HPSR; Attachment 1: Exhibit 1-Figure 3). The APEs/ cultural Project Area Limit (PAL) will be established to include all historic properties and historical resources that may be directly or indirectly affected by the proposed project alternatives; all direct ground-disturbing activity; and any potential activities that may cause indirect effects to cultural resources; including but not limited to all existing and proposed ROW, temporary construction easements (TCE), and equipment storage/staging areas.

Cultural Resources

There are no historic properties and/or historical resources within the project area that are currently listed on the California OHP Archaeological Determinations of Eligibility, CIHR, or OHP Property Data File. Previous studies have been conducted within and adjacent to the current project area (Miksell 1987; Offerman 1989; Noble 1991, 1997; Parker 1993; Supernowicz 1998; Peak 2002, 2005). During an intensive archaeological survey, Offerman and Miksell revealed the historic-era Hickman Ranch parcel which currently encompasses a large portion of Alternative 4.7 & 4.7's ESL/APE north of US 50 and is primarily on the south side of the highway (PM 23.9/24.8). The ranch parcel encompasses approximately 37 acres. Several historic features were previously identified within or adjacent to that portion of the Hickman Ranch parcel. These features include a small spring house structure, a collapsed "barn" and/or a feed shed, a portable fruit drying incinerator, and an abandoned segment of the CP&LTRR.

The CP&LTRR alignment is currently used for an unimproved trail section, but there is signage at road crossings indicating that it is part of the El Dorado Trail and small picnic tables have been placed at intervals along the trail. In 1904, the El Dorado Lumber Company headquartered in Camino, organized the CP&LTRR, and completed the standard line from Camino to Placerville on June 4, 1904. The CP&LTRR, although built to haul lumber, carried passengers and other cargo as well. The railroad ceased passenger service in 1936, having carried few passengers since 1926. The trestles were filled in by 1984 and the tracks were removed during 1986–87. Today the grade and a few ties lying beside it are all that remains.

A residence is located within the project area, south of US 50 and west of the CP&LTRR alignment. The residence dates from the early 20th century and is associated with the owner of the Hickman ranch (located east of the CP&LTRR alignment) and is in fair condition. The house is still used as a residence.

Native American Consultation for the project was previously pursued by sending notification letters, follow-up phone calls, field meetings, documenting Native American concerns regarding cultural resources, and maintain a communication log of consultation activities (Pacific Legacy 2017). No tribal cultural resources were identified within the current alternative as a result of consultation.

Cultural Resource Significance

While the known archaeological and build environment resources appear to lack the significance to be eligible for inclusion in the CRHR or NRHP, limited access, visibility, and ability for complete cultural resource identification precludes a definitive statement of significance and evaluation for the resources within the APE/PAL. A PA between Caltrans, SHPO, and interested Native American tribes will stipulate the development of a management plan to guide the identification and evaluation of the Hickman Ranch complex, the CP&LTRR, and any resources identified during studies carried out subsequent to this Initial Study. This will include finishing pedestrian survey, updating cultural resource records, and evaluating the resources within a historic context.

If previously unknown or unanticipated cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact David Price, Caltrans' District 3 Project Archaeologist, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Environmental Consequences

Caltrans has determined that there are potentially eligible archaeological resources within the APE; however, evaluation of the resources will not be possible until visibility and vegetation in the site allow proper access and recording. A project-level PA between Caltrans and SHPO will ensure that identification and evaluation efforts are completed prior to construction of the project.

Within the APE there are two historic-era built environment resources that appear to be ineligible for inclusion to the CRHP or the NRHP. One of the resources is the alignment of the CP&LTRR and the other is an early 20th century residence. Alteration of these resources will not constitute a significant impact to the environment.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and mitigation measures will be developed as applicable upon finishing phased identification and evaluation efforts, as will be outlined in the project-level PA.

2.3 Physical Environment

2.3.1 Water Quality and Storm Water Runoff

2.3.1.1 Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

The USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of the USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed

by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

- National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department's MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department's MS4 Permit (Order No. 2012-0011-DWQ) was adopted on September 19, 2012 and became effective on July 1, 2013. The permit has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);
2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the Maximum Extent Practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices (BMPs). The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in

soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). In accordance with the Department's Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

2.3.1.2 Affected Environment

The proposed project is located on US 50 in El Dorado County between Post Mile (PM) R21.95 to 24.25. Weber Creek, New Weber Creek, China Creek, El Dorado Main Irrigation Canal, Hangtown Creek, and White Rock Creek are the nearest receiving waters to the project area. Blakely Reservoir (south of PM 24.27) and an unidentified reservoir (south of PM R21.95) are also in close proximity to the project area (Caltrans 2017a). Potential discharges, resulting from project activities, would most likely be conveyed to small roadside ditches (further described below) and possibly to one of the larger receiving waters previously identified. Using the tributary rule and the Watershed Boundary Dataset to identify potential downstream risks, Weber Creek and White Rock Creek are perennial streams that are tributary to the South Fork of the American River, which confluences with Folsom Lake. With respect to TMDL pollutant listing, Weber Creek and White Rock Creek have historically been impaired for pH and specific

conductivity. However, based on the most current readily available data and information, the weight of evidence indicates that there is not sufficient justification for placing this water segment-pollution combination on the section 303(d) list. The recommendation described is based on staff findings that only 2 samples are available and a minimum of 5 is needed for evaluation under section 3.2 of the listing policy (per the State Water Resources Control Board, 2017). Surface runoff flows along the toe of cut slopes adjacent to the westbound travel way to culverts under the highway to the south. Surface water drains off the highway predominantly towards to the south into tapered drains located at the edge of pavement (Caltrans 2016). Seasonal freshwater wetlands in the project area are seasonally inundated drainage swales and depressions. Other drainages in the project area include intermittent and ephemeral drainages, and roadside ditches (Caltrans 2017b).

2.3.1.3 Environmental Consequences

Alternatives 1C, 4.5A, 4.5C, and 4.7 would result in new impervious surfaces, and a land disturbance area (not including staging areas) of 9.5 acres for Alternatives 1C, 4.5A, 4.5C, and 4.7. An increase in impervious surface (pavement) would result in the potential for additional roadway contaminants to affect water quality. Potential sources of pollutants from the roadway include total suspended sediments, nutrients, volatile and semi volatile organics, hydrocarbons, pesticides, particulate metals, dissolved metals, pathogens, litter, biochemical oxygen demand, total dissolved solids, and targeted design constituents. Construction activities may also result in eroded soil or suspended solids being temporarily introduced into waterways. Potential impacts of the proposed project on existing water quality conditions for the nearest receiving waters identified would potentially consist of short-term discharges of sediments, oil, grease, and chemical pollutants (generated during construction). Long-term impacts on water quality are not anticipated, but could occur from increased impervious area, operation and maintenance activities, and discharges of sediments and other pollutants collected in storm water runoff. However, standard facilities used to handle stormwater on site would include an array of structural elements or facilities that would serve to manage, direct, and convey stormwater, as discussed in Section 2.2.2.4, *Avoidance, Minimization, and/or Mitigation Measures.*

2.3.1.4 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is proposed related to water quality. Standard avoidance and minimization measures will be implemented. During construction, the primary pollutant of concern is sediment and siltation from disturbed construction areas. As a result, the appropriate construction site BMPs will be implemented and maintained during construction activities to avoid and reduce potential water quality impacts. Temporary BMPs will be selected and identified in the Storm Water Pollution Prevention Plan (SWPPP) to protect water bodies, within or near the project limits, from potential storm water runoff resulting from construction activities. Temporary sediment and erosion control measures may include the following:

- Fiber rolls and/or silt fences;
- Gravel bag berm;
- Rolled erosion-control product (e.g., netting);
- Designated construction entrance/exit;

- Re-establishment of vegetation or other stabilization measures (hydroseeding, mulch) on disturbed soil areas and newly constructed slopes; and
- Wind erosion control.

Adherence to additional measures are recommended to help insure NPDES Permit compliance and to further prevent receiving water pollution as a result of construction activities and/or operations related to the project. These measures would minimize the potential for discharges of pollutants to nearby storm drains, Weber Creek, and the receiving waters identified. Measures include: implementing stabilization methods, compliance with all applicable guidelines and requirements listed in the 2015 Caltrans Standard Specifications, Section 13, regarding water pollution control, and identifying and protecting existing drainage facilities by the appropriate temporary construction Site BMPs. The project is a mandatory compliance project and treatment BMPs will be required within the project limits or alternative compliance will be required. The Storm Water Data Report, will include details, specifics, and decisions made related to the inclusion of treatment BMPs and options for alternative compliance (Caltrans 2017a).

For non-stormwater discharges resulting from de-watering activities, the Central Valley Regional Water Quality Control Board has unique waste discharge requirements (WDRs) for specific types of low threat discharge to land which includes Resolution R5-2013-0145, "Waiver Of Reports Of Waste Discharge And Waste Discharge Requirements For Specific Types Of Discharge Within Central Valley Region" and Water Quality Order No. 2003-003-DWQ, "Statewide General Waste Discharge Requirements For Discharge To Land With A Low Threat to Water Quality (General WDRs)". The Contractor will determine which permit is applicable for the de-watering operations proposed and will implement the requirements to ensure compliance with the WDRs.

Further, the proposed project will be designed in accordance with the objectives of Caltrans' NPDES Permit requirements and related stormwater requirements to reduce runoff and the volume of entrained sediment. Caltrans stormwater quality manuals also include BMPs to be implemented for erosion and sediment control and material management. The implementation of BMPs would minimize impacts on drainage and water quality during long-term operations at the site. The project would only minimally affect groundwater resources because excavations and dewatering would occur on a temporary, short-term basis during the construction period.

Avoidance and Minimization Measure

WQ-1: Implement a Storm Water Pollution Prevention Plan and Caltrans' Best Management Practices to Avoid and Minimize Potential Effects on Water Quality.

Implementation of the SWPPP, Caltrans BMPs, and stormwater guidance measures will minimize the potential for construction-related surface water pollution and ensure that water quality will not be compromised during construction. The following BMPs will be considered for the project to minimize water quality effects from construction.

- Handle, store, and use construction materials in ways that prevent their release into stormwater.

- Schedule construction work to coordinate with the installation of erosion and sediment control practices.
- Use appropriate fueling and maintenance procedures to reduce discharge of pollutants.
- Place designated equipment wash areas away from exposed areas.

The following BMPs will be considered for the project to minimize effects on water quality from operation and construction.

- Manage waste (concrete and other hazardous materials) to prevent release of waste into stormwater.

All construction would conform to the NPDES General Construction Permit requirements to maintain water quality within the project area and vicinity; these requirements include stormwater and non-stormwater quality protection measures for all construction activities within the Caltrans right-of-way.

Mitigation Measures

No mitigation measures related to water quality are required.

2.3.2 Hazardous Waste/Materials

2.3.2.1 Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of CERCLA, often referred to as "Superfund," is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act

- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 2088, *Federal Compliance with Pollution Control Standards*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could affect ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

2.3.2.2 Affected Environment

The information in this section is based on the *Updated Initial Site Assessment* (UISA) prepared on May 8, 2017. The updated initial site assessment review of potential hazardous waste impacts comprised the following:

- Review of project plans.
- Discussions with the project engineer.
- Review of the Naturally Occurring Asbestos (NOA) maps.
- Review of GeoTracker, the State Water Resources Control Board's (SWRCB's) database of hazardous waste sites.

Database Search

A search of the SWRCB's GeoTracker hazardous sites database was conducted on June 2, 2017 (State Water Resources Control Board 2017). The search included the project area and a 0.25-mile-wide buffer. One site adjacent to the project alignment was identified as a former gasoline service station located at 3074 Camino Heights Drive, Camino. A leaking underground storage tank (LUST) containing gasoline was discovered during decommissioning in 2010 indicating possible soil and/or groundwater contamination. In-situ chemical treatment began the same year and the case was subsequently closed under the state LUST Low Threat Closure Policy on August 12, 2013.

Acquisition of this parcel is not a part of the proposed project and construction activities currently do not extend into the parcel. The risk of hazardous materials impacts associated with this parcel is low.

Aerially Deposited Lead

ADL can be found in the surface and near-surface soils along nearly all roadways because of the historical use of tetraethyl lead in motor vehicle fuels. Areas of primary concern are soils along routes that have had high vehicle emissions from large traffic volumes or congestion during the period when leaded gasoline was in use (generally prior to 1986). Typically, ADL is found in road shoulder areas and has high solubility when subjected to the low pH conditions of waste characterization tests. Shoulder soils along urban and heavily travelled rural highways are commonly above the soluble threshold limit concentration criteria.

US 50 has been a vehicle-bearing highway since the late 1800s. As a result, ADL may be present in soils along the project right-of-way due to historical use of leaded gasoline along this corridor. There is the potential that soils along the road contain elevated lead levels.

Naturally-Occurring Asbestos

NOA is of particular concern in El Dorado County because the local geology contains serpentinite and ultramafic rock. Exposure and disturbance of rock and soil that contain asbestos can result in the release of fibers to the air and consequent exposure to the public. Asbestos can result in a human health hazards when airborne. The inhalation of asbestos fibers into the lungs can result in a variety of adverse health effects, including lung inflammation, respiratory ailments, and cancer. The Geotechnical Memorandum, completed in 2017, stated that geologists did not observe NOA. NOA may exist within the project corridor. Construction activities in ultramafic rock deposits may be a source of asbestos emissions if NOA is present.

Presently, Caltrans policy states that restricted material that contains asbestos at a concentration above 0.25% shall not be disposed of outside the state right-of-way except at a licensed landfill permitted to accept that waste.

Yellow and White Traffic Striping

Yellow and white traffic striping and markings are located along the entire length of the project corridor. Caltrans studies have determined that yellow/white thermoplastic striping and painted markings may contain elevated concentrations of lead and chromium, depending on the age of the striping (manufactured before 2005) and painted markings (manufactured before 1997). Disturbing either yellow or white pavement markings by grinding or sandblasting can expose workers to lead and/or chromium.

Treated Wood Waste

Treated wood is wood with preservative chemicals that protect it from insect attack and fungal decay during its use. Typical uses in the highway environment include signposts, metal beam guardrail wood posts, and lagging on retaining walls. The chemical preservatives used are

hazardous and pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals that may be present in treated wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with treated wood waste (TWW) or from inhalation or ingestion of TWW particulate (e.g., sawdust and smoke) as this material is handled.

Cured-In-Place Pipe

Cured-In-Place Pipe (CIPP) lining is a trenchless method used to rehabilitate and upgrade existing drainage facilities. Styrene is a highly volatile chemical used in the resin liner installed inside the pipe. If groundwater is known to be present in the vicinity of a culvert or perched/spring water permeates to the inside of the culvert, use of a pre-liner instead of patching is recommended.

2.3.2.3 Environmental Consequences

Previously Unknown Hazardous Materials

Under all build alternatives, the potential exists for exposure of construction workers or nearby sensitive land uses to previously unknown hazardous materials during construction activities. The project area generally has a moderate risk of previously unreported hazardous materials that could be discovered during construction of the proposed project.

Known Hazards and Hazardous Materials

The UISA identified areas of moderate concern that would be affected by the project under all build alternatives. The project area generally has the potential for hazardous materials in the form of ADL along US 50; lead or chromium in yellow/white pavement striping; TWW associated with metal beam guardrail posts; styrene associated with CIPP; NOA in serpentine rock; and gasoline-contaminated soil that could be encountered or released during construction of any of the build alternatives unless measures are taken to avoid that release. Construction workers could be exposed to hazardous materials during ground-disturbing activities such as grading, removal of wood posts from metal beam guardrails, and/or roadbed resurfacing at any of the areas known to contain hazardous substances.

No Build Alternative

No construction would take place under the No Build Alternative; therefore, there would be no potential to expose workers or nearby land uses to soil contamination or hazardous materials from construction activities. The No Build Alternative would not result in right-of-way acquisition or construction disturbance. Therefore, this alternative would not result in any direct effect regarding hazardous sites.

2.3.2.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

HAZ-1: Conduct Site Investigation and Develop and Implement Plans to Address Worker Health and Safety

A site investigation of the road right-of-way will be conducted prior to acquisitions and construction to determine the extent and nature of possible contamination and implement appropriate avoidance or remediation measures according to state and federal regulations.

As necessary, and as required by Caltrans and federal and state regulations, plans such as a health and safety plan, BMPs, and/or an injury and illness prevention plan will be prepared and implemented to address worker safety when working with potentially hazardous materials, including potential ADL, styrene, lead or chromium in traffic stripes, NOA, and other construction-related materials within the right-of-way during any soil-disturbing activity.

If project components are removed that may contain TWW (e.g., signposts, metal beam guardrail wood posts, and lagging on retaining walls), the contractor must prepare and submit a safety and health work practices plan for handling TWW approved by an American Board of Industrial Hygiene Certified Industrial Hygienist. TWW will be disposed of in accordance with SSP 14-11.09 (Treated Wood Waste) in an approved TWW facility. Construction workers who handle this material must be provided with training that includes the following.

- All applicable requirements of Title 8 CCR.
- Procedures for identifying and segregating TWW.
- Safe handling practices.
- Requirements of Title 22 CCR, Division 4.5, Chapter 34.
- Proper disposal methods.

HAZ-2: Conduct a NOA Site Investigation

An investigation for NOA will be conducted in the project area along US 50 prior to construction work to determine if NOA is present in areas where surface materials would be disturbed. The presence of NOA cannot be confirmed until a detailed site investigation is performed. The results of this investigation will dictate the work practices that must be followed.

Any material with NOA exceeding a concentration of 0.25% that is excavated from a project site is required to be reused with appropriate cover, disposed of at a state-owned facility in accordance with the Caltrans' policy for NOA, or taken to a landfill licensed to accept the material.

HAZ-3: Develop a Lead Compliance Plan for Traffic Stripe Removal and Disposal

Traffic stripes for the project will be cold planed. Grindings (traffic stripes and asphalt) will be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints) which requires a lead compliance plan.

The contractor will prepare a project-specific lead compliance plan to prevent or minimize worker exposure to lead while handling the removed yellow thermoplastic and yellow paint residue in accordance with Title 8, CCR, Section 1532.1. Prior to submission of the plan to Caltrans, it will be approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene.

HAZ-4: Perform Soil Testing and Dispose of Soils Contaminated with ADL Appropriately

To prevent exposure of workers and the public to lead, soil testing for ADL contamination will be conducted in the project area along US 50 prior to construction work.

Soils in the project limits that are identified as having hazardous levels of ADL will be disposed of or reused according to federal and state regulations. Soils within the right-of-way that contain hazardous waste concentrations of ADL may be reused under the authority of variances issued by the California Department of Toxic Substances Control. These variances include stockpiling, transporting, and reusing soils with concentrations of lead below maximum allowable levels in the project right-of-way. Stockpiling, transporting and reusing of soil will also be conducted following Caltrans' standard special provisions.

Mitigation Measures

No mitigation measures related to hazardous waste/materials are required.

2.3.3 Air Quality

2.3.3.1 Regulatory Setting

The air quality management agencies of direct importance in El Dorado County include the U.S. Environmental Protection Agency (EPA), California Air Resources Board (ARB), and El Dorado County Air Quality Management District (EDCAQMD). The EPA has established federal standards for which the ARB and EDCAQMD have primary implementation responsibility. The ARB and EDCAQMD are also responsible for ensuring that state standards are met. Federal, state, and local regulations applicable to the proposed project are described below.

Federal Air Quality Standards

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM10) and particles of 2.5 micrometers and smaller (PM2.5), and sulfur dioxide (SO2). In addition, national and state standards exist for lead (PB) and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. The NAAQS and CAAQS are listed together in Table 2.2.3-1. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

Federal Clean Air Act Conformity Requirements for Transportation

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs or projects that do not conform to State Implementation Plan (SIP) for attainting the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional—or, planning and programming—level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. A region is nonattainment if one or more monitoring stations in the region measures violation of the relevant standard, and the EPA officially designates the area nonattainment. Areas that were previously designated as nonattainment areas but subsequently meet the standard may be officially redesignated to attainment by the EPA, and are then called maintenance areas. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM10 and PM2.5), and in some areas (although not in California) sulfur dioxide (SO2). California has attainment or maintenance areas for all of these transportation-

related "criteria pollutants" except SO2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years for the RTP) and 4 years (for the TIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA), make determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Conformity analysis at the project-level includes verification that the project is included in the regional conformity analysis and a "hot-spot" analysis if an area is "nonattainment" or "maintenance" for carbon monoxide (CO) and/or particulate matter (PM10 or PM2.5). "Hot-spot" analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific procedural and documentation standards for projects that require a hot-spot analysis. In general, projects must not cause the "hot-spot" related standard to be violated, and must not cause any increase in the number and severity of violations in nonattainment areas. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

The DOT and EPA developed guidance for determining conformity of transportation plans, programs, and projects in November 1993 in the Transportation Conformity Rule (40 CFR 51 and 40 CFR 93). The demonstration of conformity to the SIP is the responsibility of the local Metropolitan Planning Organization, which is also responsible for preparing RTPs and associated demonstration of SIP conformity. Section 93.114 of the Transportation Conformity Rule states that "there must be a currently conforming RTP and transportation improvement plan at the time of project approval."

Table 2.3.3-1. National and California Ambient Air Quality Standards Applicable in California

Pollutant	Symbol	Average Time	Standard (ppm)		Standard (µg/m^3)		Violation Criteria	
			California	National	California	National	California	National
Ozone	O_3	1 hour	0.09	NA	180	NA	If exceeded	NA
		8 hours	0.070	0.070	137	137	If exceeded	If fourth highest 8-hour concentration in a year, averaged over 3 years, is exceeded at each monitor within an area
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
(Lake Tahoe only)		8 hours	6	NA	7,000	NA	If equaled or exceeded	NA
Nitrogen dioxide	NO_2	Annual arithmetic mean	0.030	0.053	57	100	If exceeded	If exceeded on more than 1 day per year
		1 hour	0.18	0.100	339	188	If exceeded	NA
Sulfur dioxide	SO_2	Annual arithmetic mean	NA	0.030	NA	NA	NA	If exceeded
		24 hours	0.04	0.14	105	NA	If exceeded	If exceeded on more than 1 day per year
		1 hour	0.25	75	655	196	If exceeded	NA
Hydrogen sulfide	H_2S	1 hour	0.03	NA	42	NA	If equaled or exceeded	NA
Vinyl chloride	C_2H_3Cl	24 hours	0.01	NA	26	NA	If equaled or exceeded	NA
Inhalable PM	PM_{10}	Annual arithmetic mean	NA	NA	20	NA	If exceeded	If exceeded at each monitor within area
		24 hours	NA	NA	50	150	If exceeded	If exceeded on more than 1 day per year
	$PM_{2.5}$	Annual arithmetic mean	NA	NA	12	12.0	If exceeded	If 3-year average from single or multiple community-oriented monitors is exceeded
		24 hours	NA	NA	NA	35	NA	If 3-year average of 98th percentile at each population-oriented monitor within an area is exceeded
Sulfate particles	SO_4	24 hours	NA	NA	25	NA	If equaled or exceeded	NA
Lead particles	Pb	Calendar quarter	NA	NA	NA	1.5	NA	If exceeded on more than 1 day per year

Pollutant	Symbol	Average Time	Standard (ppm)		Standard (µg/m³)		Violation Criteria	
			California	National	California	National	California	National
		30-day average	NA	NA	1.5	NA	If equaled or exceeded	NA
		Rolling 3-month average	NA	NA	NA	0.15	If equaled or exceeded	Averaged over a rolling 3-month period

Source: California Air Resources Board 2016a

Notes: All standards are based on measurements at 25ºC and 1 atmosphere pressure; national standards shown are the primary (health effects) standards; ppm = parts per million; µg/m^3 = micrograms per cubic meter; NA = not applicable.

State Air Quality Standards

Responsibility for achieving the CAAQS (see Table 2.3.3-1), which for certain pollutants and averaging periods are more stringent than federal standards, is placed on the ARB and local air pollution control districts. State standards are achieved through district-level air quality management plans that are incorporated into the SIP.

ARB traditionally has established state air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved SIPs. Air district responsibilities include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required under CEQA. It should be noted that Caltrans considers the use of locally adopted CEQA thresholds of significance for construction emissions as being not mandatory, but to help serve as guidance for scoping air quality studies. However, Caltrans Standard Specification Section 14-9.02, (which includes specifications relating to air pollution control) requires that projects comply with air pollution control rules, regulations, ordinances, and statutes, including those provided in Government Code Section 11017 (Public Contract Code Section 10231). In addition, Caltrans does not have the authority to require use of specific equipment or to apply other direct restrictions on contractor equipment fleet emissions in excess of EPA, ARB, and possibly local air district regulations.

The California CAA of 1988 substantially added to the authority and responsibilities of air districts. The California CAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures.

The California CAA focuses on attainment of the CAAQS and requires designation of attainment and nonattainment areas with respect to these standards. The California CAA also requires that local and regional air districts expeditiously adopt and prepare an air quality attainment plan (Clean Air Plan) if the district violates state air quality standards for O_3, CO, SO_2, or NO_2. These plans are specifically designed to attain CAAQS and must be designed to achieve an annual 5 percent reduction in district-wide emissions of each nonattainment pollutant or its precursors. No locally prepared attainment plans are required for areas that violate the state PM_{10} standards;

ARB is responsible for developing plans and projects that achieve compliance with the state PM_{10} standards.

The California CAA requires that CAAQS be met as expeditiously as practicable, but, unlike the FCAA, does not set precise attainment deadlines. Instead, the California CAA establishes increasingly stringent requirements for areas that will require more time to achieve the standards.

The California CAA emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The act gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish transportation control measures. The California CAA does not define the terms indirect sources and area-wide sources. However, Section 110(a)(5)(C)) of the FCAA defines an indirect source as a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution. Such term includes parking lots, parking garages, and other facilities subject to any measure for management of parking supply.

The ARB defines area-wide sources as sources of pollution where the emissions are spread over a wide area, such as consumer products, fireplaces, road dust and farming operations. Area-wide sources do not include mobile sources or stationary sources (California Air Resources Board n.d. A). Transportation control measures are defined in the California CAA as "any strategy to reduce trips, vehicle use, vehicle miles travelled, vehicle idling, or traffic congestion for the purpose of reducing vehicle emissions."

Local and Regional Implementation of Federal and State Requirements

At the local level, air quality is managed through land use and development planning practices, which are implemented in El Dorado County through the general planning process.

EDCAQMD is responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. The air district is also responsible for implementing strategies for air quality improvement and recommending mitigation measures for new growth and development.

EDCAQMD (2002) has specified criteria pollutant thresholds and a construction fuel screening threshold in its *Determining Significance of Air Quality Impact Under the California Environmental Quality Act* (CEQA Guide) to assist lead agencies in determining air quality impacts for projects located in El Dorado County. Although not used to determine impacts associated with the proposed project, EDCAQMD's emission and fuel screening thresholds, as indicated in their CEQA Guide, are summarized in Table 2.3.3-2 for informational purposes.

Table 2.3.3-2. El Dorado County Air Quality Management District Thresholds of Significance

Emission Type	Fuel Screening	O_3 Precursor Emissions		CO	PM_{10}	$PM_{2.5}$
		ROG	NO_X			
Construction (short-term)	402 gallons per day[a]	82 pounds per day[b]	82 pounds per day[b]	-	Fugitive dust BMPs[c]	Fugitive dust BMPs[c]
Operational (long-term)	-	82 pounds per day	82 pounds per day	Violations of CAAQS	Violations of CAAQS	Violations of CAAQS

Source: El Dorado County Air Quality Management District 2002

[a] Projects with equipment (1996 engine year or newer) that consume less than 402 gallons of fuel per day are considered to have a less-than-significant impact on all pollutants (Resolution 079-2002).

[b] Emissions of one pollutant may be in excess of 82 pounds per day; however, as long as the combined ROG and NO_X total is below 164 pounds per day, the EDCAQMD considers the impact to be less than significant.

[c] PM emissions may be assumed to be not significant if the proposed project includes mitigation measures that will prevent visible dust beyond the property lines.

2.3.3.2 Affected Environment

Physical Setting

Ambient air quality is affected by climatological conditions, topography, and the types and amounts of pollutants emitted. The following discussion describes relevant characteristics of the air basin within which the project is located and offers an overview of conditions affecting pollutant ambient air concentrations in the basin.

Climate and Topography

The project is in El Dorado County, California, within the Mountain Counties Air Basin (MCAB), which lies in the northern Sierra Nevada, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. Elevations range from over 10,000 feet at the Sierra Nevada crest down to several hundred feet above sea level at the Sacramento County boundary. Throughout El Dorado County, the topography is highly variable and includes rugged mountain peaks and valleys with extreme slopes and altitude differences in the Sierra Nevada, as well as rolling foothills to the west. The western slope of El Dorado County, from the Tahoe Basin rim on the east to the Sacramento County boundary on the west, lies within the MCAB.

The general climate of the MCAB varies considerably with elevation and proximity to the Sierra Nevada crest. The terrain features of the MCAB make it possible for various climates to occur in relative proximity. The pattern of mountains and hills causes a wide variation in rainfall, temperature, and localized winds throughout the MCAB. Temperature variations have an important influence on basin wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry.

The Sierra Nevada receives large amounts of precipitation from storms moving in from the Pacific Ocean in the winter, with lighter amounts from intermittent “monsoonal” moisture flows from the south and cumulus buildup during the summer. Precipitation levels are high in the highest mountain elevations but decline rapidly toward the western portion of the basin. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate. In the western foothills, however, winter temperatures usually dip

below freezing only at night, and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s °F, but the lower elevations in western portions of the county routinely exceed 100°F.

The topography and meteorology of the MCAB combine such that local conditions predominate in determining the effect of emissions in the basin. Regional airflows are affected by the mountains and hills, which direct surface air flows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Inversion layers (where warm air overlays cooler air) frequently form and trap pollutants close to the ground. In the winter, these conditions can lead to elevated CO concentrations, known as "hot spots" along heavily traveled roads and at busy intersections.

During longer daylight hours in summer, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between ROGs and NOX (ozone precursors) that results in the formation of ozone. In the summer, the strong upwind valley air flowing into the basin from the Central Valley located to the west is an effective transport medium for ozone precursors and ozone generated in the San Francisco Bay area and the Sacramento and San Joaquin Valleys to flow into the MCAB. These transported pollutants predominate as the cause of ozone in the MCAB and are largely responsible for exceedances of the state and federal ozone standards in the MCAB. ARB has officially designated the MCAB as "ozone impacted" by transport from those areas (Title 17 California Code of Regulations, Section 70500).

2.3.3.3 Environmental Consequences

The proposed project would generate operational and construction-related emissions. The methodology used to evaluate construction and operational effects is described below.

Operational Impact Assessment

The primary operational emissions associated with the project are ROG, NOX, CO, PM_{10}, and $PM_{2.5}$, and CO_2 emitted as vehicle exhaust. In addition, the effects of criteria pollutant emissions were quantified using emission factors obtained from Caltrans' CT-EMFAC emission modeling program (version 6.0.0.295485.0) and traffic data provided by Caltrans (n.d. A). MSAT effects are assessed qualitatively, consistent with FHWA (2016) guidance.

Potential for Generation of Operation-Related Emissions of Ozone Precursors, Carbon Monoxide, and Particulate Matter

The estimation of criteria pollutant emissions associated with the project was conducted using Caltrans' CT-EMFAC model and vehicle activity data provided by Caltrans (n.d. A). CT-EMFAC is a California-specific project-level analysis tool developed for Caltrans by the University of California, Davis to model criteria pollutant emissions from on-road mobile sources. The model uses the latest version of ARB's EMFAC model to quantify running exhaust and running loss emissions using user-input traffic data, including peak-hour and off-peak-hour VMT data allocated into 5-mph speed bins.

Emission of ROG, NO_X, CO, PM10, and PM2.5 were modeled for existing year (2015), opening year (2021), and design year (2040) conditions using daily VMT for the "barrier full closed" and "barrier open at Still Meadow and Upper Carson" options. The data included vehicle activity for affected roadways in the immediate project region, although was not distributed by 5 mile per hour speed bin. Accordingly, an average vehicle speed of 60 miles per hour was assumed in the emissions modeling, per Caltrans data. The estimated criteria pollution emissions from operations are shown in Table 2.2.3-4 with the median barrier fully closed and Table 2.2.3-5 with the median barrier open at Still Meadow and Upper Carson.

The emissions analysis presented in Tables 2.2.3-4 and 2.2.3-5 indicates that operation of the Build Alternatives would result in a net reduction of all criteria pollutant emissions, relative to existing and no build conditions. This would be a regional air quality benefit.

Table 2.3.3-4. Estimated Criteria Pollutant Emissions from Operation of the U.S. 50/Camino Operational Safety Improvement Project under the Barrier Full Closed Scenario (pounds per day)

Alternative	Daily VMT	ROG	NOX	CO	PM10	PM2.5
2015 Existing	7,319	1	10	24	1	<1
2021 No Build	8,427	1	5	14	1	<1
2021 Alternative 1C	7,865	<1	5	13	1	<1
2021 Alternative 4.5A	7,690	<1	5	13	1	<1
2021 Alternative 4.5C	7,593	<1	5	12	1	<1
2021 Alternative 4.7	7,679	<1	5	13	1	<1
2040 No Build	9,326	<1	1	6	1	<1
2040 Alternative 1C	8,493	<1	1	6	1	<1
2040 Alternative 4.5A	8,365	<1	1	6	1	<1
2040 Alternative 4.5C	8,455	<1	1	6	1	<1
2040 Alternative 4.7	8,367	<1	1	6	1	<1
Comparison to Existing						
2021 Alternative 1C	546	-1	-5	-11	<0	<0
2021 Alternative 4.5A	371	-1	-5	-11	<0	<0
2021 Alternative 4.5C	274	-1	-5	-12	<0	<0
2021 Alternative 4.7	360	-1	-5	-11	<0	<0
2040 Alternative 1C	1,174	-1	-9	-18	<0	<0
2040 Alternative 4.5A	1,046	-1	-9	-18	<0	<0
2040 Alternative 4.5C	1,136	-1	-9	-18	<0	<0
2040 Alternative 4.7	1,048	-1	-9	-18	<0	<0
Comparison to No Build						
2021 Alternative 1C	-562	<0	<0	-1	<0	<0
2021 Alternative 4.5A	-737	<0	<0	-1	<0	<0
2021 Alternative 4.5C	-834	<0	-1	-1	<0	<0
2021 Alternative 4.7	-748	<0	<0	-1	<0	<0
2040 Alternative 1C	-833	<0	<0	-1	<0	<0
2040 Alternative 4.5A	-961	<0	<0	-1	<0	<0
2040 Alternative 4.5C	-871	<0	<0	-1	<0	<0
2040 Alternative 4.7	-959	<0	<0	-1	<0	<0
EDCAQMD Threshold	-	82	82	-	-	-

CO = carbon monoxide
NOX = nitrogen oxides
EDCAQMD = El Dorado County Air Quality Management District

Alternative	Daily VMT	ROG	NOX	CO	PM10	PM2.5

PM10 = particles of 10 micrometers or smaller
PM2.5 = particles of 2.5 micrometers and smaller
ROG = reactive organic gases
VMT = vehicle miles travelled

Table 2.3.3-5. Estimated Criteria Pollutant Emissions from Operation of the U.S. 50/Camino Operational Safety Improvement Project under the Barrier open at Still Meadow and Upper Carson (pounds per day)

Alternative	Daily VMT	ROG	NOX	CO	PM10	PM2.5
2015 Existing	7,319	1	10	24	1	<1
2021 No Build	7,846	<1	5	13	1	<1
2021 Alternative 1C	7,666	<1	5	13	1	<1
2021 Alternative 4.5A	7,629	<1	5	13	1	<1
2021 Alternative 4.5C	7,712	<1	5	13	1	<1
2021 Alternative 4.7	-	-	-	-	-	-
2040 No Build	8,627	<1	1	6	1	<1
2040 Alternative 1C	8,382	<1	1	6	1	<1
2040 Alternative 4.5A	8,459	<1	1	6	1	<1
2040 Alternative 4.5C	8,337	<1	1	6	1	<1
2040 Alternative 4.7	-	-	-	-	-	-
Comparison to Existing						
2021 Alternative 1C	347	-1	-5	-12	<1	<1
2021 Alternative 4.5A	310	-1	-5	-12	<1	<1
2021 Alternative 4.5C	393	-1	-5	-11	<1	<1
2021 Alternative 4.7	-	-	-	-	-	-
2040 Alternative 1C	1,063	-1	-9	-18	<1	<1
2040 Alternative 4.5A	1,140	-1	-9	-18	<1	<1
2040 Alternative 4.5C	1,018	-1	-9	-18	<1	<1
2040 Alternative 4.7	-	-	-	-	-	-
Comparison to No Build						
2021 Alternative 1C	-180	<1	<1	<1	<1	<1
2021 Alternative 4.5A	-217	<1	<1	<1	<1	<1
2021 Alternative 4.5C	-134	<1	<1	<1	<1	<1
2021 Alternative 4.7	-	-	-	-	-	-
2040 Alternative 1C	-245	<1	<1	<1	<1	<1
2040 Alternative 4.5A	-168	<1	<1	<1	<1	<1
2040 Alternative 4.5C	-290	<1	<1	<1	<1	<1
2040 Alternative 4.7	-	-	-	-	-	-
EDCAQMD Threshold	-	82	82	-	-	-

[a] = A different "barrier open" option at Still Meadow and Upper Carson are not applicable to Alternative 4.7.
CO = carbon monoxide
NOX = nitrogen oxides
EDCAQMD = El Dorado County Air Quality Management District
PM10 = particles of 10 micrometers or smaller
PM2.5 = particles of 2.5 micrometers and smaller
ROG = reactive organic gases
VMT = vehicle miles travelled

Conformity of the Regional Transportation Plan with the State Implementation Plan

The proposed project is listed in SACOG's currently conforming 2016 MTP/SCS as CAL18190. The 2016 MTP/SCS, as amended, and the corresponding air quality conformity analysis were last approved by FHWA and FTA on December 16, 2016. The proposed project is also listed in the financially constrained 2017/20 MTIP. The design concept and scope of the proposed project is consistent with the project description in the 2016 MTP/SCS, 2017/20 MTIP, and SACOG's regional emissions analysis.3 Accordingly, it can be concluded that the project's operational emissions (which include the O3 precursors ROG and NOX) meet the transportation conformity requirements imposed by the EPA and EDCAQMD would not be expected to exacerbate O3 nonattainment conditions, and conform with the SIP.

Potential Violations of PM2.5 NAAQS or CAAQS

An analysis was conducted to determine whether the project would be considered a project of air quality concern (POAQC) and would require a PM hot-spot analysis. Projects that are not considered to be a POAQC would be considered less than significant.

As described below, the project does not meet any of the project types considered to be POAQCs by EPA's final rule. Accordingly, the project is not considered to be a POAQC, and impacts are considered less than significant.

(i) **New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles**. EPA's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas* indicates that a facility with an AADT volume of 125,000 and 8 percent trucks (10,000 truck AADT) are likely considered a POAQC. For existing freeway facilities, the effect of a project on truck volumes is normally the main point on which this criterion is judged. A project may be on a freeway with a substantial number of trucks, but if it does not change those truck volumes significantly, it may have a minimal effect on exhaust-related particulate matter. As shown in Table 2.3.3-6, the Build Alternatives would have a minimal effect on AADT and truck volumes on U.S. 50 between Still Meadow Road and Upper Carson Road, resulting in either a slight decrease or increase, depending on the location. AADT on U.S. 50 in the project area is also substantially lower than 125,000, of which trucks comprise approximately 5 percent of the volume (1,118 to 1,424 AADT under design year conditions, depending on the Build Alternative). Accordingly, the Build Alternatives would not serve a significant number of diesel vehicles or result in a significant increase in the number of diesel vehicles, relative to No Build conditions.

(ii) **Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to**

[3] The project is currently listed between post miles 22.0 and 24.3, but has since been extended to post miles 21.95 and 24.45. An administrative amendment is currently underway to update the MTP and MTIP description to ensure the project limits are consistent with the reported description.

the project. Implementation of the project would not affect any intersections operating at LOS, D, E, and F (California Department of Transportation n.d. B). Moreover, trucks comprise a relatively small percent of traffic within the project area (5 percent), with the majority of vehicles traveling on mainline U.S. 50 and not through local intersections.

(iii) **New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location**. The project does not include new bus or rail terminals and transfer points.

(iv) **Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location**. The project does not include expanded bus or rail terminals and transfer points.

(v) **Projects in or affecting locations, areas, or categories of sites which are identified in the PM2.5 or PM10 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation**. The PM2.5 SIP, *PM2.5 Implementation/Maintenance Plan and Redesignation Request for Sacramento PM2.5 Nonattainment Area*, has not identified any locations, areas, or categories of sites as s site of violation or possible violation.

Table 2.3.3-6. AADT Volumes and Truck Percentages under Existing (2015), Opening (2021), and Design (2040) Year Conditions (US 50 between Still Meadow Road and Upper Carson Road)

Alternative	AADT	Truck Volume[a]
2015 Existing	20,665 to 25,282	1,033 to 1,264
2021 No Build	21,299 to 26,046	1,065 to 1,302
2021 Alternative 1C	21,006 to 26,058	1,050 to 1,303
2021 Alternative 4.5A	21,211 to 26,058	1,061 to 1,303
2021 Alternative 4.5C	21,362 to 26,058	1,068 to 1,303
2021 Alternative 4.7	21,507 to 26,460	1,075 to 1,323
2040 No Build	23,308 to 28,462	1,165 to 1,423
2040 Alternative 1C	22,985 to 28,484	1,149 to 1,424
2040 Alternative 4.5A	23,292 to 28,484	1,165 to 1,424
2040 Alternative 4.5C	23,364 to 28,484	1,168 to 1,424
2040 Alternative 4.7	22,352 to 27,714	1,118 to 1,386
Comparison to No Build[b]		
2021 Alternative 1C	-293 to 12	-46 to 1
2021 Alternative 4.5A	-88 to 12	-36 to 1
2021 Alternative 4.5C	12 to 62	-28 to 1
2021 Alternative 4.7	208 to 414	10 to 21
2040 Alternative 1C	-323 to 22	-16 to 1
2040 Alternative 4.5A	-16 to 22	-1 to 1
2040 Alternative 4.5C	22 to 56	1 to 3
2040 Alternative 4.7	-747 to -955	-37 to -48

Source: California Department of Transportation n.d. B

[a] Trucks represent 5% of AADT on U.S. 50 in the project area.

[b] Represents the change in traffic volume under the Build Alternatives, relative to No Build conditions.

Carbon Monoxide Hot Spots

The Caltrans protocol indicates a CO hot-spot analysis is not required. As such, a violation of the CO standard is not likely to occur as a result of the project and CO impacts are considered less than significant.

Mobile Source Air Toxics

The project is considered to be a project with low potential MSAT effects, because AADT is less than FHWA's MSAT AADT threshold of 140,000 (Federal Highway Administration 2016). Therefore, a qualitative analysis of potential MSAT emissions was performed.

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA (2016) entitled *A Methodology for Evaluating Mobile Source Air Toxic Emissions among Transportation Project Alternatives*.

The VMT estimated for the Build Alternatives is slightly less than that for the No Build Alternative. Refer to Tables 2.3.3-4 and 2.3.3-5. This decrease in VMT would lead to lower MSAT emissions for the Build Alternatives in the project area. Emissions would be further reduced by lower MSAT emission rates due to increased speeds; according to the EPA MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Also, emissions would likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90% between 2010 and 2050 (U.S. Federal Highway Administration 2016). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area would likely be lower in the future in nearly all cases.

In sum, the purpose of this project is to improve safety on U.S. 50 in the Camino corridor by modifying the roadway. The Build Alternatives would result in minor decreases in VMT relative to the No Build Alternative, and these decreases could lower MSAT emissions in the project area. On a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today. Therefore, impacts related to MSAT emissions are considered less than significant.

Construction (Short-term) Impacts

Potential for Temporary Increase in Ozone Precursors (ROG and NO_X), CO, and Particulate Matter Emissions during Grading and Construction Activities

Implementation of the project would involve concrete and median widening, pavement restriping, and other minor roadway modifications. Temporary construction emissions would result from grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade construction,

paving activities, and construction worker commuting patterns. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather.

The SMAQMD's RCEM (Version 8.1.0) was used to estimate ROG, NOX, CO, PM10, and PM2.5 emissions from construction based on activity data provided by the project engineers (Philipp pers. comm.). Construction would occur in four phases: (1) grubbing/land clearing, (2) grading/excavation, (3) drainage/utilities/sub-grade, and (4) paving. Each phase would occur sequentially (i.e., there would be no overlap among construction phases). There would be no material difference in the construction approach among the three alternatives. Accordingly, the Build Alternatives are assessed using one set of assumptions.

Table 2.3.3-7 summarizes estimated daily fuel consumption and emissions levels for construction of the Build Alternatives. Because Caltrans has statewide jurisdiction, and the setting for projects varies so extensively across the state, Caltrans has not developed and has no intention to develop thresholds of significance for CEQA. Further, because most air district thresholds have not been established by regulation or by delegation down from a federal or state agency with regulatory authority over Caltrans, Caltrans is not required to adopt those thresholds in Caltrans' documents. Nevertheless, EDCAQMD's thresholds of significance are provided for informational purposes.

Construction activities are subject to requirements found in the Standard Specifications, for Construction of Local Streets and Roads State of California, California State Transportation Agency, Department of Transportation (California Department of Transportation 2017)[5]). Standard Specification Section 14-9.02, Air Pollution Control, requires compliance with EDCAQMD rules, regulations, ordinances, and statutes that apply to work performed under the contract, including air pollution control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 (Public Contract Code § 10231). Standard Specification Section 10-5 addresses dust control and palliative requirements by preventing and alleviating dust by means of Standard Specification Section 18 (applying dust palliatives), Standard Specification Section 13-5 (applying temporary soil stabilization), and Standard Specification Section 13-4.03C(3) (managing material stockpiles). In addition, Standard Specification Section 14-11.04 addresses dust control associated with material containing hazardous waste or contamination. Implementation of Caltrans' Standard Specification and EDCAQMD measures to control dust during construction would help to minimize air quality impacts from construction activities.

Table 2.3.3-7. Estimated Fuel Consumption and Criteria Pollutant Emissions from Construction of the U.S. 50/Camino Operational Safety Improvement Project (gallons per day and pounds per day)

Phase	Fuel Use	ROG	NO_X	CO	PM10			PM2.5		
					Dust	Exhaust	Total	Dust	Exhaust	Total
Grubbing/land clearing	1,991	5	76	40	70	4	74	15	3	17
Grading/excavation	3,139	21	253	160	70	13	83	15	10	25
Drainage/utilities/sub-grade	859	12	118	103	70	6	76	15	6	20
Paving	2,216	6	80	58	0	5	5	0	3	3
EDCAQMD Threshold	*402*	*82*	*82*	-	*BMPs*	-	-	*BMPs*	-	-

EDCAQMD = El Dorado County Air Quality Management District
CO = carbon monoxide
NO_X = nitrogen oxides
PM10 = particles of 10 micrometers or smaller
PM2.5 = particles of 2.5 micrometers and smaller
ROG = reactive organic gases

Construction Conformity

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

Asbestos

According to the California Department of Conservation's 2000 publication, *A General Location Guide for Ultramafic Rocks in California*, there are no geologic features normally associated with NOA (i.e., serpentine rock or ultramafic rock near fault zones) in or near the project area (California Department of Conservation 2000). As such, there is no potential for impacts related to NOA emissions during construction activities.

2.3.3.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

Measure AQ-1: Implement California Department of Transportation Standard Specification Sections 18, 13-5, and 13-4.03C(3) per Standard Specification Section 10-5, in addition to Standard Specification 14-11.04

To control the generation of construction-related PM10 emissions, the project proponent will follow Standard Specification Section 14, Air Quality, which includes specifications relating to air quality. Standard Specification Section 14-9.02 requires compliance with EDCAQMD rules, regulations, ordinances, and statutes that apply to work performed under the contract, including air pollution control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 (Public Contract Code § 10231). Standard Specification Section 10-5 addresses dust control requirements by preventing

and alleviating dust by means of Standard Specification Section 18 (applying dust palliatives), Standard Specification Section 13-5 (applying temporary soil stabilization), and Standard Specification Section 13-4.03C(3) (managing material stockpiles). In addition, Standard Specification Section 14-11.04 addresses dust control associated with material containing hazardous waste or contamination.

Measure AQ-2: Implement Additional Control Measures for Construction Emissions of Fugitive Dust

Additional measures to control dust will be borrowed from EDCAQMD's Rule 223-1, Fugitive Dust – Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Trackout Prevention, which limits fugitive dust emissions from construction, and construction related activities, and implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the National Pollutant Discharge Elimination System permit, Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project.

Mitigation Measures

No mitigation related to air quality is required

2.4 Biological Environment

The affected environment and subsequent analysis for biological resources are based on the NES prepared for the project in May 2017 (California Department of Transportation 2017). Potential biological resource issues associated with the proposed project were identified through review of existing information and field surveys conducted within the project area or ESL. The ESL encompasses the study limits for all proposed alternatives and includes all areas of work, staging, and storage. The ESL encompasses 63.61 acres.

Field reviews for the project were conducted by Caltrans District 3 biologists Jason Meigs, Hanna Harrell, Kelli Angell, and Mindy Trask in July and August 2016, April 2017, and August 2017 to assess the ESL for the presence of biological resources such as special-status plants, wildlife, and fisheries; sensitive habitats; and federal and state jurisdictional waters and wetlands. An additional botanical survey will be conducted in the spring of 2018 to coincide with the blooming periods of the special-status plants identified as having the potential for occurrence in the ESL. A delineation of wetlands and other waters in the Alternative 4.7 footprint will be conducted in late 2017. A detailed discussion of survey methods is provided in the NES (California Department of Transportation 2017).

2.4.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

No habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are present in the ESL and therefore, critical habitat is not discussed in this document. Wetlands and other waters are discussed below in in Section 2.3.2, *Wetlands and Other Waters*.

2.4.1.1 Affected Environment

The ESL contains both natural communities and areas that have been developed or disturbed. The natural communities consist of riparian habitat, Sierran ponderosa pine forest, and freshwater emergent wetland. Freshwater emergent wetland is discussed in Section 2.3.2. Ruderal or disturbed areas and urban/ornamental areas also occur within the ESL. While none of the natural community types within the ESL are dominated by oak species, oak trees are present within the Sierran ponderosa pine forest natural community. No oak woodlands meet the criteria for natural communities of concern, though oaks are present within the ESL.

Riparian Habitat

Within the ESL, riparian habitat is present in association with the spring located south of the Carson Road intersection. A total of 0.88 acre of riparian habitat was identified within that area of the ESL. Riparian habitat within the ESL consists of willows (*Salix* sp.), grey alder (*Alnus incana*), and relic fruit trees from the orchard that used to occupy the parcel. Its understory is comprised almost completely of blackberry, mainly Himalayan (*Rubus armeniacus*) but also cutleaf evergreen blackberry (*R. laciniatus*). In areas where the blackberry has not encroached there is an herbaceous layer of perennial grasses, rushes (*Juncus* sp.), and sedges (*Cyperus* sp.).

Sierran Ponderosa Pine Forest

The ponderosa pine forest in the ESL is comprised of mixed species stands with an overstory canopy that is dominated by ponderosa pine (*Pinus ponderosa*), foothill pine (*P. sabiniana*), incense cedar (*Calocedrus decurrens*), and California black oak (*Quercus kelloggii*). Interior live oak (*Q. wislizeni*), canyon live oak (*Q. chrysolepis*), and madrone (*Arbutus menziesii*) are also present. Understory shrubs include whiteleaf manzanita (*Arctostaphylos viscida*), coyote brush (*Baccharis pilularis*), California buckeye (*Aesculus californica*), Scotch broom (*Cytisus scoparius*), Himalaya blackberry (*Rubus armeniacus*), buckbrush (*Ceanothus cuneatus*), and deerbrush (*Ceanothus integerrimus*).

Areas within this community type were further broken out based on the predominance of interior live oak and canyon live oak, or black oak. These areas are denoted as grey pine/live oak and ponderosa pine/black oak.

Ruderal or Disturbed

Ruderal communities occur in areas of disturbances such as along roadsides, trails, parking lots, etc. These communities are subjected to ongoing or past disturbances (e.g., vehicle activities, grazing, mowing, etc.). Ruderal communities are often successional in nature; however, in highly disturbed areas, ruderal assemblages of native and introduced weedy species can become established and maintain a position in the community as succession is prevented by repeated disturbance. The components of the ruderal community vary from place to place and with the nature of the disturbance. Most of the species that occur in these disturbed areas are various annual grasses and forbs of Eurasian origin, many of which also occur in grasslands. Ruderal or disturbed areas in the ESL are dominated by annual grasses such as soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), red brome (*B. madritensis*), wild oat (*Avena fatua*), rattail fescue (*Festuca myuros*), Italian ryegrass (*Festuca perennis*), and dogtail grass (*Cynosurus echinatus*). Forbs found in rural or disturbed portions of the ESL are vetch (*Vicia* sp.), black mustard (*Brassica nigra*), English plantain (*Plantago lanceolata*), plumeless thistle (*Carduus pycnocephalus*), rose clover (*Trifolium hirtum*), gumweed (*Grindelia* sp.), yellow star thistle (*Centaurea solstitialis*), chicory (*Cichorium intybus*), and Klamath weed (*Hypericum perforatum*).

Urban/Ornamental

Ornamental plants and trees are distinguished from native vegetation and from utilitarian and crop plants, such as those used for agriculture and vegetable crops, for forestry, or as fruit trees. These include areas landscaped in non-native vegetation, such as residential garden plots, urban landscape vegetation, lawns, and windbreak or visual screen trees. Ornamental species occurring within the ESL include Bailey acacia (*Acacia baileyana*), English ivy (*Hedera helix*), apple (*Malus* sp.), plum (*Prunus* sp.), and poplar (*Populus* sp.).

Wildlife Corridors and Crossing

Wildlife crossings are areas of concentrated animal movement intercepted by roadways. In most cases, effects are seen because animals are inadvertently hit by drivers as the animals attempt to cross the road surface, leading to mortality of animals ("road-kill") and safety concerns to the motoring public. Approximately half of the 563,496 traffic incidents reported to the California Highway Patrol between February 2015 and February 2016 involved wildlife (Shilling and Waetjen 2016).

The Sierra Nevada foothills wildlife connectivity modeling project is a Caltrans and CDFW joint effort to model potential connectivity areas between intact blocks of habitat 10,000 acres or greater in size using species-specific data. The model identified the important core habitat areas for focal species as well as the least cost path that connects core areas. The areas directly north and south of US 50, which includes sections of the ESL, were determined to be core habitat areas. The habitat within and directly south of the ESL is potential habitat for up to 14 focal wildlife species. The area north of the ESL is potential habitat for 7 focal wildlife species. Some of these species include mule deer, mountain lions, and bobcats. The El Dorado Phase 1 Integrated Natural Resource Management Plan Wildlife Movement and Corridors Report from

2010 (Sierra Ecosystem Associates 2010) also identified the ESL as a key US 50 wildlife crossing area.

US 50 constitutes a barrier for common wildlife species, such as mule deer, mountain lions, and bobcats. US 50 is a busy highway bisecting the Sierra Nevada and its foothill habitats between Folsom and Lake Tahoe. For much of its length, especially west of Placerville, it has associated urbanization in rural areas that add to the fragmenting effect of the highway. The combination of the wide highway ROW, the approximate 25,000 cars per day along the highway in western El Dorado County, and the associated rural-developed and urban areas provide a relatively effective barrier for ground-dwelling wildlife movement in the north-south compass direction in the foothills.

2.4.1.2 Environmental Consequences

Riparian Habitat

The definitions of permanent and temporary impacts to riparian habitat for the proposed project are provided below.

Permanent Impacts

Any riparian habitat receiving a new permanent fill including any new permanent fills placed for roadways and associated embankments (cut and fill areas), as well as rock slope protection or any other permanent culvert work that might encroach on the adjacent riparian habitat.

Temporary Impacts

Temporarily disturbed areas by construction activities or by equipment access and operation that will be re-contoured to as close to pre-project condition, stabilized, and re-vegetated with appropriate native species as soon as feasible at the conclusion of construction activities.

The project would result in the temporary and permanent removal of 0.79 acre of riparian woodland, which would cause the loss of 0.24% of the riparian woodland habitat in the two watersheds in the project area. The rural nature, biotic function, and genetic diversity of the habitat would remain in the watershed. The impacts from the project are minor in relation to the availability of equivalent habitat within the project's watersheds.

Table 2.4.1.1. Estimated Impacts on Riparian Habitat

Feature ID	Cause of Impact	Permanent Impact Area (acre)	Temporary Impact Area (acre)
Riparian (South of Carson Road)	Cut and fill associated with new roundabout intersection	0.73	0.06

Oak Trees

The proposed project would result in impacts on the Sierran ponderosa pine forest natural community within the ESL, which includes areas dominated by grey pine, interior live oak, and canyon live oak species, and areas dominated by ponderosa pine and black oak species (Table 2.4.1.2). The project would result in the temporary and permanent removal of 7.72 acres of Ponderosa Pine/Black Oak woodland. This would result in the loss of 0.001% of the ponderosa pine/black oak woodland habitat in the two watersheds in the project area. All of the impacts would be within 650 feet of US 50. Impacts from the project would include thin strips of woodlands. The rural nature, biotic function, and genetic diversity of the habitat would remain in the watershed. The impacts from the project are minor in relation to the availability of equivalent habitat within the project's watersheds.

Table 2.4.1.2. Estimated Impacts on Oak Trees

Potential Impact	Temporary Impacts (Acres)	Permanent Impacts (Acres)
Grey Pine/Live Oak		
Alternative 1C	2.885	0.874
Alternative 4.5A	2.885	0.874
Alternative 4.5C	2.885	0.874
Alternative 4.7	0.000	0.000
Ponderosa Pine/Black Oak		
Alternative 1C	3.706	0.678
Alternative 4.5A	4.172	0.687
Alternative 4.5C	5.833	0.631
Alternative 4.7	1.760	5.960

This project is exempt from County oak woodland policies because it is a transportation project, and the oaks present within the ESL are not protected species (i.e., valley oak [*Quercus lobata*] and coast live oak [*Q. agrifolia*]). The project ESL does support interior live oak, black oak, and canyon live oak. Because no blue (*Quercus douglasii*), Englemann (*Q. engelmanii*), valley, or coast live oaks occur within the project ESL, oak woodlands, as defined by SCR-17, do not occur within the project ESL. However, Caltrans has committed to replacement plantings to offset the loss of oaks, as discussed in Section 2.3.1.3, *Avoidance, Minimization, and/or Mitigation Measures*. Avoidance and minimization measures would establish environmentally sensitive areas, limit vegetation removal and conduct oak tree replacement plantings within the ROW, and would reduce impacts on oak trees.

Wildlife Movement

The ESL is located in a potentially high-value wildlife crossing area based on the high concentration of deer kills within the ESL, the public identification of the area as having a deer crossing problem, the identification of the ESL as an important core habitat area for 14 focal wildlife species by CDFW, the identification of the ESL as a key US 50 wildlife crossing area in

the INRMP, and wildlife camera data within the ESL showing multiple species activity adjacent to US 50.

The proposed project could potentially have a substantial impact on wildlife crossing through:

- The proposed 56-inch median barrier which
  - Is established as having low permeability across all taxa
  - Will close the last void of median barriers from Sacramento to Pollock Pines
- The lack of available median and large mammal crossing structures in the ESL
- Increased risk of mortality associated with the increased crossing distance from the proposed widening of the shoulders and median

Median barriers, wider roads, higher traffic volumes, and faster traffic can result in increased wildlife mortality and/or decreased wildlife movement.

Wildlife movement may be affected due to the combination of a new concrete median barrier and the widening of the shoulders and median in an area that has the potential to be a valuable wildlife corridor. The median barrier and road widening could cause increased road mortality or decreased wildlife movement due to the barrier effect of the road.

Avoidance and minimization measures to preserve and improve wildlife movement would be implemented to prevent potential impact and measure BIO-4 would reduce this potential impact to a less-than-significant level.

2.4.1.3 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

BIO-1: Establish Environmentally Sensitive Areas

Additional direct and indirect impacts on sensitive biological resources, including wetland and SEZ resources, throughout the project area will be avoided or minimized by designating these features outside of the construction impact area as environmentally sensitive areas (ESAs) on project plans and in project specifications. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not necessarily limited to, the use of temporary orange fencing to identify the proposed limit of work in areas adjacent to sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavated materials). ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete.

BIO-2: Limit Vegetation Removal

Vegetation removal will be limited to the minimum amount required for construction. Caltrans will install ESA fencing between the designated work area and vegetation communities supporting oak trees to minimize disturbance to this habitat.

BIO-3: Replace Oak Trees within Highway Right-of-Way

Caltrans will provide on-site replacement oak plantings within the highway ROW beyond the clear recovery zone (CRZ) where feasible.

An on-site restoration and revegetation plan addressing oak planting within Caltrans ROW will be prepared by the District Biologist and Restoration Specialist and submitted to the applicable permitting agencies for review and approval prior to project construction. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and District Biologist.

Any seed (acorns) or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics and approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.

Mitigation Measures

BIO-4: Preserve/Improve Wildlife Movement

Caltrans will include the following design considerations for roadway improvements to minimize impacts on wildlife movement across the highway.

- Where culverts are upgraded they would be designed as much as practicable to accommodate small- and medium-sized mammals, reptiles, and amphibians. This may include such features as ensuring culverts are at grade with the surrounding landscape and trimming or planting appropriate vegetation.
- Gaps and scuppers will be installed in the median barrier at the appropriate locations to ensure habitat connectivity.
- To accommodate wildlife connectivity and in an effort to prevent wildlife and vehicle collisions, a large mammal wildlife crossing would be installed in a strategic location to ensure use by all possible taxa. Fencing would be placed to direct species into the crossing.
- The wildlife crossing will be monitored to ensure the structure meets biological and management goals. Monitoring will be conducted using motion-detecting wildlife cameras.

Permit Required Compensation

BIO-5: Compensate for Permanent Impacts to Riparian Habitat

To compensate for the permanent project impacts on riparian habitat, Caltrans will purchase credits at an approved mitigation bank. The compensation ratio is expected to be between 1:1 and 3:1 to compensate for temporal losses of riparian habitat between the project impact and the implementation of establishment projects. The project proponent also will implement the conditions and requirements of state and federal permits that will be obtained for the proposed project.

2.4.2 Wetlands and Other Waters

2.4.2.1 Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the United States Environmental Protection Agency (U.S. EPA).

USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if

there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this EO states that a federal agency, such as the FHWA or Caltrans, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCB) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600–1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for additional details.

2.4.2.2 Affected Environment

Information regarding the affected environment for wetlands and other waters was derived from the NES prepared for the proposed project.

A total of 1.41 acres of potentially jurisdictional wetlands (significant nexus with [abutting or adjacent to] non-isolated, navigable or interstate waters) were delineated within the ESL. The location and area of potentially jurisdictional wetlands in the ESL are listed in Table 2.4.1.3.

Freshwater Emergent Wetland

Freshwater wetland areas within the ESL support mostly low-growing hydrophytic grasses and herbs including cattail (*Typha latifolia*), seep-spring monkeyflower (*Mimulus guttatus*), cardinal

monkeyflower (*M. cardinalis*), nut sedge (*Cyperus* sp.), watercress (*Nasturtium officinale*), rabbit-foot grass (*Polypogon monspeliensis*), dallis grass (*Paspalum dilatatum*), ciliate willow-herb (*Epilobium ciliatum*), dense willow-herb (*E. densiflorum*, fluvellein (*Kickxia elatine*), beggar's tick (*Bidens frondosa*), and Baltic rush (*Juncus balticus*). Pacific willow (*Salix lasiandra*) and horsetail (*Equisetum arvense*) also occur in freshwater emergent wetlands within the ESL.

Table 2.4.1.3. Locations of Potentially Jurisdictional Wetlands

Resource ID	Area of Resource Within ESL (square feet/acres)	Lat/Long NAD 1983
WL-01 (West of Still Meadow Road)	WL-01 is located outside of the ESL	38°44'17.615" -120°44'5.246"
WL-02 (West of Braeburn Road)	793.75/0.018 ac	38°44'20.118" -120°43'37.924"
WL-03 (Braeburn Road)	1,604.4/0.037 ac	38°44'20.287" -120°43'34.408"
WL-04 (South of Carson Road)	53,864.4/ ac	38°44'21.693" -120°41'46.498"
Total:	56,262.5 square feet/ 2.192 acre	

Other Waters of the United States

A total of 0.017 acre of jurisdictional other waters of the U.S. was delineated within the ESL including seeps, intermittent and ephemeral drainages, and roadside ditches. The portions of the ESL that overlap with the ordinary high water mark of these drainages are summarized in Table 2.4.1.4.

Table 2.4.1.4. Locations of Potentially Jurisdictional Other Waters of the United States

Resource ID	Area of Resource Within ESL (square feet/acre)	Length of Resource Within ESL (linear feet)	Lat/Long NAD 1983
OWUS-1 (Braeburn Roadside Intermittent Ditch North of US50 PM 22.37)	152.35/0.003	101.28	38°44'20.168" 120°43'35.221"
OWUS-2 (Seep South of US50 PM 22.21)	157.51/0.003	43.27	38°44'17.764" 120°43'46.013"
OWUS-3 (Seep South of US50 PM 22.27)	171.46/0.004	44.69	38°44'18.397" 120°43'42.303"
OWUS-4 (Intermittent Drainage South of US50 PM 22.35)	245.87/0.007	80.80	38°44'19.092" 120°43'37.072"
OWUS-5 (Ephemeral Drainage South of US50 PM 22.69)	27.01/>0.001	8.94	38°44'16.237" 120°43'14.707"
Totals:	**754.2 square feet/ 0.017 acre**	**278.98 LF**	

2.4.2.3 Environmental Consequences

The most current project design was analyzed against biological resources that were surveyed and mapped during the 2016 survey season (final plans, specifications, and estimates have not been developed for this project). Consistent with the regulations under Section 404 of the CWA, the determination of permanent and temporary adverse impacts to jurisdictional waters of the U.S. were based upon any "discharges of dredged or fill material."

Permanent impacts result when a jurisdictional water receives new permanent fill including, but not limited to, any new permanent fills placed for roadways and associated embankments (cut and fill areas), and new drainage features/structures including the extension of existing culverts, rock slope protection, flared end sections, headwalls and endwalls. Temporary impacts result when jurisdictional waters receive any fill that will be removed from the jurisdictional waters before or upon project completion. Temporary impacts can result from construction activities, including, but not limited to coffer-dams or temporary diversion structures that may be required for dewatering activities when working in a flowing stream, and temporary disturbance resulting from equipment access and operation that will be restored to pre-project conditions

The most current estimates of impacts on potentially jurisdictional wetlands, based on non-USACE-verified jurisdictional boundaries and the most current project design, are provided in Table 2.4.1.5. The impacts are the same for Alternatives 1C, 4.5A, and 4.5C. The project would result in the temporary and permanent removal of 1.30 acres of wetlands. This would result in the loss of 0.33% of the wetland habitat in the two watersheds in the project area. The rural nature, biotic function, and genetic diversity of the habitat would remain in the watershed. The impacts from the project would be minor in relation to the availability of equivalent habitat within the project's watersheds.

Table 2.4.1.5. Estimated Impacts on Potentially Jurisdictional Wetlands

Feature ID	Cause of Impact	Permanent Impact Area (acre)	Temporary Impact Area (acre)
WL-01 (West of Still Meadow Road)	Outside of ESL	0	0
WL-02 (West of Braeburn Road)	No Impacts	0	0
WL-03 (Braeburn Road)	RSP will be placed within WL-03	0.003	0
WL-04 (South of Carson Road)	Cut and fill associated with new roundabout intersection	1.24	0.07

The most current estimates of impacts on jurisdictional other waters of the U.S., based on non-USACE-verified jurisdictional boundaries and the most current project design, are provided in Table 2.4.1.6. The impacts are the same for Alternatives 1C, 4.5A, and 4.5C.

Table 2.4.1.6. Estimated Impacts to Potentially Jurisdictional Other Waters of the U.S.

Feature ID	Cause of Impact	Permanent Impact Area (square feet/acre)	Permanent Impact Length (linear feet)	Temporary Impact Area (square feet/acre)	Temporary Impact Length (linear feet)
OWUS-1 (Braeburn Roadside Intermittent Ditch North of US50 PM 22.37)	RSP will be placed within OWUS-1	152.3/0.003	100	0	0
OWUS-2 (Seep South of US50 PM 22.21)	Temporary fill from access for road widening	0	0	148.6/0.003	40.96
OWUS-3 (Seep South of US50 PM 22.27)	Temporary fill from access for road widening	0	0	136.0/0.003	33.66
OWUS-4 (Intermittent Drainage South of US50 PM 22.35)	Permanent fill from road widening Temporary fill from access for road widening	70.38/0.002	22.5	175.5/0.004	58.4
OWUS-5 (Ephemeral Drainage South of US50 PM 22.69)	Temporary fill from access for road widening	0	0	33.93/0.001	9.10
Totals		**222.68/ 0.005**	**122.5**	**494.03/0.011**	**142.12**

Avoidance and minimization measures below to establish environmentally sensitive areas, employ BMPs, and restore temporarily affected areas on-site would ensure that temporary impacts would be less than significant. Compensatory mitigation listed below would reduce permanent impacts on wetlands and other waters of the U.S. to a less-than-significant level.

2.4.2.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

BIO-1: Establish Environmentally Sensitive Areas

Additional direct and indirect impacts on sensitive biological resources, including wetland and other waters resources, throughout the ESL will be avoided or minimized; Caltrans will designate these features outside of the construction impact area as environmentally sensitive areas (ESAs) on project plans and in project specifications. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not necessarily limited to, the use of temporary orange fencing to identify the proposed limit of work in areas adjacent to sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavated materials). ESA provisions

will be implemented as a first order of work and remain in place until all construction activities are complete.

BIO-6: Containment Measures / Construction Site Best Management Practices

Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. BMPs for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.

The project is subject to stormwater quality regulations established under the NPDES, described in Section 402 of the federal CWA. In California, the NPDES program requires that any construction activity disturbing 1 or more acres comply with the statewide General Permit, as authorized by the SWRCB. The General Permit requires elimination or minimization of non-stormwater discharges from construction sites and development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for the site.

Caltrans and its contractors will comply with all construction site BMPs specified in the SWPPP and any other permit conditions to minimize the introduction of construction-related contaminants and mobilization of sediment in wetlands and other waters in and adjacent to the ESL. These BMPs will address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-stormwater management, and waste management practices. The BMPs will be based on the best conventional and best available technology. The BMPs will include, but are not limited to, the following:

- Conduct all drainage, earthwork, or foundation activities involving wetlands and other waters in the dry season (generally between June 15 and October 15, may vary based on weather).
- Where working areas encroach on live or dry streams, lakes, or wetlands, RWQCB-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems will be constructed and maintained between working areas and streams, lakes, and wetlands. Discharge will be contained through the use of RWQCB-approved measures that will keep sediment from entering protected waters.
- Oily or greasy substances originating from the contractor's operations will not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland.
- Asphalt concrete will not be allowed to enter a live or dry stream, pond, or wetland.

BIO-7: Restore Temporarily Affected Areas Onsite

Disturbed areas within the construction limits will be graded to minimize surface erosion and siltation into receiving waters. Areas that are disturbed by construction activities will be stabilized as soon as feasible (and no later than October 15th of each construction season) to avoid erosion during subsequent storms and runoff.

An onsite restoration and revegetation plan will be prepared by the District Biologist and Restoration Specialist and submitted to the permitting agencies for review and approval prior to project construction. Once construction is complete, a final site review will be performed by the District Biologist and Restoration Specialist to ensure channel topography is restored and appropriate for seeding/planting. Bare areas will be covered with mulch and revegetated with appropriate native species to pre-project conditions. Construction site BMPs will be utilized to prevent contamination of the streambank and watercourse from construction material and debris. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and Project Biologist.

Permanent erosion control seeding will be performed at all disturbed sites by hydro-seeding with an application of native grass straw mulch over the course of construction as each site is completed, with all sites seeded by the completion of construction activities. Additional riparian restoration planting using container plants will be conducted the first fall following the first growing season post-construction. This allows observation of water flow patterns (that then direct the planting distribution of these species) and allows observation and addressing of any problems resulting from winter flows.

Any seed or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics. Willow cuttings for use in biotechnical bank stabilization will be obtained from the vicinity of the project from along the existing Caltrans ROW or from sites approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.

Permit Required Compensation

BIO-8: Compensate for Permanent Impacts on Wetlands

To compensate for the permanent project impacts on potentially jurisdictional wetlands, Caltrans will purchase credits at an approved mitigation bank or through the participation in the USACE National Fish and Wildlife Foundation (NFWF) in-lieu fee program to ensure no net loss of wetland functions and values.

If in-lieu fees are based on USACE methodology, the in-lieu fee wetland compensation ratio is expected to be between 1:1 and 3:1 to compensate for “temporal” losses of wetland functions and values between the project impact and the implementation of wetland establishment projects within the identified watershed, and to ensure no-net-loss of wetland habitat functions and values. Caltrans also will implement the conditions and requirements of state and federal permits that will be obtained for the proposed project.

BIO-9: Compensate for Permanent Impacts to Other Waters

To compensate for the permanent project impacts on potentially jurisdictional other waters of the U.S., Caltrans will purchase credits at an approved mitigation bank or through the participation in the USACE NFWF in-lieu fee program to ensure no net loss of waters of the U.S.

If in-lieu fees are based on USACE methodology, the in-lieu fee waters compensation ratio is expected to be between 1:1 and 3:1.

2.4.3 Plant Species

Plant surveys were conducted outside of the blooming period of the potentially occurring special-status plants. Additional surveys will be conducted in spring 2018 (i.e., during the blooming periods of the special-status plants) to verify presence or absence.

2.4.4 Animal Species

The information presented in this section is based on the NES prepared for this project in May 2017.

2.4.4.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the beginning of Chapter 2. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

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

2.4.4.2 Affected Environment

Research was conducted prior to field surveys to determine the vegetation communities in the ESL and their potential as habitat for animal species. This research included database searches for sensitive animals and habitat occurrences, review of published and unpublished material, and contact with knowledgeable individuals. All accessible areas within the project ESL were

surveyed for signs or sightings of wildlife species, and each sighting was recorded in field notes. Surveys were performed on July 6 and August 16, 2016 and included a habitat-based assessment for sensitive wildlife species that could be affected by the proposed project.

Table 2.4.1.7 lists the sensitive animal species that have the potential to occur within the ESL and were considered for environmental review.

Table 2.4.1.7. Sensitive Animal Species Considered for Environmental Review

Scientific Name	Common Name	Status	Habitat and Range	Potential to Be Affected by Project
Accipiter gentilis	northern goshawk (nesting)	CSC	Within, and in vicinity of, coniferous forest. Uses old nests, and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees. Nests as low as 2,500 feet on west slope of Sierra Nevada.	None. Goshawks nest in mature/old growth trees in largely undeveloped areas surrounded by dense forest habitat. Project borders existing development and the ESL lacks mature/old growth trees.
Agelaius tricolor	tricolored blackbird	CSC, CC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	None. ESL is outside the geographic range of the species.
Aplodontia rufa californica	Sierra Nevada mountain beaver	CSC	Dense growth of small deciduous trees & shrubs, wet soil, & abundance of forbs in the Sierra Nevada & east slope. Needs dense understory for food & cover. Burrows into soft soil. Needs abundant supply of water. Elevation range 4,000 to 10,000 feet.	None. Appropriate denning habitat is not available within project ESL. Species typically occurs at higher elevations than project ESL.
Actinemys marmorata	western pond turtle	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying	None. Suitable aquatic habitat for this species is absent from the ESL.
Hypomesus transpacificus	Delta smelt	FT, CE	Sacramento-San Joaquin delta. Seasonally in Suisun bay, Carquinez strait & San Pablo bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	None. The project ESL is located outside of known range for this species.
Oncorhynchus mykiss	Central Valley ESU Steelhead	FT	Anadromous. Spawn in cool, clear streams featuring suitable water depth, gravel size, and current velocity. Intermittent streams may be used for spawning.	None. Surface waters in ESL are inaccessible to anadromous fish due to downstream barrier (Folsom Dam).

Scientific Name	Common Name	Status	Habitat and Range	Potential to Be Affected by Project
Pekania pennanti	fisher - West Coast DPS	FPT, CC	Intermediate to large-tree stages of coniferous forests & deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs & rocky areas for cover & denning. Needs large areas of mature, dense forest.	None. ESL is within suspected gap in distribution for this species.
Rana boylii	foothill yellow-legged frog	CSC	Sunny or partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	None. There is a lack of appropriate habitat within the ESL and there are no known occurrences in the Webber Creek Watershed.
Rana draytonii	California red-legged frog	FT	Lowlands and foothills in or near permanent sources of water with dense, shrubby or emergent riparian vegetation.	None. Suitable non-breeding aquatic habitat for this species in the ESL will not be affected by the proposed project.
Rana sierrae	Sierra Nevada yellow-legged frog	FE, CT	High-elevation lakes and streams. Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs. to complete their aquatic development. Ranges in elevation from 4,500 feet to 12,000 feet.	None. ESL is not within the elevational range of the species.
Riparia riparia	bank swallow (nesting)	CT	Open and partly open situations, frequently near flowing water. Colonial nester in steep sand, dirt, or gravel banks, in burrows dug near the top of the bank, along the edge of inland water or along the coast, or in gravel pits, road embankments, etc.	None. Habitat suitable for bank swallow nesting is not available within or adjacent to the ESL.
Bombus occidentalis	Western bumble bee	--	Once a widespread pollinator occupying western United States but has undergone drastic declines throughout its range. Forage on a variety of wildflowers.	Low. Suitable habitat for underground nest colonies is present within the ESL but is limited due to existing disturbance. Limited foraging habitat is present within vegetation throughout ESL.
	Bats – Bridge/structure roosting species	--	Man-made structures	None. Potential habitat for structure-roosting bats is absent from the ESL or is not expected to be affected by project activities.
	Bats – Tree roosting species	--	Mature trees.	Moderate. Potential day and maternity roosting habitat (mature trees) and appropriate foraging habitat are available within ESL. Project would result in tree removal and vegetation

Scientific Name	Common Name	Status	Habitat and Range	Potential to Be Affected by Project
				removal which could impact roosting bats.
	Migratory Birds (nesting)	MBTA	Grass, shrubs, trees, and human-made structures.	Moderate. Project would result in tree removal and vegetation removal, which could negatively affect nesting birds.

CE: CA Endangered **CT:** CA Threatened **CC**: Candidate for CESA listing **CR:** CA rare; Not presently threatened with extinction, it is in such small numbers that it may become endangered if its present environment worsens. **CSC**: California Special Concern: animals protected under California Environmental Quality Act (CEQA) or the Natural Communities Conservation Planning Act (NCCPA). **CFP:** California "Fully Protected" species. **FE:** Federal Endangered **FT**: Federal Threatened **FPE:** Federal Proposed Endangered **FPT:** Federal Proposed threatened. **MBTA:** Birds protected under the MBTA

2.4.4.3 Environmental Consequences

Due to the ESL being outside the range of the species, the lack of suitable habitat or habitat components in the ESL, the lack of detection during recent Caltrans surveys or because the project would not harm individuals or alter the species' habitat, it is Caltrans' determination that the proposed project will have no significant impact on the following non-listed sensitive wildlife species:

- northern goshawk
- tricolored blackbird (note: also California endangered candidate)
- Sierra Nevada mountain beaver
- western pond turtle
- foothill yellow-legged frog

Based upon the availability of suitable habitat or habitat components within the ESL and the presence of nearby occurrences in similar habitats as available within the ESL, the following species could potentially occur within the ESL. Therefore, it is Caltrans' determination that the proposed project may affect the following species that currently have no listings.

- Western bumble bee
- Tree-roosting bats
- Migratory birds

Western Bumblebee

The proposed project may result in habitat alteration that could destroy, fragment, alter, degrade or reduce the food supply for western bumblebees produced by flowers. It could also result in the destruction of nest sites and hibernations sites for overwintering queens. Habitat fragmentation could reduce the size of bumblebee populations, which makes inbreeding more common, reducing genetic diversity and increasing the risk of population decline. The introduction of exotic plants may threaten bumblebees by competing with native nectar and pollen plants relied upon by bees.

Based on the limited habitat available for western bumblebee within the ESL, impacts on this species are expected to be very low and would not substantially reduce local populations. Therefore, the proposed project would have a less-than-significant impact on western bumblebee. Avoidance and minimization measures, including limiting vegetation removal, will further reduce the potential for impacts on western bumblebees.

Migratory Bird Species

The proposed project would result in the loss of approximately 10 acres of potential nesting trees and 17 acres of potential foraging habitat. Most of the tree removal will occur within 100 feet of the current highway and residential area and is marginal nesting and foraging habitat for most bird species. Vegetation removal and construction activities associated with the proposed project (including equipment noise) could disturb or remove an active migratory bird nest, if present in or near the construction area. These activities could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance or loss of a migratory bird nest would violate the MBTA and CFGC Section 3503 and 3503.5, and would be a significant impact.

Avoidance, minimization, and/or mitigation measures to limit vegetation removal and restrict the timing of removal of woody vegetation removal to avoid effects on birds will be enforced to prevent any impact on nesting migratory birds.

Bats—Day Roosts and Maternity Roosts

Several common species of bats could roost in trees within the ESL, including silver-haired bat and long-legged myotis. The proposed project would result in the loss of approximately 10 acres of potential roosting trees and 17 acres of potential foraging habitat. Most of the tree removal will occur within 100 feet of the current highway and residential area and is marginal roosting and foraging habitat for bats. Tree removal within the ESL could disturb or kill a large number of bats if a roost colony is present within areas proposed for construction. This impact would be significant.

Avoidance, minimization, and/or mitigation measures to limit vegetation removal and restrict the timing of removal of woody vegetation removal to avoid effects on bats will be enforced to prevent any impact on roosting bats.

2.4.4.4 Avoidance, Minimization, and/or Mitigation Measures

Implementation of the following avoidance and minimization measures would avoid significant impacts on migratory birds and roosting bats.

Avoidance and Minimization Measures

BIO-2: Limit Vegetation Removal

Vegetation removal will be limited to the minimum amount required for construction. Caltrans will install ESA fencing between the designated work area and vegetation communities supporting oak trees to minimize disturbance to this habitat.

BIO-10: Restrict Timing of Woody Vegetation Removal—Birds

Vegetation Removal and Ground Disturbance: The contractor will take such measures as necessary to prevent disturbing any areas that will cause conflict between performing necessary work and nesting migratory birds.

Birds will be allowed to nest in any areas where conflicts with construction are not anticipated. If the contractor' work does not conflict with bird nesting, then no further measures are required.

If woody vegetation removal, construction of structures, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds (February 1st to September 30th), a focused survey for active nests of such birds will be conducted by a qualified biologist within 15 days prior to the beginning of project-related activities. If active nests are found, Caltrans will consult with USFWS regarding appropriate action to comply with the MBTA of 1918 and with CDFW to comply with provisions of the Fish and Game Code of California.

If a lapse in project-related work of 15 days or longer occurs, another survey and, if required, consultation with USFWS and CDFW will be required before the work can be reinitiated.

If contractors perform woody vegetation removal or other construction activities within nesting bird habitat between October 1st to January 31st, then no further measures are required.

BIO-11: Restrict Timing of Woody Vegetation Removal—Bats

Trees should be removed between October 1st to January 31st. If trees are removed between February 1st to September 30th a two-phase system of removing tree limbs one day and cutting the remaining boles on the next day will be employed. Evergreen trees can be limbed early in the day, but work on trees likely to be used as day roosts by bats should occur as late in the first day as possible. Live deciduous trees lacking cavities, broken limbs, and deep bark fissures (particularly riparian trees) should be limbed by chainsaw late in the afternoon of one day (to the extent possible), starting with the lower branches and delaying the cutting of higher branches prior to a minimum of 15 minutes of chainsaw operation. The intent of this method is that any red bats using live deciduous trees will be awakened by the chainsaw and leave the tree close enough to dusk that this disturbance event will not result in increased predation or injury. To the extent possible,

snags and trees with cavities, broken limbs, or deep bark fissures should also be limbed late in the day and struck repeatedly with percussive force (i.e., with the bucket of an excavator) or tapped with hand tools for 15 minutes prior to being limbed. The intent of this method is that any crevice-roosting bats will be awakened by the percussive force and leave the tree close enough to dusk that this disturbance event will not result in increased predation or injury.

BIO-12: Restrict Timing of Woody Vegetation Removal

It is recommended that the removal of any woody vegetation (trees and shrubs) required for the project be completed between October 1st to January 31st prior to project construction, outside of the predicted nesting season for raptors and migratory birds in this area. Vegetation removal outside this time period may not proceed until a survey by a qualified biologist determines no migratory bird nests are present or in use.

2.4.5 Invasive Species

The information presented in this section is based on the NES prepared for this project in May 2017.

2.4.5.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

2.4.5.2 Affected Environment

There is a risk of introducing or spreading noxious or invasive weeds associated with the proposed project because ground-disturbing action or activity is proposed. Surveys for target noxious and invasive weed species were conducted in conjunction with botanical inventory surveys and focused sensitive plant surveys conducted in the 2016 season. Table 2.4.1.8 summarizes the noxious weed species detected within the ESL.

Table 2.4.1.8. Noxious and Invasive Weed Species Detected in the ESL

Scientific Name	Common Name	USDA/CDFA Rating	Cal-IPC Rating
Bromus madritensis ssp. rubens (=B. rubens)	red brome	-/-	High
Carduus pyncocephalus	Italian thistle	-/CW	Moderate
Centaurea solstitialis	yellow starthistle	-/CW	High
Chondrilla juncea	Skeleton weed	-/AW	-
Cirsium vulgare	Bull Thistle	-/-	Moderate
Cytisus scoparius	Scotch broom	-/-	High
Dipsacus fullonum	Teasel	-/-	Moderate
Hedera helix, H. canariensis	English ivy, Algerian ivy	-/-	High
Hypericum perforatum	Klammath Weed	-/CW	Moderate
Rubus armeniacus (= R. discolor)	Himalayan blackberry	-/-	High
Sonchus arvensis	Perennial sowthistle	-/AW	-
Elymus caput-medusae	medusahead	-/CW	High

2.4.5.3 Environmental Consequences

During the 2016 plant surveys, 12 non-native plant species on the California Invasive Plant Council's (Cal-IPC) list and the California Department of Food and Agriculture (CDFA) noxious weed list, were observed within the ESL. The proposed project has the potential to impact native vegetation or vegetation communities, wetlands, agriculture, or silviculture within the ESL through the spreading of invasive plant species. However, an adverse effect is unlikely due to the implementation of avoidance strategies and design features for reducing the spread of non-native weeds listed below; the impact would be less than significant.

2.4.5.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

BIO-1: Establish Environmentally Sensitive Areas

Additional direct and indirect impacts on sensitive biological resources throughout the ESL, including wetland and other waters resources, will be avoided or minimized. Caltrans will designate these features outside of the construction impact area as environmentally sensitive areas (ESAs) on project plans and in project specifications. ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not limited to, the use of temporary orange fencing to identify the proposed limit of work in areas adjacent to sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavated materials). ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete.

BIO-2: Limit Vegetation Removal

Vegetation removal will be limited to the minimum amount required for construction. Caltrans will install ESA fencing between the designated work area and vegetation communities supporting oak trees to minimize disturbance to this habitat.

BIO-6: Containment Measures / Construction Site Best Management Practices

Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. BMPs for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.

The project is subject to stormwater quality regulations established under the NPDES, described in Section 402 of the federal CWA. In California, the NPDES program requires that any construction activity disturbing 1 or more acres comply with the statewide General Permit, as authorized by the SWRCB. The General Permit requires elimination or minimization of non-stormwater discharges from construction sites and development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for the site.

Caltrans and its contractors will comply with all construction site BMPs specified in the SWPPP and any other permit conditions to minimize the introduction of construction-related contaminants and mobilization of sediment in wetlands and other waters in and adjacent to the ESL. These BMPs will address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-stormwater management, and waste management practices. The BMPs will be based on the best conventional and best available technology. The BMPs will include, but are not limited to, the following:

- Conduct all drainage, earthwork, or foundation activities involving wetlands and other waters in the dry season (generally between June 15 and October 15, may vary based on weather).
- Where working areas encroach on live or dry streams, lakes, or wetlands, RWQCB-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems will be constructed and maintained between working areas and streams, lakes, and wetlands. Discharge will be contained through the use of RWQCB-approved measures that will keep sediment from entering protected waters.
- Oily or greasy substances originating from the contractor's operations will not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland.
- Asphalt concrete will not be allowed to enter a live or dry stream, pond, or wetland.

BIO-7: Restore Temporarily Affected Areas On-Site

Disturbed areas within the construction limits will be graded to minimize surface erosion and siltation into receiving waters. Areas that are disturbed by construction activities will

be stabilized as soon as feasible (and no later than October 15th of each construction season) to avoid erosion during subsequent storms and runoff.

An on-site restoration and revegetation plan will be prepared by the District Biologist and Restoration Specialist and submitted to the permitting agencies for review and approval prior to project construction. Once construction is complete, a final site review will be performed by the District Biologist and Restoration Specialist to ensure channel topography is restored and appropriate for seeding/planting. Bare areas will be covered with mulch and revegetated with appropriate native species to pre-project conditions. Construction site BMPs will be utilized to prevent contamination of the streambank and watercourse from construction material and debris. Restoration planting work is expected to be implemented by the California Conservation Corps, with oversight provided by the Caltrans Restoration Specialist and Project Biologist.

Permanent erosion control seeding will be performed at all disturbed sites by hydroseeding with an application of native grass straw mulch over the course of construction as each site is completed, with all sites seeded by the completion of construction activities. Additional riparian restoration planting using container plants will be conducted during the first fall following the first growing season post-construction. This allows observation of water flow patterns, which will be used to direct the planting distribution of these species, and enables the identifying and addressing any problems resulting from winter flows.

Any seed or container plants will be generated from materials collected from the vicinity of the project or of similar elevation and habitat characteristics. Willow cuttings for use in biotechnical bank stabilization will be obtained from along the existing Caltrans ROW in the project vicinity or from sites approved by the Resident Engineer in coordination with the Revegetation Specialist/Project Biologist.

BIO-13: Weed Free Construction Equipment

All off-road construction equipment will be cleaned of potential noxious weed sources (mud, vegetation) before entry into the project area ESL, and after entering a potentially infested area before moving on to another area, to help ensure noxious weeds are not introduced into the ESL. The contractor shall employ whatever cleaning methods (typically with the use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Equipment washing stations shall be placed in areas that afford easy containment and monitoring and that do not drain into sensitive (riparian, streams, wetlands, etc.) areas.

BIO-14: Equipment Staging in Weed Free Areas

Staging and storage of equipment should only be done in weed free areas. Infestations of noxious and/or highly invasive weeds were mapped as part of the project planning effort

to determine if pre-construction hand, mechanical, or chemical eradication treatments are feasible, or if it is feasible prior to designating these areas for the contractor's use.

BIO-15: Weed Free Erosion Control and Revegetation Treatments

To further minimize the risk of introducing additional non-native species into the area, only locally adapted plant species appropriate for the project area ESL will be used in any erosion control or revegetation seed mix or stock. No dry-farmed straw will be used, and certified weed-free straw shall be required where erosion control straw is to be used. In addition, any hydroseed mulch used for revegetation activities must only contain native species.

2.5 Cumulative Impacts

2.5.1.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

2.5.1.2 Affected Environment

Resource area for which the project could cause direct or indirect impacts are considered below. If a project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource, and need not be further evaluated.

Cumulative – Land Use

The area surrounding the proposed project consists primarily of agricultural, residential, and commercial land uses. As shown in the County of El Dorado's General Plan Land Use Map, most of the land north of US 50 is designated Agricultural Lands (AL). South of US 50 in the central portion of the project area are low density residential (LDR) and high density residential (HDR) land uses, as well as scattered commercial land uses (C).

Cumulative – Community Impacts

Community Character and Cohesion: US 50 currently divides the unincorporated community of Camino in the project area. Drivers must cross US 50 by using one of the seven at-grade intersections along the highway. Despite the presence of the highway, the small rural community is relatively cohesive; residents are likely to know each other, attend the same schools and other public facilities, and patronize local businesses.

Relocations and Real Property Acquisition: Right-of-way (ROW) acquisition of small portions of property adjacent to the project would be necessary under all build alternatives.

Environmental Justice: The study area does not have a disproportionate amount of environmental justice populations, such as minorities or those with low-incomes.

Cumulative – Utilities/Emergency Services

Utilities in the study area include gas lines, overhead electric lines, underground electric lines, fiber optic cables, water lines, sewer lines, and storm drain lines.

Cumulative – Traffic and Transportation/Pedestrian and Bicycle Facilities

Within the study area, direct access is available to and from US 50 via direct right turns or left turn lanes at Still Meadow Road, Paul Bunyon Road, Five Mile Road, Camino Heights Drive, Lower Carson Road, and Upper Carson Road. Average daily traffic along US 50 is up to approximately 12,805 vehicles traveling westbound and up to approximately 12,450 vehicles traveling eastbound between the Still Meadow Road/US 50 and Paul Bunyon/5 Mile Road/US 50 intersections.

Cumulative – Visual/Aesthetics

US 50 is an Officially Designated State Scenic Highway, protected for maintaining and enhancing its scenic viewsheds (California Department of Transportation 2016). In addition, the County of El Dorado considers eastbound US 50 passing near the project site to be a corridor with important scenic viewpoints for its views of the Sacramento Valley (El Dorado County 2003, 2015). As described in the *Camino Safety Project Section 4(f) De Minimis Determination*, Alternative 4.7 would have a de minimis impact on the El Dorado Trail and Pony Express National Historic Trail.

Cumulative – Cultural Resources

Caltrans has determined that there are potentially eligible archaeological resources within the cultural APE/PAL; however, evaluation of the resources will not be possible until visibility and vegetation in the site allow proper access and recording. A project-level PA between Caltrans and SHPO will ensure that identification and evaluation efforts are completed prior to construction of the project. This PA will be included in the final environmental document.

Within the APE/PAL there are two historic-era built environment resources that appear to be ineligible for inclusion to the CRHP or the NRHP. One of the resources is the alignment of the CP&LTRR and the other is an early 20th century residence.

Cumulative – Water Quality and Storm Water Runoff

The proposed project is located on US 50 in El Dorado County between Post Mile (PM) R21.95 to 24.25. Weber Creek, New Weber Creek, China Creek, El Dorado Main Irrigation Canal, Hangtown Creek, and White Rock Creek are the nearest receiving waters to the project area. Blakely Reservoir (south of PM 24.27) and an unidentified reservoir (south of PM R21.95) are also in close proximity to the project area (Caltrans 2017a). Potential discharges, resulting from project activities, would most likely be conveyed to small roadside ditches (further described below) and possibly to one of the larger receiving waters previously identified.

Cumulative – Hazardous Waste/Materials

As discussed in the project's updated ISA, ADL, NOA, potential elevated concentrations of lead and chromium within yellow and white traffic striping, and preservative chemicals within existing treated wood may occur within the project area.

Cumulative – Air Quality

The EPA has classified El Dorado County, including the project area, as nonattainment for the federal 8-hour O3 and PM2.5 standards (U.S. Environmental Protection Agency 2016b). ARB has classified El Dorado County as a nonattainment area for the state 8-hour O3 and PM10 standards (California Air Resources Board 2016c).

Cumulative – Natural Communities

The ESL contains both natural communities and areas that have been developed or disturbed. The natural communities consist of riparian habitat, Sierran ponderosa pine forest, and freshwater emergent wetland. Freshwater emergent wetland is discussed in Section 2.3.2. Ruderal or disturbed areas and urban/ornamental areas also occur within the ESL. While none of the natural community types within the ESL are dominated by oak species, oak trees are present within the Sierran ponderosa pine forest natural community. No oak woodlands meet the criteria for natural communities of concern, though oaks are present within the ESL.

Cumulative – Wetlands and Other Waters

A total of 1.41 acres of potentially jurisdictional wetlands (significant nexus with [abutting or adjacent to] non-isolated, navigable or interstate waters) were delineated within the ESL.

Cumulative – Animal Species

Based upon the availability of suitable habitat or habitat components within the ESL and the presence of nearby occurrences in similar habitats as available within the ESL, the following species that are not listed—Western bumble bee, tree-roosting bats, and migratory birds species—could potentially occur within the ESL.

Wildlife connectivity is a potential issue within the ESL. Median barriers currently exist along US 50 outside of the ESL. Past projects along US 50 have added concrete barriers which pose a potential barrier to wildlife crossings and the build alternatives would close an existing gap on US 50.

The Sierra Nevada foothills wildlife connectivity modeling project (a Caltrans and CDFW joint effect to model potential connectivity areas between intact blocks of habitat 10,000 acres or greater in size using species specific data) identified the important core habitat areas for focal wildlife species. The areas north and south of US 50 of the project's ESL were determined to be core habitat areas.

Cumulative – Invasive Species

Twelve non-native plant species on the Cal-IPC list and CDFA noxious weed list were observed within the ESL. The proposed project has the potential to spread invasive plant species during construction without avoidance measures and strategies.

Cumulative – Climate Change

Cumulative impacts and climate change are discussed in Chapter 3 of this Initial Study.

2.5.1.3 Environmental Consequences

Cumulative – Land Use

The project will take place primarily within existing Caltrans right-of-way. While some property acquisitions may be necessary, they are not expected to affect existing overall land uses.

Cumulative – Community Impacts

Community Character and Cohesion: The undercrossing proposed with all build alternatives would allow north-south connection within the study area. Cumulative impacts to community character and cohesion would be less than significant.

Relocations and Real Property Acquisition: ROW acquisition would be negotiated with property owners during the ROW process. Cumulative impacts would be less than significant.

Environmental Justice: The study area does not have a disproportionate amount of environmental justice populations, such as minorities or those with low-incomes.

Cumulative – Utilities/Emergency Services

Utility relocations would be coordinated with service providers and required roadway closures would be coordinated with emergency service providers. Cumulative impacts would be less than significant.

Cumulative – Traffic and Transportation/Pedestrian and Bicycle Facilities

The build alternatives would not result in significant impacts to LOS or VMT. Cumulatively, traffic and transportation/pedestrian and bicycle facilities are anticipated to improve considering the construction median barrier would enhance safety and the undercrossing would allow for continued north-south connectivity.

Cumulative – Visual/Aesthetics

Minor impacts on the visual conditions of the project corridor would result from cut and fill required to construct the project. Flattening existing slopes by using fill or cuts would result in a limited amount of vegetation removal. However, cut-and-fill activities would result in an appearance similar to existing locations along the project corridor. The undercrossing structure would be a new visual element, but it would not be an incongruous to the setting; the undercrossing structure would use aesthetic treatments for retaining walls to improve its appearance. Cumulatively, visual impacts would be less than significant since changes associated with the proposed cut-and-fill actions would result in an appearance similar to the existing conditions along the project corridor.

Cumulative – Cultural Resources

A phased approach to finalizing identification of cultural resources within the current alternative will be employed to comply with federal and state laws, pursuant to Stipulation XII of Caltrans's Section 106 PA and Stipulation XI of PRC Section 5024 MOU. Caltrans will enter into a project-level Programmatic Agreement (PA) with the SHPO. The PA will include a conditional Finding of Effect (FOE) and a phasing plan that outlines the approach to completing identification and evaluation efforts for the project. Caltrans will complete a Supplemental HPSR, HRER, and ASR that document the results of the finished identification efforts. The final FOE will be contingent upon results of the final identification efforts.

Cumulative impacts on cultural resources are not anticipated with the implementation of measures in the programmatic agreement.

Cumulative – Water Quality and Storm Water Runoff

Standard facilities used to handle stormwater on site would include an array of structural elements or facilities that would serve to manage, direct, and convey stormwater. Cumulative impacts to water quality and storm water runoff are less than significant.

Cumulative – Hazardous Waste/Materials

Standard measures for handling hazardous waste and materials would be implemented during construction and no hazardous waste/materials facilities are proposed with the project. Cumulative impacts to hazardous waste/materials are less than significant.

Cumulative – Air Quality

The build alternatives would meet air quality regional and project-level conformity requirements. Estimated operational and construction emissions were found to be less than significant. Cumulative impacts to air quality are less than significant.

Cumulative – Natural Communities

Cumulative impacts to natural communities including riparian habitat, Sierran ponderosa pine forest, freshwater emergent wetland, and wildlife corridors and crossing would be minimized through standard measures to limit impacts and replace affected oak trees and would also be mitigated through wildlife accommodations through project design. Cumulatively, the project would not have a significant impact on natural communities.

Cumulative – Wetlands and Other Waters

Avoidance and minimization measures to establish environmentally sensitive areas, employ BMPs, and restore temporarily affected areas on-site would be implemented. Compensatory mitigation would also reduce permanent impacts on wetlands and other waters of the U.S. and cumulative impacts would not be significant.

Cumulative – Animal Species

Cumulative impacts to Western bumble bee, tree-roosting bats, and migratory birds are not anticipated due to the implementation of avoidance and minimization measures discussed in section 2.4.4.

The proposed build alternatives could potentially have a substantial impact to wildlife movement due to the combination of a new concrete median barrier and the widening of the shoulders and median in an area that has the potential to be a valuable wildlife corridor. The median barrier and road widening could cause increased road mortality and or decreased wildlife movement. The ESL also currently has a lack of available median and large mammal crossing structures.

California Highway Patrol and Caltrans Maintenance data also show a concentration of deer road kill data within the project limits.

The El Dorado Phase 1 Integrated Natural Resources Management Plan (INRMP) concluded that there are currently fewer crossing structures under the US 50 right-of-way than are needed to meet the crossing needs of the animals in the study area. The El Dorado Phase 1 INRMP recommended that as future development occurs in the County, and to improve wildlife movement in the study area, crossings could be modified and new crossings added to meet the taxonomic group-based function and frequency requirements.

Potentially significant impacts to wildlife would be mitigated with implementation of BIO-4.

Cumulative – Invasive Species

An adverse effect related to invasive species is unlikely due to the project's implementation of avoidance strategies and design features for reducing the spread of non-native weeds.

Cumulative – Climate Change

Cumulative impacts and climate change are discussed in Chapter 3 of this Initial Study.

2.5.1.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and Minimization Measures

No avoidance and minimization measures related to cumulative impacts are proposed.

Mitigation Measures

BIO-4: Preserve/Improve Wildlife Movement

Caltrans will include the following design considerations for roadway improvements to minimize impacts on wildlife movement across the highway.

- Where culverts are upgraded they would be designed as much as practicable to accommodate small- and medium-sized mammals, reptiles, and amphibians. This may include such features as ensuring culverts are at grade with the surrounding landscape and trimming or planting appropriate vegetation.
- Gaps and scuppers will be installed in the median barrier at the appropriate locations to ensure habitat connectivity.
- To accommodate wildlife connectivity and in an effort to prevent wildlife and vehicle collisions, a large mammal wildlife crossing would be installed in a strategic location to ensure use by all possible taxa. Fencing would be placed to direct species into the crossing.
- The wildlife crossing will be monitored to ensure the structure meets biological and management goals. Monitoring will be conducted using motion-detecting wildlife cameras.

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Chapter 3 California Environmental Quality Act (CEQA) Evaluation

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

CEQA Environmental Checklist

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

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2. After public review, inconsistencies were noted in some of the checklist questions and discussions. These revisions for consistency are not indicated with a line in the margin. Changes in the level of significance of impacts are indicated with a line in the margin.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

CEQA Significance Determinations for Aesthetics

a, b, c, d) Less Than Significant Impact. As detailed in Chapter 2, Section 2.2.4, although US 50 is an Officially Designated State Scenic Highway and eastbound US 50 is considered a corridor with important scenic viewpoints for its views of the Sacramento Valley, all four build alternatives would have a less-than-significant impact. Cut and fill activities and tree removal would still result in an appearance similar to existing locations along the project corridor.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

CEQA Significance Determinations for Agriculture and Forest Resources

a, c, d, e) Less Than Significant Impact. As discussed in the beginning of Chapter 2, land designated as farmland or timberland would not be acquired as part of the ROW acquisition for any of the build alternatives.

b) No Impact. The project area does not contain areas zoned for agricultural use or areas under Williamson Act contracts.

III. 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. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

CEQA Significance Determinations for Air Quality

a, b, c, d, e) Less than Significant Impact. As discussed in Chapter 2, Section 2.3.3, operational and construction emissions would not cause the exceedance of regulatory standards..

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
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 Game or US Fish and Wildlife Service?	☐	☐	☒	☐

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Biological Resources

a) No Impact. No suitable habitat for threatened or endangered species is present within the ESL; therefore, the proposed project will have no significant impacts on federal or state listed threatened or endangered species.

b) Less than Significant Impact. Riparian areas may be affected by construction. Avoidance and minimization measure BIO-6 regarding onsite-revegetation would be implemented.

c) Less than Significant Impact. Impacts from construction activities would be avoided or minimized because all construction activities would comply with the necessary permits and requirements from regulatory agencies, including the State Water Resources Control Board, Central Valley Regional Water Quality Control Board, and United States Army Corps of Engineers.

d) Less than Significant Impact with Mitigation. Wildlife movement may be affected due to the combination of a new concrete median barrier and the widening of the shoulders and median in an area that has the potential to be a valuable wildlife corridor. The median barrier and road widening could cause increased road mortality or decreased wildlife movement due to the barrier effect of the road. To preserve and improve wildlife movement, measure BIO-4 would be implemented to prevent potential impact; measure BIO-4 would reduce this potential impact to a less-than-significant level. BIO-4, by including design considerations for culverts, gaps, and a wildlife crossing, would accommodate wildlife and provide connectivity between areas north and south of US 50.

e) Less than Significant Impact. The build alternatives would result in the removal of individual oak trees. Although the project is exempt from County oak woodland policies because it is a transportation project and the oaks present within the ESL are not protected species (valley oak and coast live oak), Caltrans has committed to replacement plantings as described in minimization measure BIO-3.

f) No Impact. No Habitat Conservation Plans, Natural Community Conservation Plans, or other regionals, or state habitat conservation plans are applicable.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

CEQA Significance Determinations for Cultural Resources

a) No Impact. Within the APE there are two historic-era built environment resources that appear to be ineligible for inclusion to the CRHP or the NRHP. One of the resources is the alignment of the CP&LTRR and the other is an early 20th century residence. Alteration of these resources would not constitute a significant impact to the environment.

b) Less than Significant Impact with Mitigation. Caltrans has determined that there are potentially eligible archaeological resources within the APE; however, evaluation of the resources will not be possible until visibility and vegetation in the site allow proper access and recording. A project-level PA between Caltrans and SHPO would ensure that identification and evaluation efforts are completed prior to construction of the project. This PA will be included in the final environmental document.

c) Less than Significant Impact. Though fossil bearing geologic units may be present within the project area, implementation of Standard Specifications Section 14-7 would address the potential for accidental discovery and would ensure any resources discovered were treated appropriately. Therefore, no adverse effects to paleontological resources are anticipated.

d) Less than Significant Impact. Caltrans standard measures would require work to stop in case of an inadvertent discovery of archaeological materials or human remains, therefore ensuring that cultural resources would not be affected.

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

CEQA Significance Determinations for Geology

a-d) Less than Significant Impact. The project would be designed according to Caltrans seismic standards, as provided in the Highway Design Manual (HDM), minimizing the risk to construction workers or the traveling public from rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, landslides, soil erosion or loss of topsoil, unstable geologic units or soils, expansive soils, or disposal of waste water.

e) No Impact. None of the build alternatives would require a septic tank or alternative waste water disposal systems.

VII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

CEQA Significance Determinations for Hazards and Hazardous Materials

a)

IX. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

CEQA Significance Determinations for Hydrology and Water Quality

a, b, c, f) Less than Significant Impact. Potential impacts of the proposed project on existing water quality conditions for the nearest receiving waters identified would potentially consist of short-term discharges of sediments, oil, grease, and chemical pollutants (generated during construction). Long-term impacts on water quality are not anticipated, but could occur from increased impervious area, operation and maintenance activities, and discharges of sediments and other pollutants collected in stormwater runoff.. However, standard facilities used to handle stormwater on site would include an array of structural elements or facilities that would serve to manage, direct, and convey stormwater

d, e) Less than Significant Impact. Stormwater drainage from the facility would tie-in with existing drainage on US 50 and would be designed in accordance with the Caltrans Highway Design Manual. No substantial alteration of the existing drainage pattern is anticipated.

g, h, i) No Impact. No 100-year flood areas are in the project area.

j) No Impact. The project is approximately 120 miles from the Pacific Ocean and no lakes are adjacent. Because the project area is in hilly terrain, mudslides are possible; however, the build alternatives are located on the existing US 50 facility.

X. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Land Use and Planning

a) Less than Significant Impact. The build alternatives include a median barrier for enhanced safety along US 50. The undercrossing proposed would accommodate traffic traveling to and from north and south of US 50.

b) Less than Significant Impact. As detailed in Chapter 2, Section 2.2.1, the build alternatives are consistent with state, regional, and local plans and programs.

c) **No Impact.** No habitat conservation plans or natural community conservation plans are applicable.

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

CEQA Significance Determinations for Mineral Resources

a) No Impact. No mineral resource operations are in the project area or environmental study limits.

XII. NOISE: Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

CEQA Significance Determinations for Noise

a, b, c, d) No Impact. This project is considered a Type III project and is exempt from traffic noise impact analysis under Title 23, Part 772 of the Code of Federal Regulations (23CFR772). FHWA defines a Type I project as a proposed Federal highway project for the construction of a highway on a new location, addition of through-traffic lane (s), the physical alteration of an existing highway where there is either a substantial horizontal or substantial vertical alteration. Projects that do not meet the classification of Type I, based on the scope of work, are considered Type III. The proposed project is considered a Type III project. Construction noise would be controlled by Caltrans Standard Specification Section 14-8.02, "Noise Control," which states that construction will not exceed the 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m., and to control and monitor noise resulting from work activities.

e, f) No Impact. As a roadway transportation project that would construct median barriers, an undercrossing, and associated ramps or intersection improvements, excessive noise related to airports and airstrips would not occur.

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

CEQA Significance Determinations for Population and Housing

a, b, c) No Impact. The build alternatives would not removing housing or displace residents along or near the project area. The build alternatives would modify the existing US 50 and would accommodate existing and future projected traffic that would occur with or without the project. The transportation facility would not make an undeveloped area newly accessible and would not induce unplanned growth.

XIV. PUBLIC SERVICES:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

CEQA Significance Determinations for Public Services

a) Less than Significant Impact. Lane closures would be required during construction, but are proposed to take place during non-peak traffic hours. Emergency service vehicles could use local and frontage roads that run parallel to US 50 as alternate routes when necessary. Coordination with emergency service providers and implementation of a TMP would minimize service delays.

Fire Protection, Police Protection) Less than Significant Impact. Once operational, the project is intended to reduce traffic accidents that result from turning conflicts; fewer accidents would relieve some proportion of police, fire, and medical emergency calls to the project vicinity. The project would not physically affect police and fire facilities, which are located outside the project area in Placerville, or lead to constructing new or altering existing such facilities. Accordingly, impacts on fire and police protection would be less than significant.

Schools: Less than Significant Impact. El Dorado High School East Campus could be temporarily affected by construction delays during the school year. A detour would provide access when school is in session, and the project proponents would coordinate with the school district to ensure that buses have access to the school. No school facilities would need to be constructed or altered. The impact would be less than significant.

Other parks: No Impact. There are no public parks in the project area. There would be no impact.

Other Public Facilities. No Impact. There are no other public service facilities in the immediate project vicinity. There would be no impact.

XV. RECREATION:	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?	☐	☐	☐	☒

CEQA Significance Determinations for Recreation

a, b) No Impact. The project accommodates existing and projected future traffic (that would occur with or without the project) on US 50 and the Camino area. No increases to park uses would occur and construction or expansion of recreational facilities would not be required.

XVI. TRANSPORTATION/TRAFFIC: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

CEQA Significance Determinations for Transportation and Traffic

a, b) Less than Significant Impact. The build alternatives would not result in exceedance of LOS standards or measures.

c) No Impact. Air traffic patterns would not be affected by the build alternatives.

d) Less than Significant Impact. Final design of the project would meet Caltrans Highway Design Manual requirements.

e) Less than Significant Impact. Emergency access would be maintained and a TMP would be implemented.

f) Less than Significant Impact. No conflicts with any policies, plans, or programs would result. The project could result in minimal and temporary impacts to portions of the El Dorado Trail and the Pony Express National Historic Trail.

XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

CEQA Significance Determinations for Tribal Cultural Resources

a, b) Native American Consultation for the project was previously pursued by sending notification letters, follow-up phone calls, field meetings, documenting Native American concerns regarding cultural resources, and maintain a communication log of consultation activities (Pacific Legacy 2017). No tribal cultural resources were identified within the current alternative as a result of consultation.

XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

CEQA Significance Determinations for Utilities and Service Systems

a, c) Less than Significant Impact. Project construction would not produce an amount of wastewater that would exceed treatment requirements of the Central Valley Regional Water Quality Control Board. Project operation would not create new sources of wastewater and therefore would not cause wastewater to exceed applicable treatment requirements.

Surface water drains off US 50 into tapered drains located at the edge of pavement. The project would add additional impervious surface area (the amount is dependent on which alternative is selected), which may increase flows. However, under all alternatives (except the median barrier-only alternative), the project proposes installation of two new drainage inlets on each side of the proposed Pondorado Road Undercrossing, connected by a 24-inch CSP. The project would implement permanent stormwater runoff best management practices (BMPs) to collect and retain or detain the additional flows within the project limits, as required by the Caltrans National Pollution Discharge Elimination System municipal separate storm sewer systems (MS4) permit and a Storm Water Management Plan. For additional detail, see Section 2.3.1, Water Quality and storm Water Runoff. With these drainage features and stormwater control measures, the impact would be less than significant.

The EID's Main Irrigation Canal passes through the project location, and is considered a receiving water that could be affected by stormwater and other water discharges from project activities (California Department of Transportation 2017c).

b, d, e) No Impact. The project would improve a transportation facility and is not a development that would require additional waste water services.

f, g) Less than Significant Impact. The project will be served by El Dorado County Disposal, which operates permitted landfills and provides solid waste disposal.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

CEQA Significance Determinations for Mandatory Findings of Significance

a) Less Than Significant with Mitigation. No suitable habitat for threatened or endangered species is present within the ESL. Caltrans has determined that there are potentially eligible archaeological resources within the cultural Area of Potential Effect/Project Area Limit; however, evaluation of the resources will not be possible until visibility and vegetation in the site allow proper access and recording. A project-level PA between Caltrans and SHPO will ensure that identification and evaluation efforts are completed prior to construction of the project. This PA will be included in the final environmental document.

Within the cultural Area of Potential Effect/Project Area Limit there are two historic-era built environment resources that appear to be ineligible for inclusion to the CRHP or the NRHP. One of the resources is the alignment of the CP&LTRR and the other is an early 20th century residence. Alteration of these resources will not constitute a significant impact to the environment.

Wildlife connectivity is a potential issue within the ESL. Median barriers currently exist along US 50 outside of the ESL. Past projects along US 50 have added concrete barriers which pose a potential barrier to wildlife crossings and the build alternatives would close an existing gap on US 50. The proposed build alternatives could potentially have a substantial impact to wildlife movement due to the combination of a new concrete median barrier and the widening of the shoulders and median in an area that has the potential to be a valuable wildlife corridor. The median barrier and road widening could cause increased road mortality and or decreased wildlife movement. The ESL also currently has a lack of available median and large mammal crossing structures. California Highway Patrol and Caltrans Maintenance data also show a concentration of deer road kill data within the project limits.

The El Dorado Phase 1 Integrated Natural Resources Management Plan (INRMP) concluded that there are currently fewer crossing structures under the US 50 right-of-way than are needed to meet the crossing needs of the animals in the study area. The El Dorado Phase 1 INRMP recommended that as future development occurs in the County, and to improve wildlife movement in the study area, crossings could be modified and new crossings added to meet the taxonomic group-based function and frequency requirements. Potentially significant impacts to wildlife would be mitigated with implementation of BIO-4. BIO-4, by including design considerations for culverts, gaps, and a wildlife crossing, would accommodate wildlife and provide connectivity between areas north and south of US 50.

b) Less Than Significant Impact. The build alternatives would not result in cumulatively significant impacts because the improvements are largely at the existing US-50 right-of-way, the build alternatives would accommodate existing and projected future traffic and not induce growth, and measures implemented as part of the project would avoid or minimize the potential for cumulative impacts.

c) Less Than Significant Impact. Adverse effects on human beings are not anticipated. Construction activities would be conducted in accordance with standard safety measures and ROW acquisition would be coordinated with property owners during the ROW process.

3.1 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 has 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_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation.[4] In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles) are the largest contributors of GHG emissions.[5] The dominant GHG emitted is CO_2, mostly from fossil fuel combustion.

[4] https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014
[5] https://www.arb.ca.gov/cc/inventory/data/data.htm

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." "Greenhouse gas mitigation" is a term for reducing GHG emissions to reduce or "mitigate" the impacts of climate change. "Adaptation" refers to 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).

3.1.1 Regulatory Setting

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

3.1.1.1 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.[6] This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability."[7] 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. Addressing these factors up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making.

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 Energy Policy Act of 1992 (EPACT92, 102nd Congress H.R.776.ENR): With this act, Congress set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. EPACT92 consists of 27 titles detailing various measures designed to lessen the nation's dependence on imported energy, provide incentives for clean and renewable energy, and promote energy conservation in

[6] https://www.fhwa.dot.gov/environment/sustainability/resilience/
[7] https://www.sustainablehighways.dot.gov/overview.aspx

buildings. Title III of EPACT92 addresses alternative fuels. It gave the U.S. Department of Energy administrative power to regulate the minimum number of light-duty alternative fuel vehicles required in certain federal fleets beginning in fiscal year 1993. The primary goal of the Program is to cut petroleum use in the United States by 2.5 billion gallons per year by 2020.

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) Indian 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.

Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel 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 Corporate Average Fuel Economy (CAFE) program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, 74 *Federal Register* 52117 (October 8, 2009): This federal EO set sustainability goals for federal agencies and focuses on making improvements in their environmental, energy, and economic performance. It instituted as policy of the United States that federal agencies measure, report, and reduce their GHG emissions from direct and indirect activities.

Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*, 80 Federal Register 15869 (March 2015): This EO reaffirms the policy of the United States that federal agencies measure, report, and reduce their GHG emissions from direct and indirect activities. It sets sustainability goals for all agencies to promote energy conservation, efficiency, and management by reducing energy consumption and GHG emissions. It builds on the adaptation and resiliency goals in previous executive orders to ensure agency operations and facilities prepare for impacts of climate change. This order revokes Executive Order 13514.

U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts* v. *EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010[8] and significantly increased the fuel economy of all new passenger cars and light trucks sold in the United States. The standards required these vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. In August 2012, the federal government adopted the

[8]] http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq

second rule that increases fuel economy for the fleet of passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2017 and beyond to average fuel economy of 54.5 miles per gallon by 2025. Because NHTSA cannot set standards beyond model year 2021 due to statutory obligations and the rules' long timeframe, a mid-term evaluation is included in the rule. The Mid-Term Evaluation is the overarching process by which NHTSA, EPA, and ARB will decide on CAFE and GHG emissions standard stringency for model years 2022–2025. NHTSA has not formally adopted standards for model years 2022 through 2025. However, the EPA finalized its mid-term review in January 2017, affirming that the target fleet average of at least 54.5 miles per gallon by 2025 was appropriate. In March 2017, President Trump ordered EPA to reopen the review and reconsider the mileage target.[9]

NHTSA and EPA issued a Final Rule for "Phase 2" for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO_2 emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

Presidential Executive Order 13783, *Promoting Energy Independence and Economic Growth*, of March 28, 2017, orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

3.1.1.2 State

With the passage of legislation including State Senate and Assembly bills and executive orders, California has been innovative and proactive in addressing GHG emissions and climate change.

Assembly Bill 1493, Pavley Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order S-3-05 (June 1, 2005): The goal of this executive order (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 32 in 2006 and SB 32 in 2016.

Assembly Bill 32 (AB 32), Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB 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 Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

[9] http://www.nbcnews.com/business/autos/trump-rolls-back-obama-era-fuel-economy-standards-n734256 and https://www.federalregister.gov/documents/2017/03/22/2017-05316/notice-of-intention-to-reconsider-the-final-determination-of-the-mid-term-evaluation-of-greenhouse

Executive Order S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order 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. ARB 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 97 (SB 97), Chapter 185, 2007, Greenhouse Gas Emissions: This bill requires the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB 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.

Senate Bill 391 (SB 391), Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

Executive Order B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, 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.

Executive Order B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 in order 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 ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). 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.

Senate Bill 32, (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.

3.1.2 Environmental Setting

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020. The Scoping Plan was first approved by ARB in 2008 and must be updated every 5 years. ARB approved the *First Update to the Climate Change Scoping Plan* on May 22, 2014. ARB is moving forward with a discussion draft of an updated Scoping Plan that will reflect the 2030 target established in EO B-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. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California.[10] ARB is responsible for maintaining and updating California's GHG Inventory per H&SC Section 39607.4. The associated forecast/projection is an estimate of the emissions anticipated to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented.

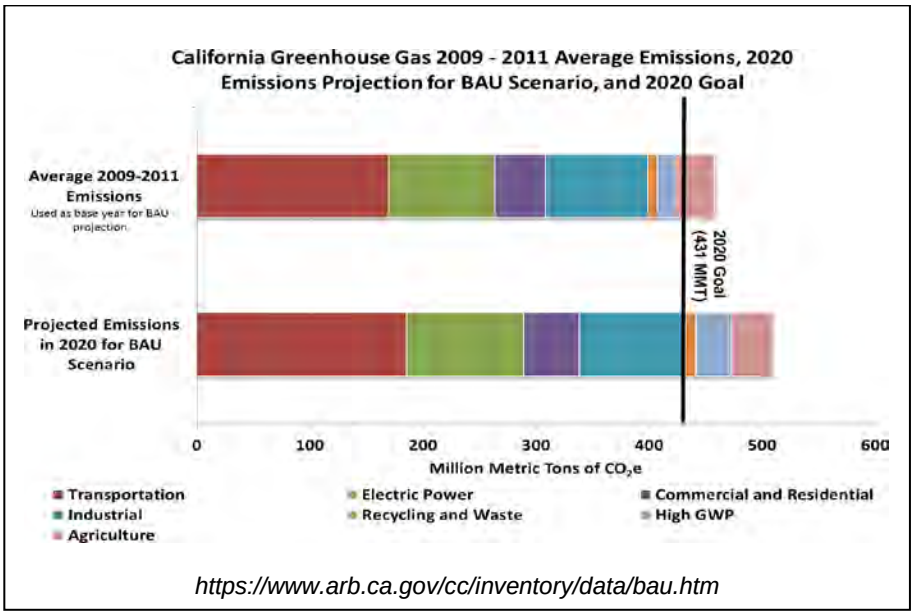
An emissions projection estimates future emissions based on current emissions, expected regulatory implementation, and other technological, social, economic, and behavioral patterns. The projected 2020 emissions provided in Figure 1 represent a business-as-usual (BAU) scenario assuming none of the Scoping Plan measures are implemented. The 2020 BAU emissions estimate assists ARB in demonstrating progress toward meeting the 2020 goal of 431 MMTCO2e[11]. The 2017 edition of the GHG emissions inventory (released June 2017) found total California emissions of 440.4 $MMTCO_2e$, showing progress towards meeting the AB 32 goals.

The 2020 BAU emissions projection was revisited in support of the First Update to the Scoping Plan (2014). This projection accounts for updates to the economic forecasts of fuel and energy demand as well as other factors. It also accounts for the effects of the 2008 economic recession and the projected recovery. The total emissions expected in the 2020 BAU scenario include reductions anticipated from Pavley I and the Renewable Electricity Standard (30 $MMTCO_2e$ total). With these reductions in the baseline, estimated 2020 statewide BAU emissions are 509 $MMTCO_2e$.

[10] 2017 Edition of the GHG Emission Inventory Released (June 2017): https://www.arb.ca.gov/cc/inventory/data/data.htm

[11] The revised target using Global Warming Potentials (GWP) from the IPCC Fourth Assessment Report (AR4)

Figure 3.1.2.1. 2020 Business as Usual (BAU) Emissions Projection 2014 Edition



https://www.arb.ca.gov/cc/inventory/data/bau.htm

3.1.3 Project Analysis

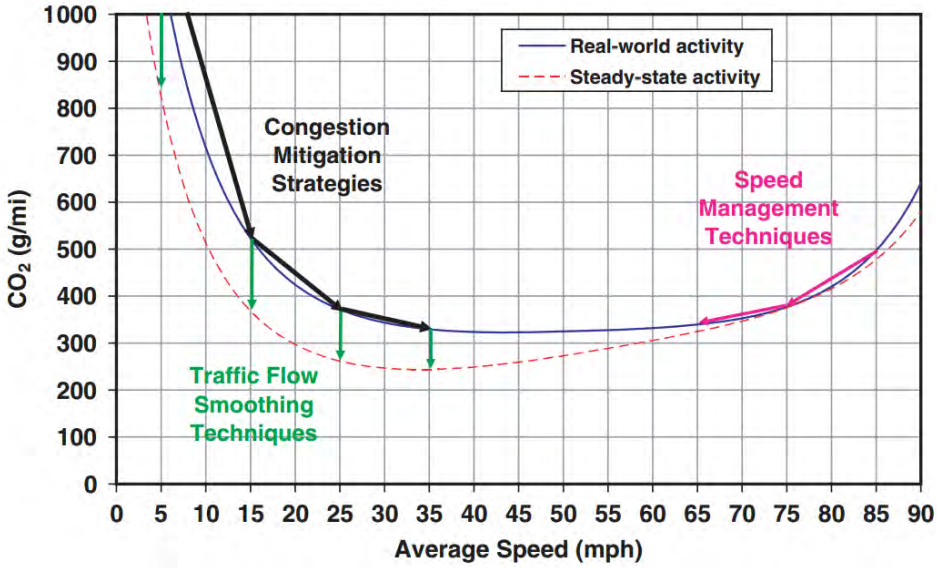
An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.[12] In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

GHG emissions for transportation projects can be divided into those produced during operations and those produced during construction. The following represents a best faith effort to describe the potential GHG emissions related to the proposed project.

[12] This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

3.1.4 Operational Emissions

Figure 3.1.4.1. Possible Use of traffic operation strategies in reducing on-road co_2 emissions



*Source: Matthew Barth and Kanok Boriboonsomsin, University of California, Riverside, May 2010 (*http://uctc.berkeley.edu/research/papers/846.pdf*)*

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity), (3) transitioning to lower GHG-emitting fuels, and (4) improving vehicle technologies/efficiency. To be most effective all four strategies should be pursued concurrently.

FHWA supports these strategies to lessen climate change impacts, which correlate with efforts that the state of California is undertaking to reduce GHG emissions from the transportation sector.

The highest levels of CO_2 from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see Figure 3.6.4.1 above). To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO_2, may be reduced.

The proposed project is listed in SACOG's currently conforming 2016 MTP/SCS as CAL18190. The 2016 MTP/SCS, as amended, and the corresponding air quality conformity analysis were last approved by FHWA and FTA on December 16, 2016. The proposed project is also listed in the financially constrained 2017/20 MTIP. The design concept and scope of the proposed project is consistent with the project description in the 2016 MTP/SCS, 2017/20 MTIP, and SACOG's regional emissions analysis.[13] Traffic data was provided by Caltrans for the existing year (2015), opening year (2021), and the design year (2040) of the proposed project, and GHG emissions were quantified for each of these years. As shown in Tables 3.1.4.1 and 3.1.4.2, the proposed

[13] The project is currently listed between post miles 22.0 and 24.3, but has since been extended to post miles 21.95 and 24.45. An administrative amendment is currently underway to update the MTP and MTIP description to ensure the project limits are consistent with the reported description.

project would reduce operational GHG emissions in 2021 and 2040 relative to both existing and no build conditions, which is consistent with the goals of the 2016 RTP/SCS.

The primary purpose of the proposed project is to improve safety; however, as shown in Tables 3.1.4.1 and 3.1.4.2, the proposed project would result in reduced VMT relative to no-build conditions in 2021 and in 2040. The net reduction in VMT of the proposed project relative to no-build conditions would be consistent with the goals of reducing VMT in the SACOG 2016 MTP/SCS. Because the proposed project would involve safety improvements to roadways, no multi-modal or transit alternatives were considered.

Table 3.1.4.1. Estimated Greenhouse Gas Emissions from Operation of the U.S. 50/Camino Operational Safety Improvement Project under the Barrier Full Closed Scenario (metric tons per year)

Alternative	Annual VMT[a]	CO_2[b]	Other[c]	CO_2e
2015 Existing	2,539,693	1,004	50	1,055
2021 No Build	2,924,169	967	48	1,015
2021 Alternative 1C	2,729,155	902	45	947
2021 Alternative 4.5A	2,668,430	882	44	926
2021 Alternative 4.5C	2,634,771	871	44	915
2021 Alternative 4.7	2,664,613	881	44	925
2040 No Build	3,236,122	696	35	731
2040 Alternative 1C	2,947,071	634	32	665
2040 Alternative 4.5A	2,902,655	624	31	655
2040 Alternative 4.5C	2,933,885	631	32	662
2040 Alternative 4.7	2,903,349	624	31	655
Comparison to Existing				
2021 Alternative 1C	189,462	-102	-5	-107
2021 Alternative 4.5A	128,737	-122	-6	-128
2021 Alternative 4.5C	95,078	-133	-7	-140
2021 Alternative 4.7	124,920	-123	-6	-130
2040 Alternative 1C	407,378	-371	-19	-389
2040 Alternative 4.5A	362,962	-380	-19	-399
2040 Alternative 4.5C	394,192	-374	-19	-392
2040 Alternative 4.7	363,656	-380	-19	-399
Comparison to No Build				
2021 Alternative 1C	-195,014	-64	-3	-68
2021 Alternative 4.5A	-255,739	-85	-4	-89
2021 Alternative 4.5C	-289,398	-96	-5	-100
2021 Alternative 4.7	-259,556	-86	-4	-90
2040 Alternative 1C	-289,051	-62	-3	-65
2040 Alternative 4.5A	-333,467	-72	-4	-75
2040 Alternative 4.5C	-302,237	-65	-3	-68
2040 Alternative 4.7	-332,773	-72	-4	-75

CO_2e = carbon dioxide equivalent

[a] Annual VMT values derived from daily VMT values in Table 2.2.3-4 and 2.2.3-5 multiplied by 347, per ARB methodology (California Air Resources Board 2008).

[b] Caltrans' CT-EMFAC model was used to calculate emissions.

[c] Includes methane, nitrous oxide, and other trace GHG emissions emitted by passenger vehicles.

Table 3.1.4.2. Estimated Greenhouse Gas Emissions from Operation of the U.S. 50/Camino Operational Safety Improvement Project under the Barrier open at Still Meadow and Upper Carson (metric tons per year)

Alternative	Annual VMT[a]	CO_2[b]	Other[c]	CO_2e
2015 Existing	2,539,693	1,004	50	1,055
2021 No Build	2,722,562	900	45	945
2021 Alternative 1C	2,660,102	879	44	923
2021 Alternative 4.5A	2,647,263	875	44	919
2021 Alternative 4.5C	2,676,064	885	44	929
2021 Alternative 4.7[d]	-	-	-	-
2040 No Build	2,993,569	644	32	676
2040 Alternative 1C	2,908,554	625	31	657
2040 Alternative 4.5A	2,935,273	631	32	663
2040 Alternative 4.5C	2,892,939	622	31	653
2040 Alternative 4.7[d]	-	-	-	-
Comparison to Existing				
2021 Alternative 1C	120,409	-125	-6	-131
2021 Alternative 4.5A	107,570	-129	-6	-136
2021 Alternative 4.5C	136,371	-120	-6	-126
2021 Alternative 4.7[d]	-	-	-	-
2040 Alternative 1C	368,861	-379	-19	-398
2040 Alternative 4.5A	395,580	-373	-19	-392
2040 Alternative 4.5C	353,246	-382	-19	-402
2040 Alternative 4.7[d]	-	-	-	-
Comparison to No Build				
2021 Alternative 1C	-62,460	-21	-1	-22
2021 Alternative 4.5A	-75,299	-25	-1	-26
2021 Alternative 4.5C	-46,498	-15	-1	-16
2021 Alternative 4.7[d]	-	-	-	-
2040 Alternative 1C	-85,015	-18	-1	-19
2040 Alternative 4.5A	-58,296	-13	-1	-13
2040 Alternative 4.5C	-100,630	-22	-1	-23
2040 Alternative 4.7[d]	-	-	-	-

CO_2e = carbon dioxide equivalent

[a] Annual VMT values derived from daily VMT values in Tables 2.3.3-4 and 2.3.3-5 multiplied by 347, per ARB methodology (California Air Resources Board 2008).

[b] Caltrans' CT-EMFAC model was used to calculate emissions.

[c] Includes methane, nitrous oxide, and other trace GHG emissions emitted by passenger vehicles.

[d] A different "barrier open" option at Still Meadow and Upper Carson is not applicable to Alternative 4.7.

The emissions analysis presented in Tables 3.1.4.1 and 3.1.4.2 indicates that operation of the Build Alternatives would result in a net reduction of GHG emissions, relative to both existing and no-build conditions. VMT in 2021 and 2040 would increase relative to existing conditions under the Build Alternatives, but the increases in VMT are the result of background growth that would occur without the proposed project. Despite the increases in VMT, GHG emissions for the Build Alternatives would decrease relative to existing conditions. The decrease in emissions is attributed to improved efficiency of automobiles and light-duty trucks and reduced carbon intensity of diesel and gasoline transportation fuels. This would be a GHG benefit in both 2021 and 2040, but the benefit would be greatest in 2040 when vehicle efficiency and carbon intensity

of fuels have had the most time to improve. The Build Alternatives in 2021 and 2040 would result in decreased VMT relative to the no-build condition in 2021 and 2040, and GHG emissions would also be reduced accordingly. The decreases in VMT relative to no-build conditions, the improved efficiency of vehicles, and the reduced carbon intensity of transportation fuels would all contribute to the reduced GHG emissions under the Build Alternatives relative to no-build conditions.

While EMFAC has a rigorous scientific foundation and has been vetted through multiple stakeholder reviews, its emission rates are based on tailpipe emission test data. The numbers are estimates of CO_2 emissions and not necessarily the actual CO_2 emissions. The model does not account for factors such as the rate of acceleration and the vehicles' aerodynamics, which would influence CO_2 emissions. To account for CO_2 emissions, ARB's GHG Inventory follows the IPCC guideline by assuming complete fuel combustion, while still using EMFAC data to calculate CH_4 and N_2O emissions. Though EMFAC is currently the best available tool for use in calculating GHG emissions, it is important to note that the CO_2 numbers provided are only useful for a comparison of alternatives.

3.1.4.1 Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

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

The SMAQMD's RCEM (Version 8.1.0) was used to estimate CO_2e emissions from construction activities. Table 3.1.4.3 summarizes estimated annual and total GHG emissions generated by construction equipment and vehicles.

Table 3.1.4.3. GHG Emissions from Construction of the U.S. 50/Camino Operational Safety Improvement Project (metric tons per year)

Year	CO_2	CH_4	N_2O	CO_2e
2019	7,248	0.7	0.2	7,320
2020	3,303	0.3	0.1	3,334
2021	993	0.0	0.0	1,002
Total	***11,544***	***1.1***	***0.3***	***11,656***

CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

The total amount of CO_2e produced during construction was estimated to be between 1,002 and 7,320 metric tons of CO_2e annually for a construction duration of 30 months, with an estimated project total of 11,656 metric tons of CO_2e over the construction duration of 30 months.

Caltrans Standard Specifications, a part of all construction contracts, include requirements to comply with ARB and local air quality management district rules, ordinances, and regulations for air quality. A number of such requirements help reduce construction GHG emissions, including maintenance of construction equipment and vehicles, and limiting construction vehicle idling time. The project would also implement a traffic management plan (Measure TRA-1), which would schedule and route construction traffic to reduce engine emissions.

3.1.5 CEQA Conclusion

While the project will result in a slight increase in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. While it is Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

3.1.5.1 Greenhouse Gas Reduction Strategies

Statewide Efforts

In an effort to further the vision of California's GHG reduction targets outlined an AB 32 and SB 32, Governor Brown identified key climate change strategy pillars (concepts). These pillars highlight the idea that several major areas of the California economy will need to reduce emissions to meet the 2030 GHG emissions target. These pillars are (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 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 farm and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

Figure 3.1.5.1 The Governor's Climate Change Pillars: 2030 Greenhouse Gas Reduction Goals

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that we build on our past successes in reducing criteria and toxic air pollutants from transportation and goods movement activities. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. One of Governor Brown's key pillars sets the ambitious goal of reducing today's petroleum use in cars and trucks by up to 50 percent by 2030.

Governor Brown called for support to manage natural and working lands, including forests, rangelands, farms, wetlands, and soils, so they can store carbon. These lands have the ability to remove carbon dioxide from the atmosphere through biological processes, and to then sequester carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set a new 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 (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future statewide,

integrated, multimodal transportation system. It serves as an umbrella document for all of the other statewide transportation planning documents.

SB 391(Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 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, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT per capita
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several funding and technical assistance programs that have GHG reduction benefits. These include the Bicycle Transportation Program, Safe Routes to School, Transportation Enhancement Funds, and Transit Planning Grants. A more extensive description of these programs can be found in *Caltrans Activities to Address Climate Change* (2013).

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a department policy that will 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 activities undertaken by Caltrans statewide to reduce GHG emissions resulting from agency operations.

3.1.5.2 Project-Level GHG Reduction Strategies

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

Implement California Department of Transportation Standard Specification Sections 14-9

The project proponent will follow Standard Specification Section 14, Air Quality, which includes specifications relating to air quality. Standard Specification Section 14-9.02 requires compliance with EDCAQMD rules, regulations, ordinances, and statutes that apply to work performed under

the contract, including air pollution control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 (Public Contract Code § 10231).

TRA-1: Implement a Traffic Management Plan during Construction

A TMP is a program of activities for alleviating or minimizing work-related traffic delays. To the extent that the TMP reduces delays and idling, GHG emissions can be reduced.

Roundabout

If the final project design includes a roundabout to improve traffic flow and vehicle speeds, and does not involve any increases in idling, it would be expected to have a neutral or positive influence on GHG emissions.

3.1.5.3 Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage—or, put another way, planning and design for resilience. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. These types of impacts to the transportation infrastructure may also have economic and strategic ramifications.

Federal Efforts

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the CEQ, the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011[14], outlining the federal government's progress in expanding and strengthening the nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provided an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as fresh water, and providing accessible climate information and tools to help decision-makers manage climate risks.

The federal Department of Transportation issued *U.S. DOT Policy Statement on Climate Adaptation* in June 2011, committing to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely and that transportation infrastructure, services and operations remain effective in current and future climate conditions."[15]

[14] https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/resilience
[15] https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm

To further the DOT Policy Statement, in December 15, 2014, FHWA issued order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*).[16] This directive established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The FHWA will work to integrate consideration of these risks into its planning, operations, policies, and programs in order to promote preparedness and resilience; safeguard federal investments; and ensure the safety, reliability, and sustainability of the nation's transportation systems.

FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels.[17]

State Efforts

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08, which directed a number of state agencies to address California's vulnerability to sea-level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea-level rise and directed all state agencies planning to construct projects in areas vulnerable to future sea-level rise to consider a range of sea-level rise scenarios for the years 2050 and 2100, assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea-level rise. Sea-level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, and storm surge and storm wave data.

Governor Schwarzenegger also requested the National Academy of Sciences to prepare an assessment report to recommend how California should plan for future sea-level rise. The final report, *Sea-Level Rise for the Coasts of California, Oregon, and Washington* (Sea-Level Rise Assessment Report)[18] was released in June 2012 and included relative sea-level rise projections for the three states, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates; and the range of uncertainty in selected sea-level rise projections. It provided a synthesis of existing information on projected sea-level rise impacts to state infrastructure (such as roads, public facilities, and beaches), natural areas, and coastal and marine ecosystems; and a discussion of future research needs regarding sea-level rise.

In response to EO S-13-08, the California Natural Resources Agency (Resources Agency), in coordination with local, regional, state, federal, and public and private entities, developed *The California Climate Adaptation Strategy* (Dec 2009),[19] which summarized the best available science on climate change impacts to California, assessed California's vulnerability to the identified impacts, and outlined solutions that can be implemented within and across state agencies to promote resiliency. The adaptation strategy was updated and rebranded in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan).

[16] https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm
[17] https://www.fhwa.dot.gov/environment/sustainability/resilience/
[18] *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012) is available at: http://www.nap.edu/catalog.php?record_id=13389.
[19] http://www.climatechange.ca.gov/adaptation/strategy/index.html

Governor Jerry Brown enhanced the overall adaptation planning effort by signing EO B-30-15 in April 2015, requiring state agencies to factor climate change into all planning and investment decisions. In March 2016, sector-specific Implementation Action Plans that demonstrate how state agencies are implementing EO B-30-15 were added to the Safeguarding California Plan. This effort represents a multi-agency, cross-sector approach to addressing adaptation to climate change-related events statewide.

EO S-13-08 also gave rise to the *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance), produced by the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), of which Caltrans is a member. First published in 2010, the document provided "guidance for incorporating sea-level rise (SLR) projections into planning and decision making for projects in California," specifically, "information and recommendations to enhance consistency across agencies in their development of approaches to SLR." The March 2013 update[20] finalizes the SLR Guidance by incorporating findings of the National Academy's 2012 final Sea-Level Rise Assessment Report; the policy recommendations remain the same as those in the 2010 interim SLR Guidance. The guidance will be updated as necessary in the future to reflect the latest scientific understanding of how the climate is changing and how this change may affect the rates of SLR.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation, and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is actively engaged in in working towards identifying these risks throughout the state and will work to incorporate this information into all planning and investment decisions as directed in EO B-30-15.

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

[20] http://www.opc.ca.gov/2013/04/update-to-the-sea-level-rise-guidance-document/

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Chapter 4 Comments and Coordination

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

There have been several open houses to date to share the project alternatives with the community and to receive public input and comments. The following meetings have taken place:

- On May 4, 2016, a public open house was held to present the project's preferred alternatives from the 2015 Project Study Report purpose to receive public input from the attendees for further consideration. The public was strongly opposed to the preferred alternative 1A because of it close proximity to the Camino Hills residents.
- On September 20, 2016, a public open house was held to present two new alternatives and to receive comments. A presentation was made by the staff of El Dorado County and the State to allow public input. It appears from comment cards and verbal input from those in attendance that the 4.5A option was the most favored alternative.
- On December 15, 2016, a public open house was held to present the option for connection of the new UC to Carson Road on the north. Displays were created for five alternatives, they presented possible scenarios for loop-off or roundabout-off in the east bound direction. Additionally, connections on the north to Carson Road were shown for either a roundabout or a "T" connection to this new intersection.
- On January 17, 2017, an Emergency Services Meeting was held to solicit input from first responders and emergency services to determine how the project alternatives will affect response times and determine other safety features. Based on input received from the meeting, a proposal was added to create an opening in the existing center concrete barrier for Emergency Responders.
- On July 20, 2017, an alternative at Upper Carson Road was introduced as Alternative 4.7. The alternative showed a slight southerly alignment shift for a segment of US-50 to minimize traffic impacts during construction; it also showed a south roundabout and a 0.51 mile long road connecting to Vista Del Mundo to the south. Alternative 4.7 with Vista Del Mundo Connection was rejected. Modification to include direct access to US 50 was requested by the public.
- On August 24, 2017, Alternative 4.7 was presented to show a right-in and right-out access to US-50 using an eastbound slip-off ramp and an eastbound slip-on ramp. The change to allow right-in and right-out access to US-50 was made based on public feedback from the July

public meeting. Alternative 4.7, with minor modification to include local private property access, has been carried forward for consideration and is analyzed in this Initial Study

- On October 19, 2017, a public meeting was held to present the Draft Initial Study. Comments were requested in writing. The public notice of the meeting was published in the Mountain Democrat newspaper on October 11, 2017. The public notice was posted at the County clerk on October 11, 2017.
- On January 2, 2018, Vickie Sanders, Parks Manager, County of El Dorado Parks Division, provided written concurrence on the de minimis finding under Section 4(f) (Appendix A, Attachment1). In accordance with Section 4(f) requirements, following the opportunity for public review and comment, the official(s) with jurisdiction over the property must provide written concurrence; only then can Caltrans (as assigned by the FHWA) make the final determination on the de minimis impact finding. With the concurrence, this requirement has been completed.

Chapter 5 List of Preparers

5.1 Caltrans Staff

The following Caltrans staff and consultants contributed to the preparation of this IS/EA.

- Kristen Stubblefield, Associate Environmental Planner. Contribution: Task order manager and environmental coordination.
- Kelly McNally. District Environmental Branch Chief. Contribution: Environmental document oversight.
- Saied Zandian, T.E., Noise Specialist. Contribution: Prepared Noise Technical Memorandum.
- Hanna Harrell, Associate Environmental Planner–Natural Resources. Contribution: Prepared Natural Environment Study.

5.2 ICF

- Cherry Zamora, Task Order Manager. M.A. in Geography, University of California, Davis; B.A. in Geography, University of California, Berkeley; 12 years of experience in environmental planning. Contribution: Consultant task order manager and environmental document preparation.
- Shahira Ashkar, Project Director. M.A., Anthropology (Archaeology emphasis), University of Arizona, Tucson; 22 years of environmental planning experience. Contribution: Environmental document oversight.
- Christy Corzine, Principal. M.S. in Natural Resource Economics, University of California, Davis; B.S. Environmental Sciences, University of California, Riverside; 37 years of environmental planning experience. Contribution: Consultant Contract Manager.
- Jennifer Stock, B.L.A. Landscape Architecture, Pennsylvania State University, University Park; 17 years of environmental planning experience. Contribution: Visual/aesthetics section and Visual Impact Memorandum.
- Tina Sorvari, B.S. Anthropology, California State University, Sacramento. 15 years of environmental planning experience. Contribution: Hazardous Materials/Waste section.
- Barbara Wolf, M.A. Anthropology, University of Arizona, Tucson; B.A. Geography and Anthropology, University of Southern Maine; 19 years of experience in environmental planning and editing. Contribution: Environmental document preparation.
- Lindsay Christensen, Environmental Planner. B.S., Community and Regional Development, University of California, Davis; 11 years of environmental planning experience. Contribution: Primary author of CIA.

- Alex Angier, GIS Analyst. B.A. Geography, California State University, Sacramento; 11 years of Geographic Information Systems experience. Contribution: GIS figures.
- Jessica Hughes, M.S. Botany and Plant Pathology, Michigan State University; B.S. Biology, Central Michigan University; 12 years of experience in botany and environmental documentation. Contribution: Editor.
- Christine McCrory, PhD Candidate, Germanic Languages and Literatures, Washington University in St. Louis Missouri; MPhil, European Literature; 13 years of professional experience. Contribution: Publications Specialist.

Appendix A. Section 4(f) De Minimis Determination and Section 6(f) Assessment

Resources Evaluated Relative to the Requirements of Section 4(f), Section 4(f) De Minimis Determination, and Section 6(f) Assessment

Camino Safety Project
El Dorado County
03-ED-50/PM 21.95 – 24.45
Federal Project No.: EA 03-4E620/E-FIS 0314000039

February 2018

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

List of Abbreviated Terms

Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
FHWA	Federal Highway Administration
NRHP	National Register of Historic Places
NHT	National Historic Trail
U.S. 50	United States Route 50
TCE	temporary construction easement
USC	United States Code

Resources Evaluated Relative to the Requirements of Section 4(f), Section 4(f) De Minimis Determination, and Section 6(f) Assessment

Introduction

The California Department of Transportation (Caltrans), in cooperation with El Dorado County and the El Dorado County Transportation Commission, proposes to improve safety on U.S. 50 in the Camino Corridor by widening the outside shoulders and installing several acceleration/deceleration lanes to help reduce collisions within the project limits. A secondary purpose is to maintain local and regional access to and from the north and south sides of U.S. 50 while providing safe east-west access on and off U.S. 50. The proposed design also includes a new bridge (Pondorado Road Undercrossing) to pass traffic under U.S. 50 to allow north-south movements.

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by the California Department of Transportation (Caltrans) under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 USC 303, declares that "it is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project … requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- there is no prudent and feasible alternative to using that land, and
- the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

As defined in 23 Code of Federal Regulations (CFR) Section 774.17,[1] resources subject to Section 4(f) consideration include publicly owned lands that are considered part of a public park; a recreational area of national, state, or local significance; a wildlife or waterfowl refuge; or a historic site of national, state, or local significance, whether publicly or privately owned. The resources evaluated within 0.5 mile of the proposed project are described below and shown on

Figures 2a and 2b. The 0.5 mile analysis area is in accordance with Caltrans guidance on complying with Section 4(f) regulations (California Department of Transportation 2013).

No existing parks, historic properties, or wildlife or waterfowl refuges were identified within 0.5 mile of the proposed project. Only recreational facilities were identified within the 0.5 mile area.

Recreational Facilities

Recreational facilities and other public spaces with recreational use within the study area that have been considered as potential Section 4(f) properties are described below. These properties are shown in Figures 2a and 2b.

In accordance with the coordination requirements of Section 4(f), letters will be sent to each of the jurisdictions along the study area requesting feedback and confirmation on the locations, primary purpose, and attributes of the parks and recreational areas within their respective jurisdictions.

Camino Heights Golf Course

Camino Heights Golf Course is a privately owned golf course located at 3020 Vista Tierra Road, south of U.S. 50 (Camino Heights Golf Course 2016). Because it is privately owned, it is not considered a recreational resource that would trigger Section 4(f) protection.

El Dorado High School – East Campus

The El Dorado High School – East Campus (East Campus) is located at 3240 Pondorado Road, south of U.S. 50 within the project limits. The campus is owned by the El Dorado Union High School District and used for career technical education and regional occupational programs, including a natural resources/land management outdoor laboratory and fire science class (El Dorado Union High School District 2014). The campus is fenced and there are no sports fields except for an outdoor basketball court. No community service districts or parks and recreation districts serve the project area with potential joint-use agreements for public recreation access at the campus, nor does El Dorado County enter into joint-use agreements for public recreation access outside areas served by local park providers (El Dorado County 2012). Because the campus grounds are not open to the public, it is not considered a recreational resource that would trigger Section 4(f) protection.

El Dorado Trail

The El Dorado Trail is an existing multi-use Class I bike path planned to eventually extend the length of El Dorado County and provide a connection from the Sacramento Valley to the Tahoe Basin. The paved portion of the existing trail is approximately 4.6 miles long, extends from Clay Street in Placerville east, crosses U.S. 50 on an overpass, and continues to Los Trampas Drive south of Camino Heights. At Los Trampas Drive, the trail continues east as an improved

gravel/dirt road and ends south of U.S. 50 opposite the Upper Carson Road exit, approximately 1.7 miles (Figures 2a and 2b). There is a trailhead in Smith Flat near Jacquier Road west of the project area. Other access points would be from roadways that the trail crosses, including Walkabout Way, Still Water Road, Los Trampas Drive, Verde Robles Drive, and Halcon Road. El Dorado County owns the extent of the trail in the project vicinity. As shown on Figure 2a and 2b, the trail is south of and outside the project area for Alternatives 1C, 4.5A, and 4.5C and would be within the project area near the easternmost portion, near the exit to Upper Carson Road where the trail ends (El Dorado County 2012) for Alternative 4.7. Alternative 4.7B at Upper Carson Road would be located at the eastern terminus of El Dorado Trail. The section of trail from Los Trampas Drive east to Halcon Road, approximately 1 mile, is proposed for paving and construction in 2017 (El Dorado County Transportation Commission 2017).

The alignment for the planned extension of the trail east towards the Tahoe Basin has not been determined, although the County has identified potential alignments from Camino Heights to Pacific House, approximately 13 miles east of the project area. From Pacific House to the Tahoe Basin, the trail is planned to follow the historic route of the Pony Express National Historic Trail (NHT) that generally follows a path similar to that of U.S. 50 (El Dorado County 2012). The Pony Express NHT is discussed in the following section. The *Parks and Trails Master Plan* (El Dorado County 2012) and the *Bicycle Transportation Plan - 2010 Update* (El Dorado County Transportation Commission 2010) show the proposed portion of the trail located adjacent to the south side of U.S. 50 extending from the trail's existing terminus opposite the exit to Upper Carson Road to Snows Road in Camino, approximately 1 mile east of the project area (El Dorado County 2012). Construction of Alternatives 1C, 4.5A, and 4.5C would not prevent construction, or potentially interrupt the continuity, of the future extension of the trail to Snows Road. Construction of Alternative 4.7 would modify the existing eastern terminus of the trail, but is not anticipated to interrupt the continuity of the trail or prevent future construction of the trail to Snows Road. Further discussion is provided below under "Section 4(f) Determination".

Build Alternatives 1C, 4.5A, and 4.5C would not directly affect the trail, but there is the potential for proximity impacts, as described below. Alternative 4.7 would directly affect the trail at its eastern terminus.

Access to the trail is from outside the project area or at locations where the trail crosses several roads south of U.S. 50 and outside the project boundary. No formal access points are at the eastern end near Upper Carson Road where Alternative 4.7 is located therefore, there would be no change in access to the trail.

There would be no change in views from the trail as a result of the project, because of the intervening vegetation and trees, difference in grade, and distance from U.S. 50. At the beginning of the project (post mile [PM] 22), near Walkabout Way and Still Meadow Road, the trail is below the grade of U.S. 50. At Las Trampas Drive, the trail travels south of the Camino Heights residential area (Figures 2a and 2b), more than 0.4 mile from U.S. 50. The trail is closest to U.S. 50 as it approaches the highway opposite the Upper Carson Road exit, where it is

still separated from the roadway by vegetation and trees. During construction, trail users could have direct views of construction equipment and activities where roadway widening would occur. This would be a temporary construction-related impact.

Recreation use of the trail consists of transitory activities (e.g., walking, running, and bike riding); and existing portions of the trail are already close to U.S. 50 in some locations, where trail users could hear traffic noise from U.S. 50. Construction noise would be short term and intermittent and would not impair use of the trail.

The proposed project would not cause a constructive use of the El Dorado Trail because the proximity impacts would not substantially impair the protected activities, features, or attributes of the trail.

Planned Bike Lane/Pony Express National Historic Trail

Review of El Dorado County's *Parks and Trails Master Plan* (El Dorado County 2012) and the El Dorado County Transportation Commission's *Bicycle Transportation Plan - 2010 Update* (El Dorado County Transportation Commission 2010) found one planned Class II bike lane within the 0.5-mile analysis area. (Class II bike lanes are located within the right-of-way and designated by pavement striping for one-way travel.) This bike lane is planned to follow the historic route of the Pony Express NHT. The Pony Express NHT generally follows routes adjacent to U.S. 50, and as noted in the 2012 Parks and Trails Master Plan, "generally corresponds" to the El Dorado Trail. In the project vicinity, the bike lane is planned north of U.S. 50 on Carson Road between Smith Flat and Snows Road (Figures 2a and 2b).

The bike lane is designated in the El Dorado County Bicycle Transportation Plan and Parks and Trails Master Plan and included here as a potential resource. The proposed improvements to U.S. 50 would not interfere with future development of the planned facility nor would they potentially interrupt the continuity of the planned bike lane. The provisions of Section 4(f) would not be triggered.

The alignment of NHTs is not subject to the provisions of Section 4(f) (Federal Highway Administration 2012). However, any portions of NHTs that physically exist and provide opportunities for active recreational use are subject to the requirements of Section 4(f), as are any National Register of Historic Places (NHRP)-eligible properties related to the NHT. There are no existing physical recreational facilities or NRHP-eligible properties associated with the NHT in the project vicinity, except for the El Dorado Trail discussed above. Accordingly, as described for the El Dorado Trail, the provisions of Section 4(f) would be triggered.

Section 4(f) De Minimis Determination

Section 6009(a) of the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users amended Section 4(f) legislation at 23 USC 138 and 49 USC 303 to simplify the

processing and approval of projects that have only de minimis impacts on lands protected by Section 4(f). This revision provides that once U.S. Department of Transportation determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a de minimis impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. Federal Highway Administration's final rule on Section 4(f) de minimis findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

Table 1. Section 4(f) Parks and Recreation Properties Use Determination Summary

Name	Use?	Constructive Use?	Temporary Occupancy?	Explanation
El Dorado Trail	Yes	No	No	Alternative 4.7 would result in permanently incorporating approximate 850 foot segment of the trail.
Pony Express National Historic Trail	Yes	No	No	Permanently incorporating approximate 850 foot segment of the El Dorado Trail.

As Table 1 demonstrates, Alternative 4.7 would result in a Section 4(f) use of the El Dorado Trail and the Pony Express National Historic Trail (which is generally associated with the El Dorado Trail).

Use of El Dorado Trail and Pony Express National Historic Trail

A permanent acquisition/incorporation of approximately 850 feet of the El Dorado Trail would be necessary, which is 2.5% of the length of the existing trail. The segment is at the eastern end and is unpaved. Visitors would experience a shortened trail. Such acquisition constitutes permanent incorporation of land from a Section 4(f) resource into a transportation use. This acquisition would be a minimal impact because there are no developed facilities or other resources in this portion of the trail.

De Minimis Determination for El Dorado Trail and Pony Express National Historic Trail

Although a use of 850 feet of the El Dorado Trail would occur, the impact would be minor. In terms of recreational value, the affected segment of the trail does not contain formalized access points or developed recreational facilities. Such acquisition constitutes permanent incorporation of land from a Section 4(f) resource into a transportation use; however, the acquisition would be a minimal impact because there are no developed facilities or other resources in this portion of the trail.

Coordination for El Dorado Trail and Pony Express National Historic Trail

Prior to making Section 4(f) approvals, coordination with the El Dorado County Parks and Trails Department is required regarding activities, features, and attributes that qualify the El Dorado Trail as a Section 4(f) resource. The draft environmental document was made available for public review between the dates of October 11, 2017 and November 9, 2017. In December 2017, Caltrans provided a copy of the draft environmental document including Appendix A, Section 4(f), to the County for review and requested concurrence with Caltrans' intention to adopt a *de minimis* finding. On January 2, 2018, Caltrans received concurrence from the El Dorado County Parks and Trails Department on the *de minimis* use of the El Dorado Trail. The concurrence documentation can be found in Attachment 1. No substantive comments related to the *de minimis* impact finding were received. Following public review and receipt of concurrence from the agency with jurisdiction over the Section 4(f) resource, Caltrans has determined that the Camino Safety Project would result in a *de minimis* impact, as defined in 23 CFR 774.17, on the El Dorado Trail.

Measures to Minimize Harm for El Dorado Trail and Pony Express National Historic Trail

To reduce impacts to the El Dorado Trail under Alternative 4.7, the following measures would be implemented:

- Maintain safe access to the El Dorado Trail at all times.
- Ensure that project construction equipment and other potential impediments to recreation, is equipped with required safety markings (e.g., lights).
- Coordinate construction activities with El Dorado County Parks and Trails at least 10 days in advance of start of construction and regularly while construction activities are ongoing in the Parkway.
- Post written notices along the El Dorado Trail regarding construction activities.
- Return construction staging or any areas disturbed by construction activities to preconstruction or better conditions.

Section 6(f) Consideration

State and local governments often obtain grants through the Land and Water Conservation Fund Act (16 USC 460l-8[f] and 36 CFR 59.1) to acquire or make improvements to parks and recreation areas. Section 6(f) of the act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the U.S. Department of the Interior's National Park Service. Section 6(f) directs the Department of the Interior to ensure that replacement lands of comparable value and function, location, and usefulness are provided as conditions to such conversions.

The California State Parks Land and Water Conservation Fund grants list was reviewed for El Dorado County (California State Parks 2013). No recreational facilities in the project vicinity were found to have been developed or improved with grants from the Land and Water Conservation Fund Act. The project would not trigger the provisions of Section 6(f).

References

Camino Heights Golf Course. 2016. Camino Heights Golf Course website. Available: http://www.caminoheightsgolf.com/. Accessed December 19, 2016.

California Department of Transportation. 2013. Standard Environmental Reference, Forms and Templates, EIR/EA Annotated Outline, pages 40–41 and 146–159. Revised: August 2013. Available: http://www.dot.ca.gov/ser/forms.htm. Accessed: November 18, 2016.

California State Parks. 2013. Grants and Local Services, Land and Water Conservation Fund, All Funded Projects. Available: http://www.parks.ca.gov/pages/1008/files/lwcf_all_projects_1964_2013.xlsx. Accessed: November 18, 2016.

El Dorado County. 2012. *Parks and Trails Master Plan*. Final. Available: https://www.edcgov.us/Government/Parks/MasterPlan.aspx. Accessed November 16, 2016.

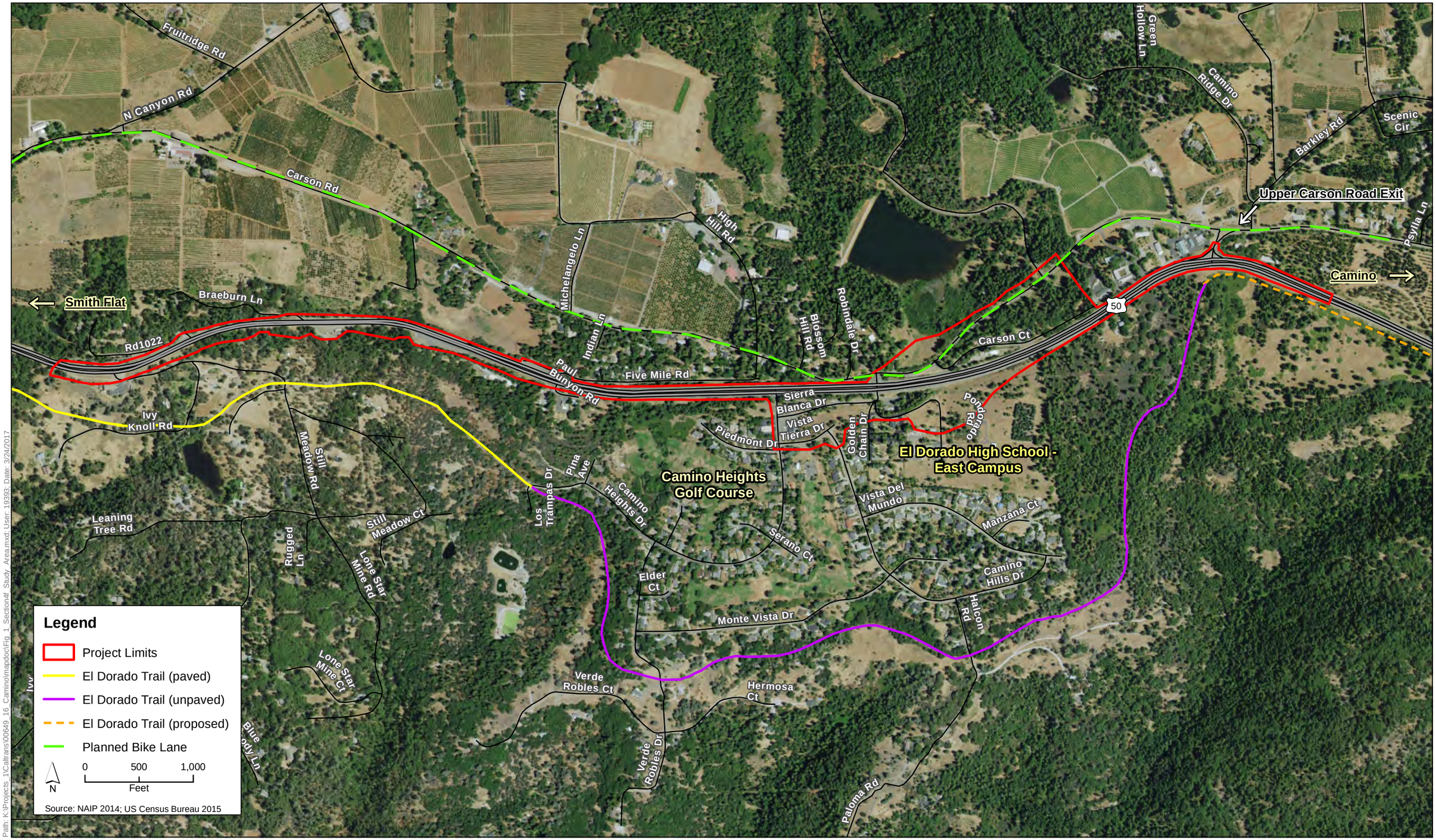
El Dorado County Transportation Commission. 2010. *Bicycle Transportation Plan - 2010 Update*. Available: http://www.edctc.org/3/CountyBikePlan2010.html Accessed: December 19, 2016.

———. 2017. *CMAQ Project, El Dorado Trail – Los Trampas Drive to Halcon Road*. Available: http://www.edctc.org/C/PM/Feb2017/02-17_EDTrail-LostTrampas-Halcon.pdf. Accessed: March 23, 2017.

El Dorado Union High School District. 2014. Facilities Master Plan. Available: http://www.eduhsd.k12.ca.us/Departments/Facilities/index.html Accessed: November 18, 2016.

Federal Highway Administration. 2012. Section 4(f) Policy Paper. July 20. Office of Planning, Environment, and Realty Project Development and Environmental Review. Available: http://www.environment.fhwa.dot.gov/4f/4fpolicy.asp#1.

Figure 1
Project Vicinity



Path: K:\Projects_1\Caltrans\00649_16_Camino\mapdoc\Fig_1_Section4f_Study_Area.mxd; User: 19393; Date: 3/24/2017

Figure 2a
Resources Evaluated Relative to the Requirements of Section 4(f) - Alternatives 1C, 4.5A, 4.5C

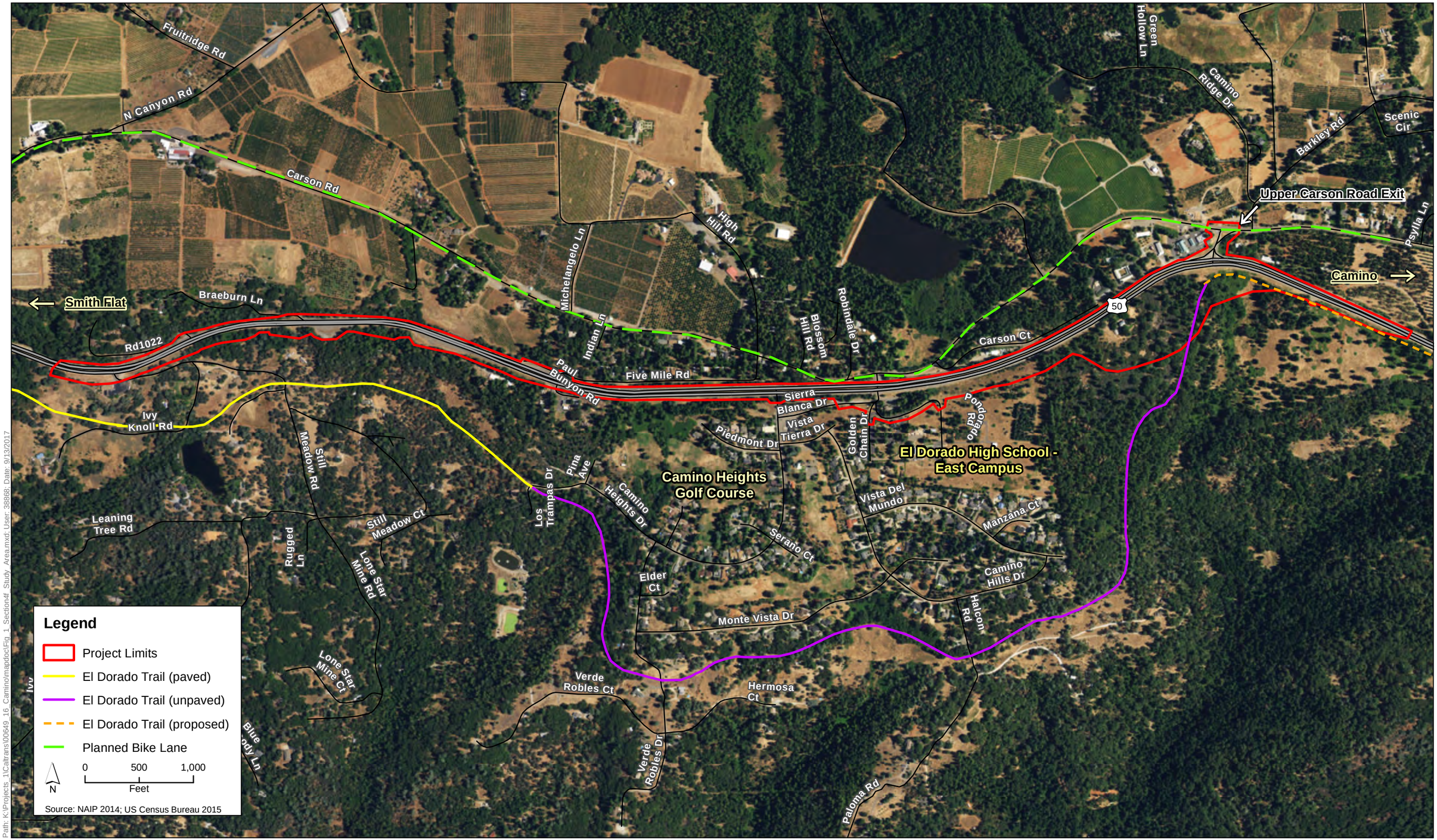


Figure 2b
Resources Evaluated Relative to the Requirements of Section 4(f) - Alternative 4.7B

Attachment 1
Section 4(f) Concurrence Documentation

On Tue, Jan 2, 2018 at 1:50 PM, Stubblefield, Kristen@DOT <Kristen.Stubblefield@dot.ca.gov> wrote:

> Hi Vickie,
>
> Thank you for your concurrence.
>
> Kristen Stubblefield
>
> Environmental Planner, M-2 Branch
>
> Phone: (530) 741.5124
>
> Kristen.Stubblefield@dot.ca.gov
>
> **From:** Vickie Sanders [mailto:vickie.sanders@edcgov.us]
> **Sent:** Tuesday, January 02, 2018 1:48 PM
> **To:** Stubblefield, Kristen@DOT <Kristen.Stubblefield@dot.ca.gov>
> **Cc:** McNally, Kelly D@DOT <kelly.mcnally@dot.ca.gov>; Matt.Smeltzer@edcgov.us
> **Subject:** Re: El Dorado Trail Right of Way near Camino
>
> Kristen,
>
> I have no issues or concerns.
>
> Thank you
>
> Vickie Sanders
>
> Parks Manager
>
> County of El Dorado
>
> Chief Administrative Office

530-621-7538

FAX: 530-642-0301

On Tue, Jan 2, 2018 at 1:00 PM, Stubblefield, Kristen@DOT <Kristen.Stubblefield@dot.ca.gov> wrote:

> Hi Vickie,
>
> I'm just checking in to see if there are any questions you may have regarding our project?
>
> Thank you,
>
> Kristen Stubblefield
>
> Environmental Planner, M-2 Branch
>
> Phone: (530) 741.5124
>
> Kristen.Stubblefield@dot.ca.gov

From: Stubblefield, Kristen@DOT
Sent: Monday, December 18, 2017 10:39 AM
To: Vickie Sanders <vickie.sanders@edcgov.us>
Cc: McNally, Kelly D@DOT <kelly.mcnally@dot.ca.gov>; Matt.Smeltzer@edcgov.us
Subject: RE: El Dorado Trail Right of Way near Camino
Importance: High

Hello Vickie,

As you know from conversations with Matt, Caltrans is proposing a safety project along US-50 in Camino. Part of the project will have a slight impact on the El Dorado Trail. In accordance with FHWA regulations, we have analyzed these impacts in the environmental document – attached. Please see Appendix A. Section 4(f) for more information. Once you have read through the document, please let me know should you have any concerns or further questions. If you agree with our findings, please provide your concurrence in the form of a response to this email.

Thank you,

Kristen Stubblefield

Environmental Planner, M-2 Branch

Phone: (530) 741.5124

Kristen.Stubblefield@dot.ca.gov

From: Matthew Smeltzer [mailto:matt.smeltzer@edcgov.us]
Sent: Wednesday, December 06, 2017 1:22 PM
To: Stubblefield, Kristen@DOT <Kristen.Stubblefield@dot.ca.gov>
Cc: Vickie Sanders <vickie.sanders@edcgov.us>
Subject: El Dorado Trail Right of Way near Camino

Kristen-

Below is contact information for our Parks Manager Vickie Sanders. I also cc'd Vickie on this email. You had requested this for our Camino US 50 interchange project at upper Carson that will overlap on to our County trail right of way.

I have discussed with Vickie how this project is in CEQA/Preliminary Design and the intent to include a connection for the El Dorado Trail to Carson Rd under US 50 as part of new interchange project.

The County hopes to advance this last portion of the El Dorado Trail, one mile of Class I bike path, from Halcon Rd to US 50 in the near future.

Vickie Sanders

Parks Manager

County of El Dorado

Chief Administrative Office

530-621-7538

FAX: 530-642-0301

vickie.sanders@edcgov.us

Sincerely,

Matthew Smeltzer

Deputy Director, Engineering

County of El Dorado

Department of Transportation

2850 Fairlane Court

Placerville, CA 95667

(530) 621-5912

matt.smeltzer@edcgov.us

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WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

Appendix B. Title VI Policy Statement

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.

May 2017

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.

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 14th Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email Title.VI@dot.ca.gov, or visit the website www.dot.ca.gov.

MALCOLM DOUGHERTY
Director

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

Appendix C. Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

RELOCATION ASSISTANCE ADVISORY SERVICES

DECLARATION OF POLICY

"The purpose of this title is to establish a ***uniform policy for fair and equitable treatment*** of persons displaced as a result of federal and federally assisted programs in order that such persons ***shall not suffer disproportionate injuries*** as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall…be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

Fair Housing

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require Caltrans to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

Relocation Assistance Advisory Services

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person,

business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. Caltrans will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe and sanitary" replacement dwelling, available on the market, is offered to them by Caltrans.

RESIDENTIAL RELOCATION PAYMENTS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until the Department obtains control of the property in order to be eligible for relocation payments.

Purchase Differential

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 180 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is $22,500. If the total entitlement (without the moving payments) is in excess of $22,500, the Last Resort Housing Program will be used (see the explanation of the Last Resort Housing Program below).

Rent Differential

Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by Caltrans prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when Caltrans determines that the cost to rent a comparable "decent, safe and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the *Down Payment* section below. The maximum amount payable to any eligible tenant and any owner-occupant of less than 180 days, in addition to moving expenses, is $5,250. If the total entitlement for rent supplement exceeds $5,250, the Last Resort Housing Program will be used.

To receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of less than 180 days and tenants in legal occupancy prior to Caltrans' initiation of negotiations. The down payment and incidental expenses cannot exceed the maximum payment of $5,250. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed

the $22,500 and $5,250 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, Caltrans will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to $10,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment

A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $20,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, *except* for any federal law providing local "Section 8" Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from Caltrans Right-of-Way. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

Your Rights and Benefits as a Displacee Under the Uniform Relocation Assistance Program (Residential)

California Department of Transportation

Introduction

In building a modern transportation system, the displacement of a small percentage of the population is often necessary. However, it is the policy of Caltrans that displaced persons shall not suffer unnecessarily as a result of programs designed to benefit the public as a whole.

Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments.

This brochure provides information about available relocation services and payments. If you are required to move as the result of a Caltrans transportation project, a Relocation Agent will contact you. The Relocation Agent will be able to answer your specific questions and provide additional information.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 As Amended "The Uniform Act"

The purpose of this Act is to provide for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs.

49 Code of Federal Regulations Part 24 implements the "Uniform Act" in accordance with the following relocation assistance objective:

> To ensure that persons displaced as a direct result of federal or federally-assisted projects are treated fairly, consistently and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

While every effort has been made to assure the accuracy of this booklet, it should be understood that it does not have the force and effect of law, rule, or regulation governing the payment of benefits. Should any difference or error occur, the law will take precedence.

Some Important Definitions...

Your relocation benefits can be better understood if you become familiar with the following terms:

Comparable Replacement: means a dwelling which is:

(1) Decent, safe, and sanitary. (See definition below)

(2) Functionally equivalent to the displaced dwelling.

(3) Adequate in size to accommodate the family being relocated.

(4) In an area not subject to unreasonable adverse environmental conditions.

(5) In a location generally not less desirable than the location of your displacement dwelling with respect to public utilities and commercial and public facilities, and reasonably accessible to the place of-employment.

(6) On land that is typical in size for residential development with typical improvements.

Decent, Safe and Sanitary (DS&S): Replacement housing must be decent, safe, and sanitary - which

means it meets all of the minimum requirements established by federal regulations and conforms to applicable housing and occupancy codes. The dwelling shall:

(1) Be structurally sound, weather tight, and in good repair.

(2) Contain a safe electrical wiring system adequate for lighting and other devices.

(3) Contain a heating system capable of sustaining a healthful temperature (of approximately 70 degrees) for a displaced person, except in those areas where local climatic conditions do not require such a system.

(4) Be adequate in size with respect to the number of rooms and area of living space needed to accommodate the displaced person. The Caltrans policy is that there will be no more than 2 persons per room unless

the room is of adequate size to accommodate the normal bedroom furnishings for the occupants.

(5) Have a separate, well-lighted and ventilated bathroom that provides privacy to the user and contains a sink, bathtub or shower stall, and a toilet, all in good working order and properly connected to appropriate sources of water and to a sewage drainage system.

Note: In the case of a housekeeping dwelling, there shall be a kitchen area that contains a fully usable sink, properly connected to potable hot and cold water and to a sewage drainage system, and adequate space and utility service connections for a stove and refrigerator.

(6) Contains unobstructed egress to safe, open space at ground level. If the replacement dwelling unit is on the second story or above, with access directly from or through a common corridor, the common corridor must have at least two means of egress.

(7) For a displaced person who is handicapped, be free of any barriers which would preclude reasonable ingress, egress, or use of the dwelling by *such displaced person.*

Displaced Person or Displacee: Any person who moves from real property or moves personal property from real property as a result of the acquisition of the real property, in whole or in part, or as the result of a written notice from the agency to vacate the real property needed for a transportation project. In the case of a partial acquisition, Caltrans shall determine if a person is displaced as a direct result of the acquisition.

Relocation benefits will vary, depending upon the type and length of occupancy. As a residential displacee, you will be classified as either a:

- An owner occupant of a residential property (includes mobile homes)

- A tenant occupant of a residential property (includes mobile homes and sleeping rooms)

Dwelling: The place of permanent or customary and usual residence of a person, according to local custom or law, including a single family house; a single family unit in a two-family, multi-family, or multi-purpose property; a unit of a condominium or cooperative housing project; a non-housekeeping unit; a mobile home; or any other residential unit.

Owner: A person is considered to have met the requirement to own a dwelling if the person purchases or holds any of the following interests in real property:

(1) Fee title, a life estate, a land contract, a 99-year lease, oral lease including any options for extension with at least 50 years to run from the date of acquisition; or

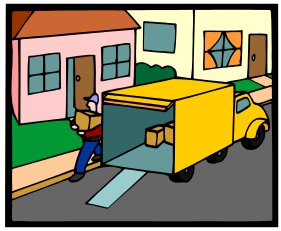
(2) An interest in a cooperative housing project which includes the right to occupy a dwelling; or

(3) A contract to purchase any interests or estates; or

(4) Any other interests, including a partial interest, which in the judgment of the agency warrants consideration as ownership.

Tenant: A person who has the temporary use and occupancy of real property owned by another.

Moving Expenses



If you qualify as a displaced person, you are entitled to reimbursement of your moving costs and certain related expenses incurred in moving. The methods of moving and the various types of moving cost payments are explained below.

Displaced individuals and families may choose to be paid on the basis of actual, reasonable moving costs and related expenses, or according to a fixed moving cost schedule. However, to ensure your eligibility and prompt payment of moving expenses, you should contact your Relocation Agent before you move.

You Can Choose Either:

Actual Reasonable Moving Costs - You may be paid for your actual reasonable moving costs and related expenses when a commercial mover performs the move. Reimbursement will be limited to a move of 50 miles or less. Related expenses may

include:

- Transportation
- Packing and unpacking personal property.
- Disconnecting and reconnecting household appliances.
- Temporary storage of personal property.
- Insurance while property is in storage or transit.

OR

Fixed Moving Cost Schedule - You may be paid on the basis of a fixed moving cost schedule. Under this option, you will not be eligible for reimbursement of related expenses listed above. The fixed schedule is designed to cover such expenses.

Examples (Year 2014 Rate):
4 Rooms - $ 1,295
7 Rooms - $ 2,090

The Fixed Move Schedule for a furnished unit (e.g. you are a tenant of an apartment that is furnished by your landlord) is based on Schedule B.

Example (Year 2014 Rate):
1 Room - $450

A dormitory style room under the 2014 Schedule B rate would receive $125.

Under the Fixed Move Schedule, you will not receive any additional payments for temporary storage, lodging, transportation or utility hook-ups.

Replacement Housing Payments

The type of Replacement Housing Payment (RHP) depends on whether you are an owner or a tenant, and the length of occupancy in the property being acquired.

If you are a qualified **owner occupant** of more than 90 days prior to the initiation of negotiations for the acquisition of your property, you may be entitled to a RHP that consists of:

Price Differential, and

Mortgage Differential, and

Incidental Expenses;

OR

Rent Differential

If you are a qualified **tenant occupant** of at least 90 days, you may be entitled to a RHP as follows:

Rent Differential

OR

Down payment Option

Length of occupancy simply means counting the number of days that you actually occupied a dwelling before the date of initiation of negotiations by Caltrans for the purchase of the property. The term "initiation of negotiations" means the date Caltrans makes the first personal contact with the owner of real property, or his/ her representative, to give him/her a written offer for the property to be acquired.

Note: If you have been in occupancy less than 90 days before the initiation of negotiations and the property is subsequently acquired, or if you move onto the property after the initiation of negotiations and you are still in occupancy on the date of acquisition, you may or may not be eligible for a Replacement Housing Payment. Check with your Relocation Agent before you make any decision to vacate your property.

For Owner Occupants of 90 Days or More

If you qualify as a 90-day owner occupant, you may be eligible - in addition to the fair market value of your property - for a Replacement Housing Payment that consists of a Price Differential, Mortgage Differential and Incidental Expenses.

The **Price Differential** payment is the amount by which the cost of a replacement dwelling exceeds the acquisition cost of the displacement dwelling. This payment will assist you in purchasing a comparable decent, safe, and sanitary (DS&S) replacement dwelling. Caltrans will compute the maximum payment you may be eligible to receive.

In order to receive the full amount of the calculated price differential, you must spend at least the amount calculated by Caltrans on a replacement property

The **Mortgage Differential** payment will reimburse you for any increased mortgage interest costs you might incur because the interest rate on your new mortgage exceeds the interest rate on the property acquired by Caltrans. The payment computation is complex as it is based on prevailing rates, your existing loan and your new loan. Also, a part of this payment may be prorated such as reimbursement for a portion of your loan origination fees and mortgage points.

To be eligible to receive this payment, the acquired property must have been encumbered by a bona fide mortgage which was a valid lien for at least 180 days prior to the initiation of negotiations.

You may also be reimbursed for any actual and necessary **Incidental Expenses** that you incur in relation to the purchase of your replacement property. These expenses may be those costs for title search, recording fees, credit report, appraisal report, and certain other closing costs associated with the purchase of property. You will not be reimbursed for any recurring costs such as prepaid real estate taxes and property insurance.

EXAMPLES OF PRICE DIFFERENTIAL PAYMENT COMPUTATION:

Assume that Caltrans purchases your property for $98,000. After a thorough study of available, decent, safe and sanitary dwellings on the open market, Caltrans determines that a comparable replacement property will cost you $100,000. If your purchase price is $100,000, you will receive $2,000 *(see Example A).*

If your actual purchase price is more than $100,000, you pay the difference (see *Example B).* If your purchase price is less than $100,000, the differential payment will be based on actual costs *(see Example C).*

How much of a differential payment you receive depends on how much you actually spend on a replacement dwelling as shown in these examples:

Caltrans' Computation

Comparable Replacement Property	$100,000
Acquisition Price of Your Property	-$ 98,000
Maximum Price Differential	$ 2,000

Example A

Purchase Price of Replacement	$100,000
Comparable Replacement Property	$100,000
Acquisition Price of Your Property	-$ 98,000
Maximum Price Differential	$ 2,000

Example B

Purchase Price of Replacement Property	$105,000
Comparable Replacement Property	$100,000
Acquisition Price of Your Property	$ 98,000
Maximum Price Differential	$ 2,000

You Must Pay the Additional $5,000

Example C

Comparable Replacement Property	$100,000
Purchase Price of Replacement	$ 99,000
Acquisition Price of Your Property	$ 98,000
Price Differential	$ 1,000

In Example C you will only receive $1,000 - not the full amount of the Caltrans "Comparable Replacement Property" because the requirements to spend were not met.

IN ORDER FOR A "90 DAY OWNER OCCUPANT" TO RECEIVE THE FULL AMOUNT OF THEIR REPLACEMENT HOUSING *PAYMENT* *(Price Differential, Mortgage Differential and Incidental Expenses)***, you must:**

A) Purchase and occupy a DS&S replacement dwelling within one year after the later of:

(1) The date you first receive a notification of an available replacement house, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the closing of escrow on State's acquisition),

AND

B) Spend at least the amount of the Caltrans "Comparable Replacement Property" for a replacement property,

AND

C) File a claim for relocation payments within 18 months of the later:

(1) The date you vacate the property acquired by Caltrans, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the close of escrow on State's acquisition)

You will not be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. Also, you will also receive at least 90 days' written notice before you must move.

For Tenants of 90 Days or More

If you qualify as a 90-day occupant, you may be eligible for a Replacement Housing Payment in the form of a Rent Differential.

The **Rent Differential** payment is designed to assist you in renting a comparable decent, safe and sanitary replacement dwelling. The payment is based on the difference between the base monthly Rent for the property acquired by Caltrans (including average monthly cost for utilities) and the lesser of:

a) The monthly rent and estimated average monthly cost of utilities for a comparable replacement dwelling as determined by Caltrans, **OR**

b) The monthly rent and estimated average monthly cost of utilities for the decent, safe and sanitary dwelling that you actually rent as a replacement dwelling.

Utility costs are those expenses you incur for heat, lights, water and sewer - regardless of the source (e.g. electricity, propane, and septic system). It does not include garbage, cable, telephone, or security. The utilities at your property are the average costs over the last 12 months. The utilities at the comparable replacement property are the estimated costs for the last 12 months for the type of dwelling

PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV

AT&T
Albion Power Company
Alcantar & Kahl LLP

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
P.C. CalCom Solar
California Cotton Ginners & Growers Assn
California Energy Commission
California Public Utilities Commission
California State Association of Counties
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
County of Tehama - Department of Public Works
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

Downey & Brand
East Bay Community Energy
Ellison Schneider & Harris LLP
Energy Management Service

Engineers and Scientists of California

Evaluation + Strategy for Social Innovation
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Charge Networks
Green Power Institute
Hanna & Morton
ICF

International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc. Linde
Los Angeles County Integrated Waste Management Task Force
Los Angeles Dept of Water & Power
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
Morgan Stanley
NLine Energy, Inc.
NRG Solar

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy
Praxair

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions

SCE
SDG&E and SoCalGas

SPURR
San Francisco Water Power and Sewer
Seattle City Light
Sempra Utilities
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Troutman Sanders LLP
Utility Cost Management
Utility Power Solutions
Utility Specialists

Verizon
Water and Energy Consulting Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
Yep Energy