

# **El Camino Real Roadway Renewal Project**

SAN MATEO COUNTY, CALIFORNIA

04-SM-82 – PM 12.3/15.9

EA 04-0K810 / Project ID 0416000142

EA 04-1G900 / Project ID 0400020619

## **Draft Environmental Impact Report/Environmental Impact Statement and Draft Section 4(f) Evaluation**



**Prepared by the  
State of California, Department of Transportation**

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.



**June 2021**



## General Information about This Document

### What's in this document:

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/Environmental Impact Statement (EIR/EIS), which examines the potential environmental impacts of the alternatives being considered for the project located in San Mateo County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

### What you should do:

- Please read this document.
- Additional copies of this document and the related technical studies are available for review upon request by emailing or writing the address below.
- This document may be downloaded at the following website: <https://dot.ca.gov/caltrans-near-me/district-4/d4-projects/d4-san-mateo-82-el-camino-real-project> or [www.elcaminorealproject.com](http://www.elcaminorealproject.com)
- Attend the virtual public hearing on Wednesday, July 14, 2021 from 5:30 p.m. to 7:30 p.m.
- Attend the virtual public hearing on Friday, July 16, 2021 at the Burlingame High School Athletic Field, 1 Mangini Way, Burlingame, California 94010 from 5:30 p.m. to 7:30 p.m.
- We'd like to hear what you think. If you have any comments about the project, please attend the virtual public hearing and/or send your written comments via postal mail or email to Caltrans by the deadline.
  - Send comments via postal mail to:  
Department of Transportation, District 4 Attn: Yolanda Rivas,  
P.O. Box 23660, MS 8B, Oakland, CA 94623-0660
  - Send comments via email to: [ecrproject@dot.ca.gov](mailto:ecrproject@dot.ca.gov)
- Be sure to send comments by the deadline: August 2, 2021.

### What happens next:

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

### Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please send an email to Alejandro Lopez at [Alejandro.Lopez@dot.ca.gov](mailto:Alejandro.Lopez@dot.ca.gov) or call (510) 385-6856. You may also use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

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FHWA Highway ID No. P082(026)

SCH: 2020059037  
04-SM-82 – PM 12.3/15.9  
EA No. 04-0K810 & 04-1G900  
Project No. 0416000142 & 0400020619

Rehabilitate State Route 82 (El Camino Real) from East Santa Inez Avenue  
(Postmile 12.3) in the City of San Mateo to Millbrae Avenue (Postmile 15.9)  
in the City of Millbrae


**Draft Environmental Impact Report/Environmental Impact Statement and  
Draft Section 4(f) Evaluation**

Submitted Pursuant to: (State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2)(C), 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA  
Department of Transportation

Responsible Agencies:  
City of Burlingame and California Transportation Commission

June 10, 2021  
Date

  
Dina El-Tawansy  
District 4 Director  
California Department of  
Transportation  
CEQA/NEPA Lead Agency

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Following circulation for public review and consideration of comments received, Caltrans will issue a combined final EIS/ROD document unless statutory criteria or practicability considerations preclude such issuance.

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## Summary

The California Department of Transportation (Caltrans), proposes to rehabilitate the roadway and sidewalks, improve safety and visibility, remedy drainage issues, and upgrade curb ramps to be compliant with the Americans with Disabilities Act (ADA) along a 3.6-mile segment of State Route (SR) 82 (El Camino Real) in San Mateo County.

The proposed project is a joint project by Caltrans 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). Caltrans is the lead agency under NEPA. Caltrans is the lead agency under CEQA. In addition, 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.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, often a "lower level" document is prepared for NEPA.

After receiving comments from the public and reviewing agencies, a Final EIR/EIS will be prepared. Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EIS will include responses to comments received on the Draft EIR/EIS and will identify the preferred alternative. After the Final EIR/EIS is circulated, if Caltrans decides to approve the project, a Notice of Determination will be published for compliance with CEQA, and a Record of Decision will be published for compliance with NEPA.

The project extends along El Camino Real from post mile (PM) 12.3, East Santa Inez Avenue, in the City of San Mateo, to PM 15.9, Millbrae Avenue, in the City of Millbrae (i.e. project limits). The project is in the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough in San Mateo County.

Caltrans, as assigned by FHWA, is the lead agency under NEPA. Caltrans is also the lead agency under CEQA.

The purposes of the project are to preserve and extend the life of the roadway and improve ride quality; improve drainage efficiency to reduce localized flooding; enhance user visibility and safety; and enhance pedestrian infrastructure and bring it into compliance with Title II of the ADA.

This project is needed to correct roadway deficiencies and improve safety. Specifically, the project is needed due to the following: the overall condition of the pavement is rated as poor due to signs of moderate alligator cracking and very poor ride quality, which indicate roadway structural inadequacy; water ponding and flooding occurs frequently during rain events due to uneven roadway surfaces and inadequate or impacted drainage systems; pedestrian access is

impaired due to a lack of updated curb ramps and uneven sidewalks; pedestrian infrastructure is not compliant with state and federal ADA requirements; and existing sidewalks lack accessible pedestrian signal (APS) systems. Countdown pedestrian systems (CPS) and high-visibility striping or current devices as well as pavement markings are missing or outdated.

This project is being considered without and with the inclusion of a design option to permanently relocate above-ground utilities underground for a portion of the project limits.

The project has been programmed under expenditure authorization (EA) 04-0K810 Project identification number (ID) 0416000142 and EA 04-1G900 Project ID 0400020619. These EAs will be combined into EA 04-0K81U Project ID 0420000075 during construction.

### **NEPA Assignment**

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. The Moving Ahead for Progress in the 21st Century Act (MAP-21; P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered into a Memorandum of Understanding (MOU) pursuant to 23 USC 327 (NEPA Assignment MOU) with FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016, for a term of five years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

### **Project Impacts**

Table S-1 summarizes the effects of the Build Alternative (with and without inclusion of the design option) in comparison with the No Build Alternative. The proposed avoidance, minimization, and/or mitigation measures to reduce the effects of the Build Alternative are also presented. This environmental document evaluates the potential effects of the Build Alternative. A complete description of potential effects and recommended measures is provided in Chapter 3.

**Table S-1: Summary of Impacts and Avoidance, Minimization, and/or Mitigation Measures**

Affected Resource	Potential Impact: No Build Alternative	Potential Impact: Build Alternative (with or without Design Option)	Avoidance, Minimization, and/or Mitigation Measures
<b>Consistency with State, Regional and Local Plans and Programs</b>	This alternative would not be consistent with the Grand Boulevard Multimodal Transportation Corridor Plan, San Mateo County Bicycle and Pedestrian Plan, City of San Mateo Pedestrian Plan and City of Burlingame Bicycle and Pedestrian Plan because it does not improve bicycle or pedestrian infrastructure.	The Build Alternative would be consistent with most applicable plans and policies. It would be somewhat consistent with the Grand Boulevard Plan, because like the No Build Alternative, it would not narrow traffic lanes to include bike lanes and somewhat consistent with City of San Mateo Pedestrian Plan because new median refuge islands will be investigated during final design for possible inclusion into the Build Alternative.	None.
<b>Community Character and Cohesion</b>	None.	The Build Alternative would improve pedestrian infrastructure providing improved physical space for community interactions but would remove character-defining historic trees resulting in a moderate change to community character and cohesion.	See VIS-2 and CUL-3
<b>Environmental Justice</b>	None.	The Build Alternative would include work in eight block groups that meet the criteria of an environmental justice community. Project construction would not disproportionately affect these communities.	None.
<b>Utilities/Emergency Services</b>	None.	The Build Alternative would require temporary relocation of overhead electrical lines during construction that would be restored above ground for the Build Alternative without inclusion of the design option and underground with the inclusion of the design option. This work may result in short-term, temporary interruptions of service.  Construction would also require temporary lane closures that would be communicated to emergency service providers. The project would	None.



Affected Resource	Potential Impact: No Build Alternative	Potential Impact: Build Alternative (with or without Design Option)	Avoidance, Minimization, and/or Mitigation Measures
		not result in long-term effects to utilities or emergency services.	
<b>Visual/ Aesthetics</b>	None.	The Build Alternative would require the removal of approximately 300 to 350 trees within the project limits resulting in a moderate-high to high degree of visual change.	<p><b>VIS-1.</b> The following minimization measures will be incorporated into the final design and construction of the project to minimize effects to trees:</p> <ul style="list-style-type: none"> <li>• Design modifications including but not limited to sidewalk meanders around tree trunks, sidewalk ramping over tree roots, and adjustment of driveway conforms to sidewalks and the roadway will be implemented where feasible.</li> <li>• Alternative construction practices including but not limited to hand excavation around structural roots and trenchless drilling will be implemented where feasible.</li> <li>• Trees and vegetation outside of clearing and grubbing limits shall be protected from construction operations, equipment, and materials storage.</li> <li>• Soils within planting areas shall be protected from construction operations, equipment, and materials storage to maintain suitable growing conditions for existing and replacement street trees. Protective measures shall include avoiding compaction and introduction of materials inconducive to plant growth. Corrective amendments and treatments will be used if planting area soils are damaged during construction.</li> </ul> <p><b>VIS-2.</b> Following completion of roadway construction, replacement street trees shall be planted in roadside areas of the right-of-way consistent with horticultural and maintenance guidelines and safety and sight distance standards. Removed vegetation will be replaced at a 1:1 ratio provided there is adequate space within the roadside areas of the project limits within Caltrans right-of-way. Replacement planting species and size will be determined during final design.</p> <p><b>VIS-3.</b> A permanent irrigation system for replacement plantings will be specified during final design and installed prior to replacement street tree planting within the limits of the Howard-Ralston Eucalyptus Tree Rows.</p> <p><b>VIS-4.</b> A three-year plant establishment period will be specified during final design and implemented immediately following construction of planting and irrigation systems. The three-year plant establishment period will be implemented in accordance with Section 20-4 of the standard specification.</p> <p><b>VIS-5.</b> A 20-year management plan shall be prepared in consultation with a certified consulting arborist and shall prescribe methods for the long-term care of both retained trees and replacement trees within the limits of the Howard-Ralston</p>

Affected Resource	Potential Impact: No Build Alternative	Potential Impact: Build Alternative (with or without Design Option)	Avoidance, Minimization, and/or Mitigation Measures
			Eucalyptus Tree Rows, in order to ensure the sustained health and viability of the trees within the Tree Rows.
<b>Cultural Resources</b>	None.	The Build Alternative would require the removal of approximately 250 trees that contribute to the Howard-Ralston Eucalyptus Tree Rows resulting in an adverse effect to this resource. The Build Alternative would require the removal of character-defining features from three historic properties within the project limits resulting in adverse effects to these resources.	<p><b>CUL-1.</b> Prior to construction, all construction personnel will be instructed on the protection and avoidance of cultural resources including state and federal laws regarding cultural resources, the importance of these resources, and the purpose and necessity of protecting them.</p> <p><b>CUL-2.</b> Mitigation Measures VIS-2 and VIS-5 will be done in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties, where possible.</p> <p><b>CUL-3.</b> Caltrans is continuing to consult with the SHPO regarding the effect's findings and resolutions of these effects and will continue to consult with stakeholders to develop mitigation measures for impacted historic properties, pursuant to Stipulation XI of the 2014 Section 106 PA and 36 CFR Part 800.6. The mitigation measures will be included in an MOA, which will be executed in consultation with the SHPO and other stakeholders.</p>
<b>Hydrology and Floodplain</b>	None.	The Build Alternative would not add any impervious area to floodplains within the project limits, and no longitudinal encroachment would occur.	None.
<b>Water Quality and Storm Water Runoff</b>	None.	The Build Alternative would result in 29.5 acres of disturbed soil area but would not involve work in any waterways.	None.
<b>Energy</b>	None.	The Build Alternative would require the use of approximately 117,000 gallons of diesel fuel and approximately 4,000 gallons of gasoline fuel for project construction but could potentially reduce indirect energy consumption by encouraging pedestrian travel and reducing the frequency of on-going roadway maintenance.	None.
<b>Natural Communities</b>	None.	The Build Alternative would involve no work in waterways and would not affect riparian corridors within the project limits.	None.
<b>Animal Species</b>	None.	None	None
<b>Invasive Species</b>	None.	The project limits contain blue gum and red gum eucalyptus trees that are identified as invasive. Within the project limits, these trees are not propagating in an invasive manner. The Build Alternative would require removal of some but not all blue gum and red gum eucalyptus trees.	None.

Affected Resource	Potential Impact: No Build Alternative	Potential Impact: Build Alternative (with or without Design Option)	Avoidance, Minimization, and/or Mitigation Measures
		Invasive species will not be used for replacement plantings.	
<b>Construction Impacts (Noise)</b>	None.	The Build Alternative would require daytime and nighttime construction activities adjacent to residences and a school. These activities are anticipated to be louder than allowable noise limits.	<p><b>NOI-1.</b> A temporary noise barrier or other control measure will be put in place in front of McKinley Elementary to attenuate noise to less than 52 dBA whenever work is planned within 500 feet of the school during regular school hours. Noise levels will be verified through noise monitoring during construction.</p> <p><b>NOI-2.</b> The project plans will include a specification for the contractor to create and implement a Noise Control and Monitoring Plan. The plan will require the contractor to implement measures to limit noise levels to comply with 2018 Caltrans Standard Specifications Section 14-8.02 and California Streets and Highway Code Section 216. Noise levels will be verified through noise monitoring during construction.</p>
<b>Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity</b>	The No Build Alternative would not improve the roadway, drainage facilities, or pedestrian facilities.	The Build Alternative would require a change to visual and cultural resources and would improve the roadway, drainage facilities, and pedestrian facilities.	None.
<b>Irreversible and Irrecoverable Commitment of Resources</b>	None.	The Build Alternative would require the expenditure of fossil fuels, construction materials, and labor in order to improve the roadway, drainage facilities, and pedestrian facilities.	None.
<b>Cumulative Impacts</b>	None.	The Build Alternative would result in significant impacts to visual and cultural resources. However, no reasonably foreseeable planned projects would incrementally contribute to a cumulative impact.	None.
<b>Climate Change</b>	None.	The Build Alternative would result in greenhouse gas emissions during construction, but it would not result in any increase in operational greenhouse gas emissions. The Build Alternative would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	None.

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## Chapter 1 Proposed Project

### 1.1 Introduction

The California Department of Transportation (Caltrans), proposes to rehabilitate the roadway and sidewalks, improve safety and visibility, remedy drainage issues, and upgrade curb ramps to be compliant with the Americans with Disabilities Act (ADA) along a 3.6-mile segment of State Route (SR) 82 (El Camino Real) in San Mateo County.

Figure 1.1-1 shows the location of the project, which extends along El Camino Real from post mile (PM) 12.3, East Santa Inez Avenue, in the City of San Mateo, to PM 15.9, Millbrae Avenue, in the City of Millbrae (i.e. project limits). The project is in the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough in San Mateo County.

The project is included in the Metropolitan Transportation Commission's (MTC's) Bay Area Regional Transportation Plan (RTP), *Plan Bay Area 2040* (Association of Bay Area Governments [ABAG] and MTC 2017a, amended 2020; RTP ID No. 17-10-0025). The project is in the 2019 Transportation Improvement Program (TIP), as revised with Revision Number 2019-41, originally adopted by the MTC on September 28, 2018 and revised on December 11, 2020 (MTC 2018, MTC 2020; TIP ID No. VAR170006). The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) originally approved the 2019 TIP on December 17, 2018.

Caltrans, as assigned by FHWA, is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

### 1.2 Location and History

SR 82 extends from Interstate 880 (I-880) in San Jose to I-280 in San Francisco. SR 82 is known as El Camino Real throughout much of the San Francisco Peninsula and within the project limits. El Camino Real was a historic mission trail and has long been an important travel way for the communities along the peninsula. It runs roughly parallel to the U.S. 101 freeway, I-280, and Caltrain within the project limits.

From East Santa Inez Avenue (PM 12.3) to Ray Drive/Rosedale Avenue (PM 15.2), El Camino Real is a four-lane, undivided highway with two lanes in each direction. From Ray Drive/Rosedale Avenue to Millbrae Avenue (PM 15.9), El Camino Real is a six-lane divided highway with three lanes in each direction. It provides access to businesses and residences along the roadway. The posted speed limit is 35 miles per hour (mph), except in the school zone near McKinley Elementary School, where it is 25 mph. SamTrans provides bus service along El Camino Real for its Number 397 line and ECR line. Bicycles are permitted on El Camino Real, but there are no designated bicycle facilities within the project limits. Sidewalks are present along the northbound and southbound sides of El Camino Real within the project limits for all areas except the southbound side from Bellevue Avenue to Floribunda Avenue.

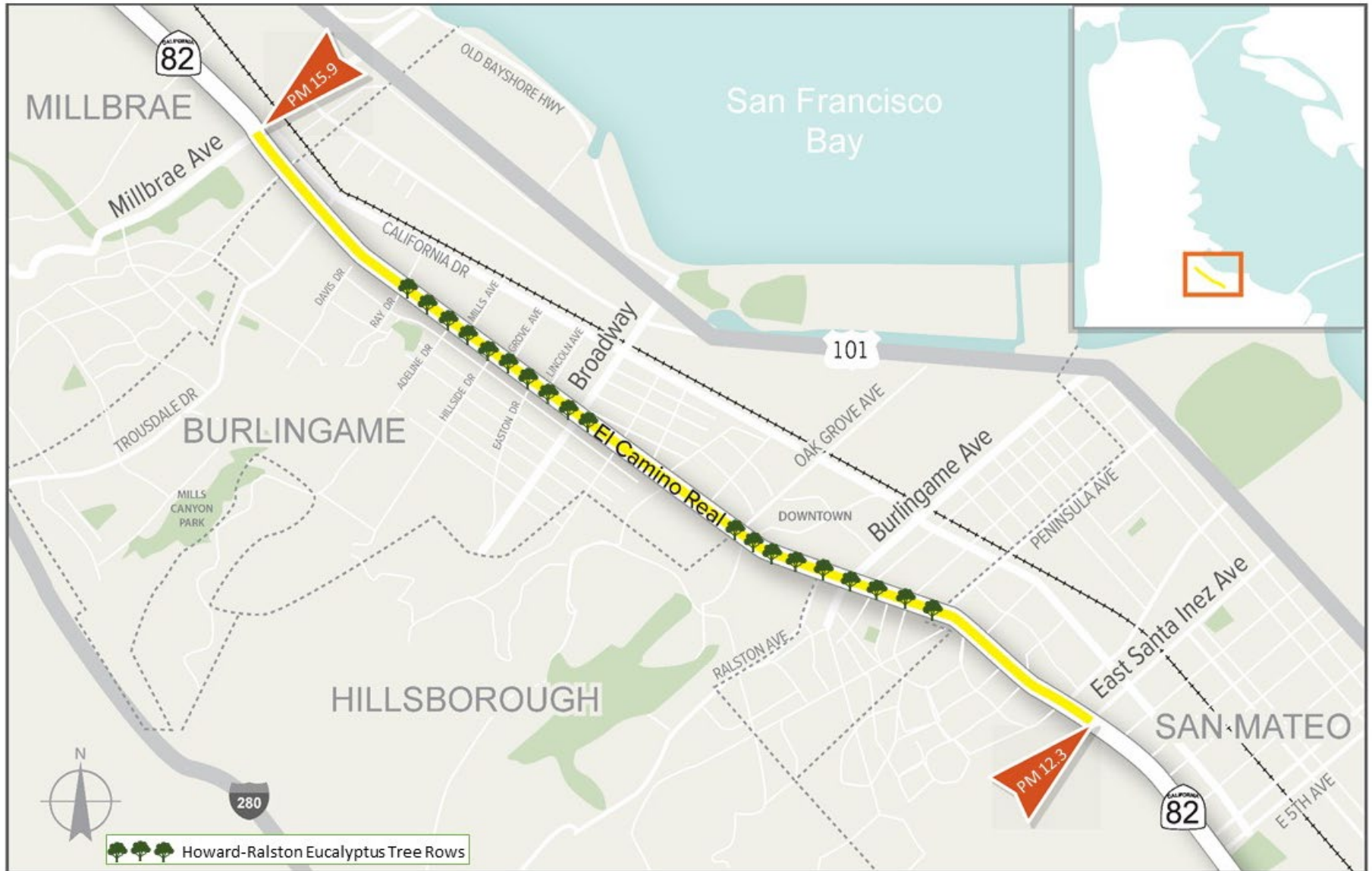


Figure 1.1-1: Project Location

Within the project limits, the Howard-Ralston Eucalyptus Tree Rows, (a historic resource listed on the National Register of Historic Places [NRHP]) extends along El Camino Real from Peninsula Avenue to Ray Drive/Rosedale Avenue in the City of Burlingame.

Between 2014 and 2017, Caltrans undertook preliminary investigations to evaluate the condition of the roadway, sidewalks, and other infrastructure (Caltrans 2014, Caltrans 2016a, Caltrans 2017a). Caltrans then included funding for these items in its State Highway Operation and Protection Program (SHOPP).

In 2017, Caltrans participated in a series of meetings and workshops as part of the Burlingame El Camino Real Task Force. The Task Force was comprised of members of the City of Burlingame's Historical Society, Beautification Commission, Traffic, Parking, and Safety Commission, as well as the City's arborist and public works representative, City residents, and some City council members (Burlingame 2018). The Task Force reviewed a two-block section of El Camino Real from Palm Drive to Sanchez Drive and made recommendations for Caltrans to consider when developing the project in terms of trees, sidewalks, roadway, and drainage facilities. These recommendations have been reviewed carefully by members of the Project Development Team (PDT) and the project has been designed to incorporate recommendations where feasible.

### **1.3 Purpose and Need**

#### **1.3.1 Project Purpose**

The purposes of the project are to:

- Preserve and extend the life of the roadway and improve ride quality;
- Improve drainage efficiency to reduce localized flooding;
- Enhance user visibility and safety; and
- Enhance pedestrian infrastructure and bring it into compliance with Title II of the Americans with Disabilities Act (ADA).

#### **1.3.2 Project Need**

This project is needed to correct roadway deficiencies and improve safety. Specifically, the project is needed due to the following:

- The overall condition of the pavement is rated as poor due to signs of moderate alligator cracking and very poor ride quality, which indicate roadway structural inadequacy.
- Water ponding and flooding occurs frequently during rain events due to uneven roadway surfaces and inadequate or impacted drainage systems.
- Pedestrian access is impaired due to a lack of updated curb ramps and uneven sidewalks.
- Pedestrian infrastructure is not compliant with state and federal ADA requirements.

- Existing sidewalks lack accessible pedestrian signal (APS) systems. Countdown pedestrian systems (CPS) and high-visibility striping or current devices as well as pavement markings are missing or outdated.

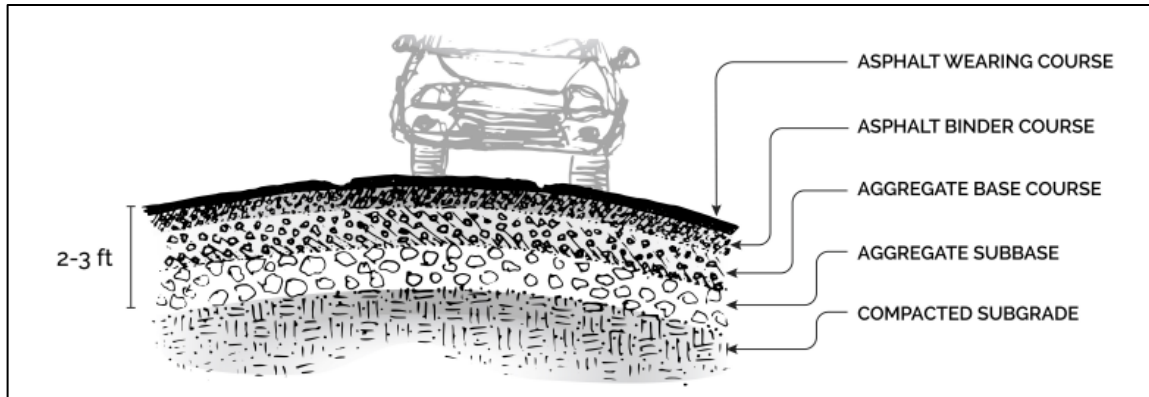
### 1.3.2.1 Pavement Condition

The condition of the existing pavement was evaluated within the project limits in 2015. The roadway throughout the project limits shows signs of cracking with the segment from Broadway to just north of Ray Drive/Rosedale Avenue being the worst. Up to 38 percent of the pavement is cracked in the portion of the roadway that is frequently impacted by tires. This is often due to repetitive traffic loads and can be an indication of a weak or wet subgrade below the roadway (Caltrans 2009). See Figure 1.3.2-1 for an example of this type of cracking. See Figure 1.3.2-2 for the typical layers of an asphalt roadway. Based on the pattern of cracking, it is likely that the subgrade is damaged and all of the roadway layers above the subgrade are impacted.



**Figure 1.3.2-1: Roadway Cracking**





**Figure 1.3.2-2: Typical Pavement Structural Section**

In addition, the pavement contains ruts that range in size from 0.10 to 0.20 inch deep (the larger being about the size of a pea). Ruts are depressions or grooves in the roadway that prevent a smooth drive surface and can also fill with water and contribute to hydroplaning in wet conditions (FHWA 2018). Ruts are shown in Figure 1.3.2-3. The deepest ruts within the project limits were recorded between Ralston Avenue and Broadway.



**Figure 1.3.2-3: Roadway Rutting**

Lastly, the International Roughness Indicator (IRI) score within the project limits ranged from approximately 300 to 450 inches per mile. Roughness is a measure of the irregularities in pavement that contribute to poor ride quality. Specifically, IRI measures the total vertical movement a vehicle's body would experience if driven over a 1-mile segment at 50 mph. Pavement with an IRI score higher than 170 inches per mile is considered to provide poor ride quality (Caltrans 2019a). Rough pavement has been found to impact vehicle speed, fuel consumption, and tire wear for individual vehicles (Abulizi et al. 2016). The roughest sections of road were recorded between Ralston Avenue and Broadway. Only surface maintenance such



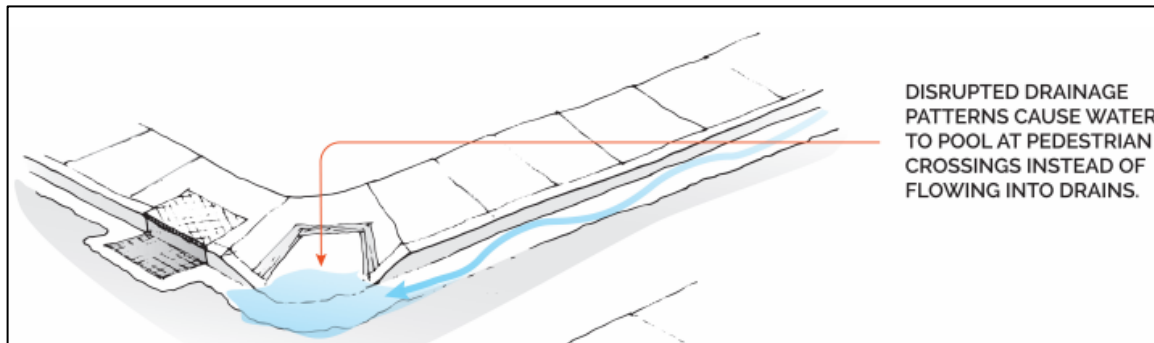
as pothole filling has taken place within the project limits. Therefore, the underlying damage to the roadway structure persists.

The existing pavement condition is considered major roadway distress per the Caltrans Design Information Bulletin 79 and can't be corrected with pothole repair, minor roadway resurfacing, or pavement overlay (Caltrans 2019b).

### 1.3.2.2 Drainage

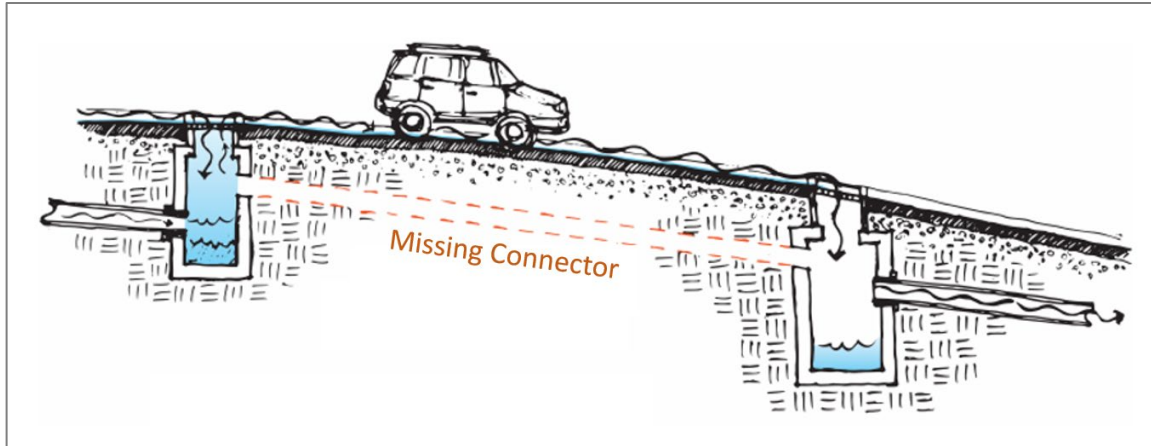
Within the project limits, there are three issues that contribute to poor drainage. The first is the presence of old, undersized clay storm water pipes. The pipes are only 12 inches in diameter. This diameter makes it difficult to clean sediment out of the pipes that has built up over time. In addition, many of the existing pipes have been cracked or broken by tree roots.

The second issue that contributes to poor drainage is flow line disruption. The flow line is the line in a gutter in which water is intended to flow. When the ground settles or tree roots lift the pavement, like in many places within the project limits, it can disrupt the flow of water, creating dams and puddles. The flow line is also disrupted when sidewalks and curb ramps experience settling. If curb ramps become lower than drain inlets, water will pond there instead of going into the drain. This causes water to back up on to the roadway. See Figure 1.3.2-4 for an illustration of this. This is a persistent problem throughout the project limits.



**Figure 1.3.2-4: Flow Line Disruptions**

The third issue that contributes to poor drainage is the existing drain inlets themselves. Within the project limits, some drain inlets are located higher than the surrounding low-lying pavement, causing pooling and flooding on the roadway, such as in Figure 1.3.2-4. Often the drain inlets have not moved but nearby pavement has settled causing these low spots to form. In addition, some drain inlets are not connected underground to one another. In these locations, inlets fill up during a rain event and there is no way for the water to get to other nearby inlets, except along the roadway. Therefore, water “bubbles up” out of the drain and floods the roadway. See Figure 1.3.2-5 for an example.



**Figure 1.3.2-5: Drain Inlet Bubble Up**

All these drainage issues are present within the project limits and contribute to frequent, localized flooding on the roadway. This impairs the movement of all users during rain events.

### 1.3.2.3 Pedestrian Infrastructure

Within the project limits, the existing pedestrian infrastructure varies greatly. Sidewalks are present along the northbound and southbound sides of El Camino Real except the southbound side from Bellevue Avenue to Floribunda Avenue. However, existing sidewalks within the project limits frequently do not meet the current state and federal standards for ADA compliance. Many sidewalks have narrow widths, and many are severely damaged from tree roots and trunks encroaching into them (see Figure 1.3.2-6), which impacts pedestrian movement. Pedestrian movement is also impeded by trees, posts, and utility poles within the existing sidewalks.



**Figure 1.3.2-6: Narrow sidewalk between a tree and a retaining wall along El Camino Real between Carmelita Avenue and Sanchez Avenue**

Within the project limits, the existing curb ramps and crosswalks also do not meet current state and federal standards for ADA compliance. Some intersections lack crosswalks at all legs of the intersection, which may necessitate out-of-direction travel or additional street crossings for people walking along and across El Camino Real. The landing widths, cross-slopes, flare slopes, ramp slopes, and curb heights of many of the existing curbs are not ADA compliant. These features are shown in Figure 1.3.2-7 (Snohomish County Public Works 2016). Many existing curb ramps are placed diagonally to the crosswalks as opposed to perpendicular or parallel. Diagonal curb ramps feature crosswalks that do not extend directly from the curb ramp and, therefore, force pedestrians descending the ramp to proceed into the intersection before turning to the left or right to cross the street at the crosswalk. This results in reduced maneuverability and increased pedestrian interactions with turning vehicles. Some curbs and crosswalks also currently lack detectable warning surfaces, pedestrian push buttons, APS systems, CPS systems, and high-visibility striping. Implementation of these pedestrian features would create infrastructure accessible to all users. Examples of APS and CPS systems are shown in Figure 1.3.2-8.



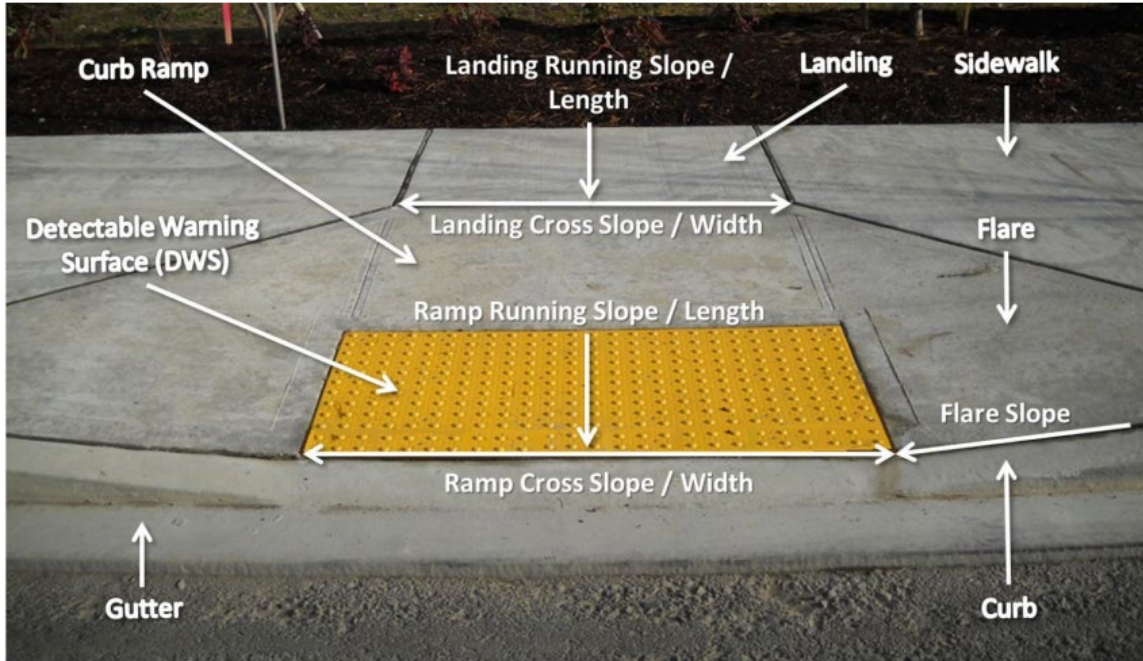


Figure 1.3.2-7: Curb Ramp Elements



Figure 1.3.2-8: Accessible Pedestrian Signal System (left) and Countdown Pedestrian Signal System (right)

### 1.3.3 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.

2. Have independent utility or independent significance (be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made).
3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Logical termini are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. Independent utility, or independent significance, is defined as being a usable and reasonable expenditure even if no additional transportation improvements in the area are made.

The project limits were chosen based on the pavement condition along El Camino Real. In 2010, the area south of East Santa Inez Avenue (PM 12.3) was repaved and in 2003, the area north of the Murchison Drive (PM 15.8) was rehabilitated and are in generally good condition. The project limits extend to PM 15.9 to include striping and ADA curb ramps north of Murchison Drive. Therefore, the 3.6-mile gap is being considered for rehabilitation of the roadway. This is supported by the pavement condition of this section of roadway compared to the areas beyond the north and south limits. In addition, deficiencies in curb ramps and APS systems are present from East Santa Inez Avenue (PM 12.3) to Millbrae Avenue (PM 15.9). Sidewalks to the south and to the north of the project limits meet ADA requirements. Drainage improvements are being proposed as required by a rehabilitation project and are not being undertaken on their own. Since pavement condition is the primary factor determining logical termini, the project limits are rational end points for both the transportation improvement and the review of the environmental impacts.

The project would not require any additional transportation improvements within the project limits to meet the purpose and need. Accordingly, the project is a usable and reasonable expenditure. The project would also not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

## Chapter 2 Project Alternatives

### 2.1 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives include a No Build Alternative and one Build Alternative (that includes an option to maintain the existing location of above-ground utilities and an option to underground utilities).

The project is located in San Mateo County on El Camino Real (SR 82) from East Santa Inez Avenue (PM 12.3) to Millbrae Avenue (PM 15.9). The project limits extend for 3.6 miles through the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough. Within the project limits, El Camino Real is a four-lane undivided highway from PM 12.3 to 15.2 and is a six-lane divided highway from PM 15.2 to 15.9.

The purposes of the project are to preserve and extend the life of the roadway and improve ride quality; improve drainage efficiency to reduce localized flooding; enhance user visibility and safety; and enhance pedestrian infrastructure and bring it into compliance with Title II of the ADA.

This project is needed to correct roadway deficiencies and improve safety. Specifically, the project is needed due to the following: the overall condition of the pavement is rated as poor due to signs of moderate alligator cracking and very poor ride quality, which indicate roadway structural inadequacy; water ponding and flooding occurs frequently during rain events due to uneven roadway surfaces and inadequate or impacted drainage systems; pedestrian access is impaired due to a lack of updated curb ramps and uneven sidewalks; pedestrian infrastructure is not compliant with state and federal ADA requirements; and existing sidewalks lack accessible pedestrian signal (APS) systems. Countdown pedestrian systems (CPS) and high-visibility striping or current devices as well as pavement markings are missing or outdated.

The following sections describe the Build Alternative and design option under consideration for the project.

#### 2.1.1 Build Alternative

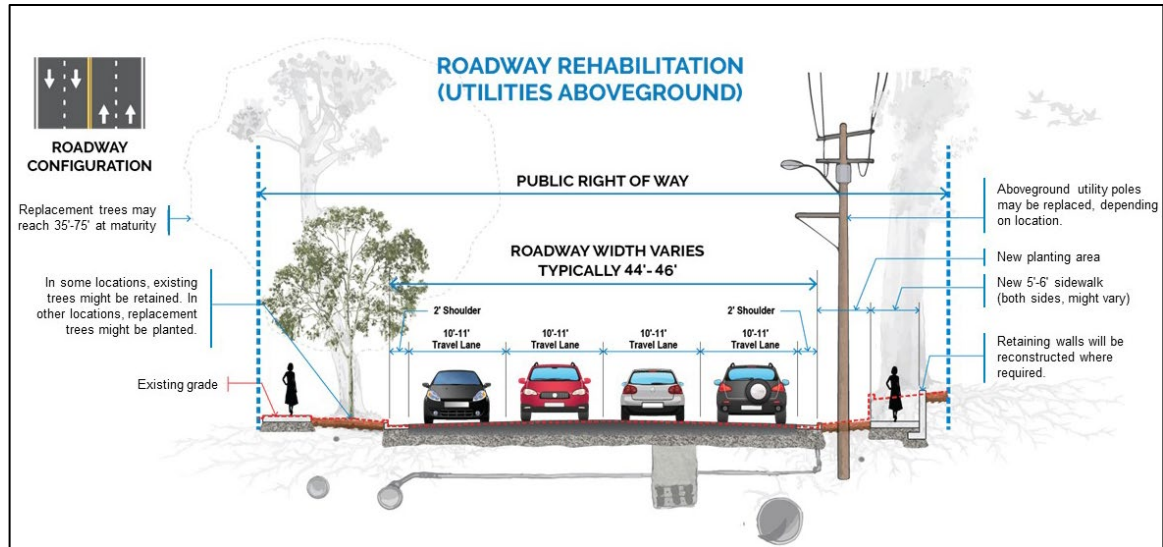
Under the Build Alternative, the roadway would be rehabilitated, and drainage and pedestrian infrastructure would be upgraded. There would be no change to the number of travel lanes on El Camino Real. See Figure 2.1.1-1 for a typical cross-section of the Build Alternative.

Under the Build Alternative, the roadway would maintain its existing 44- to 46-foot width including two 10- to 11-foot-wide travel lanes in each direction. All permanent improvements would occur within existing state and city/town right-of-way.

#### Roadway Rehabilitation

To address structural inadequacy of the roadway, the entire pavement structural section (as shown in Figure 1.3.2-2) would be removed and reconstructed between East Santa Inez (PM 12.3) and Murchison Drive (PM 15.8). To do this, construction crews would use saw cutters, excavators, and jack hammers to remove the existing pavement, concrete structures, and bus





**Figure 2.1.1-1: Build Alternative**

pads. The existing subgrade would be re-compacted with vibratory compactors and the road base would be reconstructed and graded. Construction crews would use cement trucks to install Portland cement concrete pavement and other concrete surfaces and an asphalt paving machine would be used to install a new layer of asphalt flexible pavement. This would be followed by roadway re-striping.

### **Drainage Improvements**

There are 79 existing roadway drainage inlets within the project limits. A total of 34 new drainage inlets would be installed, and 25 existing drainage inlets would be modified or relocated to accommodate changes to existing curb ramps. In addition, all existing reinforced concrete pipes, clay pipes, and metal pipes smaller than 18 inches would be replaced with 18-inch polyvinyl chloride pipes. These improvements would minimize roadway ponding caused by the existing deficiencies. Drainage work would require the use of excavators and backhoes for trenching and vibratory compactors for pipe backfill.

### **Pedestrian Improvements**

All existing sidewalks within the project limits from East Santa Inez Avenue (PM 12.3) in the City of San Mateo to Dufferin Avenue (PM 15.3) in the City of Burlingame would be upgraded as part of the project. This coincides with the portion of the project limits that is an undivided, four-lane roadway. The upgraded sidewalks would range from 5 feet to 6 feet in width and would be compliant with ADA standards. The sidewalks north of Dufferin Avenue in the cities of Burlingame and Millbrae are already compliant with ADA standards and would not be changed as part of the project. The only portion of the project limits that currently lacks sidewalks is along the southbound side of El Camino Real from Bellevue Avenue to Floribunda Avenue. There are existing crosswalks at both the El Camino Real/Bellevue Avenue intersection and the El Camino Real/Floribunda Avenue intersection to assist pedestrians in navigating to the northbound side of the roadway and continuing along El Camino Real. No new sidewalk is being proposed between Bellevue Avenue and Floribunda Avenue in order to preserve existing street trees at this location.

The Build Alternative would not change the number of intersections within the project limits. All existing crosswalks would be marked with high-visibility paint (comprised of one layer of thermoplastic and two layers of glass beads) following project construction. Within the existing intersections, 183 curb ramps at 43 intersections in the project limits (from East Santa Inez Avenue [PM 12.3] to Millbrae Avenue [PM 15.9]) would be upgraded to meet ADA standards.

In addition, APS and CPS systems would be installed at 20 intersections from Poplar Avenue (PM 12.4) to Millbrae Avenue (PM 15.9). Pedestrian hybrid beacons would be installed at the intersections of Bellevue Avenue, Willow Avenue, and Palm Drive.

The APS systems would provide an audible and vibrating signal designed to make street crossings safer for people who are blind, deaf, or who have low vision. These signals provide information in non-visual formats (e.g., audible tones, speech messages, and/or vibrating surfaces) designed to increase awareness for all pedestrians, which can lead to fewer pedestrian-related collisions with vehicles. The APS system would be integrated into the pedestrian pushbutton detector, so the audible tones and messages would come from the pushbutton housing and have a pushbutton locator tone and tactile arrow. These electronic buttons are actuated by pedestrians to change traffic signal timing to accommodate pedestrian crossings. Locator tones would be used to help pedestrians with visual impairments find the pushbuttons that also activate CPS signals. CPS signals inform pedestrians of the number of seconds remaining in the pedestrian crossing time and reduce the number of pedestrians caught in the crosswalk at the end of the cycle.

Pedestrian hybrid beacons would be located at uncontrolled intersections where there is no traffic signal. A pedestrian hybrid beacon is a traffic control device designed to help pedestrians safely cross busy or higher-speed roadways at midblock crossings and uncontrolled intersections. The beacon head consists of two red lenses above a single yellow lens. The lenses remain "dark" until a pedestrian desiring to cross the street pushes the call button to activate the beacon. The signal then initiates a yellow to red lighting sequence consisting of steady and flashing lights that directs motorists to slow and come to a stop. The pedestrian signal then flashes a WALK display to the pedestrian. Once the pedestrian has safely crossed, the hybrid beacon again goes dark.

Demolition of existing pavement for sidewalk replacement and curb ramp upgrades would require the use of pavement breaking equipment (e.g. jackhammers, hoe-rams, etc.). New concrete would require the installation of concrete formwork using hand tools and concrete pouring using concrete pumps.

Associated relocation, adjustment, and upgrading of traffic signal poles, light poles, signs, utility cabinets, fire hydrants, and other utilities (such as gas, fiber optic cables, sewer and water lines) may be required to conform to infrastructure upgrades within the scope of the project.

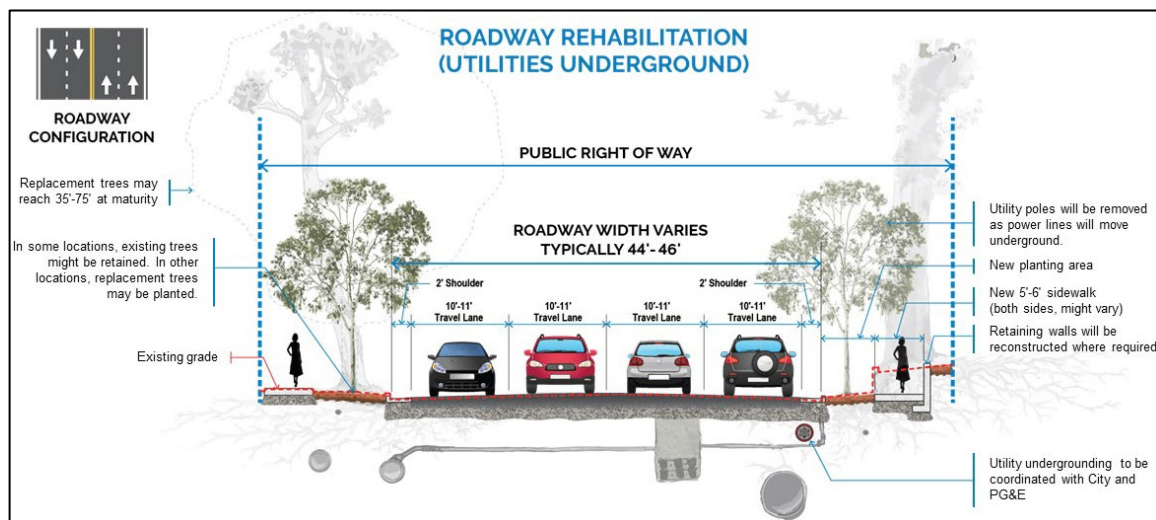
Traffic signal and lighting upgrades would require the use of drilling machines for the construction of new signal foundations and cranes for the placement of new signal and lighting poles and mast arms.

## Utilities

Under the Build Alternative, utility poles would be removed and relocated at various locations during construction to conform to infrastructure upgrades. There would be no change in the services provided to customers following project construction, however there could be short-term minor disruptions during construction.

### 2.1.1.1 Design Option to Underground Utilities

A design option is being evaluated for the Build Alternative. With this design option, the existing electrical transmission, telecommunications, and cable TV lines that currently run along poles above the roadway would be relocated underground from Barroilhet Avenue (PM 12.9) to Ray Drive/Rosedale Avenue (PM 15.2) in the City of Burlingame. See Figure 2.1.1-2 for a typical cross-section of this design option.



**Figure 2.1.1-2: Design Option to Underground Utilities**

Utility undergrounding is being considered to minimize conflicts between overhead utilities and tree replanting as well as at the request of the City of Burlingame. Current Pacific Gas and Electric Company (PG&E) standards require that replacement trees placed near existing distribution lines be no more than 25 feet tall at maturity, 50 feet from power lines, and 10 feet from power poles (PG&E 2021). Therefore, the existing aboveground utilities limit the potential number and size of replacement plantings along El Camino Real within the project limits.

Utility undergrounding efforts are being funded, lead, and coordinated by the City of Burlingame. On June 17, 2019, the Burlingame City Council established the El Camino Real Underground Utility District to initiate proceedings for implementing the proposed utility undergrounding. The City of Burlingame estimates this work will cost \$25-30 million if done as part of the Build Alternative (Goldman 2020). The City of Burlingame will coordinate with Caltrans Design on the placement of utility infrastructure to avoid impacts to the environment. Final approval of utility undergrounding would depend upon agreements between the City of Burlingame, Caltrans, PG&E, and other utility providers. This design option would be constructed as long as necessary funding and approvals are secured by the City of Burlingame.

Should funding and approvals not be secured in time to meet the project schedule, the Build Alternative would be constructed without this design option. Since the ability to move forward with this design option is beyond the decision-making capability of Caltrans, it does not represent a distinct Build Alternative. However, it is being evaluated for potential effects to the environment throughout this EIR/EIS and the public, stakeholders, and agencies are invited to provide comments on this action.

#### **2.1.1.2 Project Construction**

The following activities and components are anticipated as part of project construction.

##### **Construction Lane Closures and Detours**

Lane and shoulder closures would be required for project construction such as reconstructing the roadway, curb ramps, and sidewalks. Construction activities are anticipated to occur both during daytime and nighttime hours. Appropriate temporary traffic control devices and barriers (e.g. k-rails, cones, etc.) will be used to protect the construction site from public traffic through the various stage of construction. The project would be phased such that the roadway would be reduced to one lane in each direction for a period of approximately three months at each location within the project limits. Construction crews would move from one end of the project limits to the other in stages. Total project construction is anticipated to take no more than three years. Residential and business access would be maintained during construction.

##### **Right-of-Way**

No permanent right-of-way acquisitions are proposed for the project. City permits from the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough would be required to reconstruct curb ramps. Temporary construction easements (TCEs) would be required on 32 properties to reconstruct the edges of driveways to conform with the new project features and to rebuild crumbling retaining walls that are currently located within Caltrans right-of-way. The depth of each TCE into private property would vary but would range from one to ten feet. The length of each TCE along El Camino Real would vary by location. In order to construct the upgraded pedestrian infrastructure, Caltrans would utilize all state right-of-way lands within the project limits. Any privately owned features (e.g. landscaping, landscape retaining walls, staircase, fencing) within state right-of-way that conflict with the project would be removed.

##### **Water Quality**

No work is expected in daylighted or culverted waterways that cross El Camino Real or at drainage outfalls. The project is anticipated to result in a disturbed soil area (DSA) of 29.5 acres. Therefore, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared before project construction, and SWPPP requirements will be inspected and maintained during construction. The SWPPP requires temporary best management practices (BMPs) for hazardous materials storage and soil stockpiles, inspections, maintenance, worker training, and release containment to prevent runoff into storm water collection systems or waterways. These measures are designed to protect human health and the environment. BMPs proposed for the project include soil stabilization, sediment control, tracking control, and non-storm water management. BMPs will be determined during final design.

The project design also includes permanent BMPs to avoid the potential for project-related storm water discharges to substantially alter drainage patterns, violate water quality standards, or substantially degrade water quality. Permanent BMPs proposed for the project include bioretention or biofiltration devices. The placement of each will be determined during final design.

### **Tree Trimming, Removal, and Replacement**

The Build Alternative requires existing street trees to be trimmed or removed during construction, including both historic trees and newer replacement trees that contribute to the Howard-Ralston Eucalyptus Tree Rows. Caltrans has extensively studied trees within the project limits to determine how many may need to be removed. A detailed description of this evaluation is presented in Appendix F. Caltrans has identified trees that are incompatible with the project scope due to one of the following conditions:

- The trunks of some trees overlap with the location of a proposed project feature such as a sidewalk or drainage feature that cannot be relocated and needs to be upgraded as part of the project.
- The structural root systems of some tree are within areas of extensive excavation required to construct project improvements, such as curb and gutters, driveways, and curb ramps. For instance, stabilizing roots of some trees extend over curbs and into the edge of the roadway. In order to reconstruct the pavement structural section and curb and gutter, these roots would be unavoidably severed during construction permanently damaging the tree's health and structural stability.
- Some trees exhibit signs of greatly compromised health, including a lack of vigor and/or the presence of Sulphur fungus, suggesting they lack the resiliency to survive moderate excavation required for construction activities. An example would be sidewalk replacement in areas where the existing sidewalk has been moderately to severely displaced and where alternative construction techniques are not possible. Work within the root zones of these trees would negatively impact their already compromised health.

An estimated 300 to 350 of the approximately 700 trees in the project limits would be removed, including approximately 250 trees that contribute to the Howard-Ralston Eucalyptus Tree Rows.

Tree removal would be done using industry standard practices including various hand saws and pruners, chain saws, woodchippers, and excavators. Extremely large trees may require cranes to safely lower large branches and sections of trunks. All project activities will be done in compliance with the Migratory Bird Treaty Act.

Replacement planting is described in Section 3.1.5.4.

#### **2.1.1.3 Other Construction Activities and Requirements**

This project contains a number of several standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the project. These measures are addressed in more detail in the Environmental Consequences sections in Chapter 3. The construction contractor will be required to follow all standard requirements and procedures to be included during detailed design, specifications, and permits or other authorizations.

The following are examples of standardized project measures that will be implemented as part of the project.

### **Construction Lighting**

Construction activities adjacent to residential areas will limit all construction lighting to within the area of work and avoid light trespass through directional lighting, shielding, and other measures as needed.

### **Transportation Management Plan**

During the final design phase, a Transportation Management Plan (TMP) will be prepared in accordance with Caltrans requirements and guidelines to minimize the construction-related delays and inconvenience for travelers, residents, and businesses within the project limits. The TMP will include details about the project's construction hours as well as address the potential traffic impacts as they relate to lane closures and other traffic handling concerns associated with construction of the project. The TMP will include:

- Distribution of press releases and other public outreach necessary to notify local jurisdictions, agencies, and the public of upcoming lane closures and expected delays;
- Coordination with California Highway Patrol (CHP) and local law enforcement on contingency plans;
- Use of portable changeable message signs and CHP Construction Zone Enhanced Enforcement Program where possible to minimize delays.

Access will be maintained for emergency response vehicles.

### **Hazardous Materials**

The long-term use of the existing roadway facility and presence of previous commercial sites adjacent to the roadway provides the opportunity for contaminated soils and groundwater to be encountered during project construction. During the final project design phase, a Preliminary Site Investigation (PSI) will be performed in accordance with current Caltrans guidance to investigate hazardous materials concerns related to soil, groundwater, and building materials within the project limits and will include required measures for managing hazardous materials encountered during project construction. These measures shall be incorporated in the final project design and would address the potential adverse effects to human health and the environment (if any) that could result from the disturbance of hazardous materials in order to protect human health and the environment.

Depending on the results of the PSI and the presence of hazardous materials that exceed regulatory thresholds, potential measures could include the following:

- ADL-contaminated soils exceeding California hazardous waste thresholds shall be reused in accordance with the DTSC's 2016 Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils.
- Lead compliance plans for ADL-contaminated soils and pavement markings containing lead shall be prepared in accordance with the Caltrans Standard Special Provisions and

implemented by the project construction contractor(s) to ensure compliance with OSHA and Cal/OSHA worker safety regulations.

- Groundwater from dewatering of excavations shall be stored in Baker tanks during construction activities and characterized to determine the appropriate treatment requirements for discharge and disposal. The extracted groundwater shall be collected and managed for disposal/treatment in compliance with local and state regulations.
- All loose and peeling lead-based paint and asbestos-containing material shall be removed by a certified contractor(s) in accordance with local, state, and federal requirements. All other hazardous materials will be removed from structures in accordance with Cal/OSHA regulations.
- Asphalt concrete and Portland cement concrete grindings shall be reused in accordance with the San Francisco Bay RWQCB's (2007) guidance to protect water quality or transported off-site for recycling or disposal.
- Job site perimeter air monitoring when the project work disturbs regulated lead-contaminated soils. Air monitoring program requirements will be defined in Section 14-11.08F Air Monitoring of Standard Special Provision 14-11.08 Regulated Material Containing Aerially Deposited Lead.
- Protective measures when excavating, loading, and transporting contaminated soils such as before any excavation work begins, the contractor will be required to submit an excavation and transportation plan for review and acceptance by the state's resident engineer, as stated in Standard Special Provision 14-11.08 Regulated Material Containing Aerially Deposited Lead, subsection D (3).
- Safety in the transport of contaminated soils, as addressed in subsection 14-11.08J Material Transportation, which requires practices such as removing and containing loose soils from truck exteriors before leaving the construction zone.

Preparation of the PSI is anticipated to cost approximately \$100,000. Based on the constituents of concern identified in Section 3.2.3.3, management and disposal of lead-contaminated, hazardous-waste soils during construction is anticipated to cost approximately \$500,000.

### **Erosion Control and Construction Discharges**

The following standard practices for erosion control and construction discharges will be part of the project:

- Installation of silt fencing, fiber roll, and/or check dam;
- drainage inlet protection;
- concrete wash-out;
- street sweeping; and
- job site management for sediment control.

### **Air and Noise Standards**

The project's construction contract will include the 2018 Caltrans Standard Specification 7-1.02C which require contractors to certify they are aware of and will comply with all California Air Resources Board (ARB) emissions reduction regulations and 14-9.02 which requires all work to be performed in accordance with air-pollution-control rules, regulations, ordinances, and statutes, including those provided in Government Code § 11017 (Public Contract Code §-10231).

In addition, the following measures will be included in the construction contract to minimize construction impacts to nearby residences and businesses.

- Regular vehicle and equipment maintenance.
- Recycle non-hazardous waste and excess materials, where possible, to reduce offsite disposal.

### **Discovery of Cultural Resources**

If 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 Native American Heritage Commission (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 Kathryn Rose, Caltrans Archaeology Branch Chief (510 504-1937) 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.

### **Protection of Existing Cultural Resources**

For construction activities where there is the potential for inadvertent direct impacts to NRHP-listed or resources that qualify for protection under CEQA, Caltrans BMPs include designating Environmentally Sensitive Area (ESA) fencing or other forms of delineation to protect these resources. A qualified architectural historian will prepare an ESA Action Plan. The Plan will include requirements to protect these resources where there is the potential for indirect construction impacts. ESA fencing or other markings will be placed, where needed, around historic properties, protecting resources from inadvertent project-related effects. The ESAs will also be delineated in the PS&E package. No project-related activities (e.g., grubbing, staging, equipment parking, etc.) shall occur within the ESAs.

- 1124 El Camino Real, Burlingame, The La Solana Apartments. A TCE is needed for driveway conform at this property. The area in the front area of this building is all cement and is not a contributing feature to the NRHP eligibility of the resource. However, to protect the building's front façade at this location an ESA will be placed



along the construction limits of the driveway conform in front of the building to ensure construction activities do not cause inadvertent damage to the resource.

- 1045 El Camino Real, Burlingame. A TCE is needed for driveway conform at this property. The area in the front of this building is all cement and is not a contributing feature to the NRHP eligibility of the resource. However, to protect the building's front façade at this location an ESA will be placed along the construction limits of the driveway conform in front of the building to ensure construction activities do not cause inadvertent damage to the resource.
- 1021 El Camino Real, Burlingame. A TCE is needed for driveway conform at this property. Construction of the driveway conform will occur along the northeast elevation of the building. An ESA will be placed along the construction limits of the driveway conform at this elevation of the building to ensure construction activities do not inadvertently damage the resource.
- 1501 Forest View, Burlingame. A TCE is needed for driveway conform at this property. Construction of the driveway conform will occur along the southeast elevation of the building along El Camino Real. An ESA will be placed along the construction limits of the driveway conform at this elevation of the building to ensure construction activities do not inadvertently damage the resource.
- 1246 El Camino Real, Burlingame. A TCE is needed for driveway conform at this property. The area in front of this building is all cement and is not a contributing feature to the CEQA eligibility of the resource. However, to protect the building's front façade at this location an ESA will be placed along the construction limits of the driveway conform in front of the building to ensure construction activities do not cause inadvertent damage to the resource.
- 1500-1504 Barroilhet Avenue, Burlingame. This property is located on the corner of Barroilhet Avenue and El Camino Real. The building elevation along El Camino Real is in close proximity to where new sidewalks will be constructed. ESAs fencing will be placed along this elevation to protect the building from any inadvertent construction impacts.
- 770 N. El Camino Real, San Mateo, St. Joseph's Church. This building sits on the corner of El Camino Real and State Street. The elevation along El Camino Real is in close proximity to where new sidewalks will be constructed. ESAs fencing will be placed along this elevation to protect the building from any inadvertent construction impacts.
- 525 N. El Camino Real, San Mateo, Royal Pines Apartments. This building sits on the corner of El Camino Real and Clark Drive. Portions of the landscaping along this corner are contributing features to the NRHP eligibility of this resource. ESAs will be needed due to the proximity of these contributing elements to sidewalk construction. ESA fencing will be placed along these features to protect the building from any inadvertent construction impacts.

## **Design Standards**

Caltrans establishes and supports the consistent application of highway design standards to ensure optimal safety for the traveling public and those who work to construct, operate, and maintain the State Highway System. Exceptions to these standards are considered when the proposed design deviates from the standard design features presented in the *Caltrans Highway Design Manual*.

Caltrans *Project Development Procedures Manual* Chapter 21 defines Boldface design standards as those that have the approval for design exceptions. Underlined design standards are important also, but allow greater flexibility in application to accommodate design constraints or be compatible with local conditions on resurfacing or rehabilitation projects.

Within the project limits, the existing roadway contains nonstandard design elements that do not meet current design standards. The following roadway elements would be designed to current Caltrans standards:

- Curb ramps to be upgraded to current ADA standards;
- Width of sidewalks;
- Curb and gutter;
- Improve sight distances; and
- Type of striping and signage.

Exceptions from boldface and underlined design standards would be considered based on engineering judgment to minimize adverse environmental impacts.

### **2.1.1.4 Estimated Project Cost and Funding**

Project funding is provided by the 2018 State Highway Operation and Protection Program (SHOPP) under 201.120 Pavement Resurfacing/Rehabilitation SHOPP Roadway Preservation. The project is anticipated to cost \$150-180 million. This cost does not include undergrounding as described in Section 2.1.1.1.

The project has been programmed under expenditure authorization (EA) 04-0K810 Project identification number (ID) 0416000142 and EA 04-1G900 Project ID 0400020619. These EAs will be combined into EA 04-0K81U Project ID 0420000075 during construction.

### **2.1.2 No Build Alternative**

Under the No Build Alternative, no modifications would be made to El Camino Real other than routine maintenance. The existing configuration as shown in Figure 2.1.2-1 would be maintained. Deteriorated roadway conditions would continue to be addressed through filling potholes and other short-term surface remedies. The sidewalks and existing drainage facilities would not be upgraded. Localized flooding due to damaged and outdated drainage infrastructure would continue to be present on the roadway. Under this alternative, the utilities would not be relocated underground.

Existing trees that line El Camino Real would continue to age and may eventually decline in health. Any existing historic trees (part of the Howard-Ralston Eucalyptus Tree Rows) that must be removed due to safety or routine maintenance projects would continue to be replaced with elm trees, per the existing agreement between Caltrans and the State Historic Preservation Officer (SHPO).

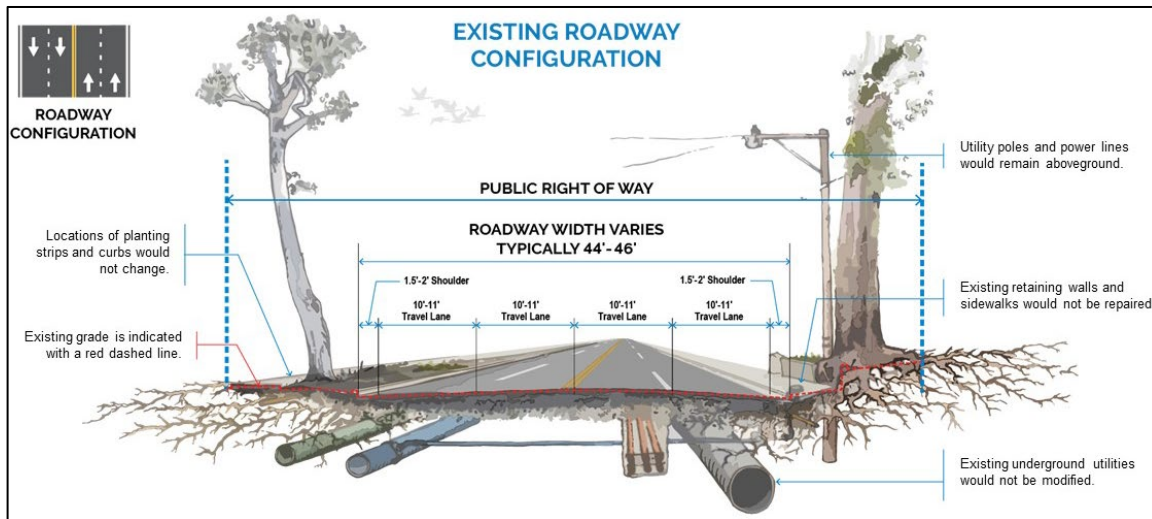


Figure 2.1.2-1: No Build Alternative

### 2.1.3 Final Decision Making Process

After the public circulation period of this Draft EIR/EIS, all comments received will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Caltrans will certify that the project complies with CEQA, prepare findings for all significant impacts identified, prepare a Statement of Overriding Considerations for impacts that will not be mitigated below a level of significance, and certify that the findings and Statement of Overriding Considerations have been considered prior to project approval. Caltrans will then file a Notice of Determination with the State Clearinghouse that will identify whether the project will have significant impacts, if mitigation measures were included as conditions of project approval, that findings were made, and that a Statement of Overriding Considerations was adopted. With respect to NEPA, Caltrans, as assigned by FHWA, will document and explain its decision regarding the selected alternative, project impacts, and mitigation measures in a Record of Decision.

### 2.1.4 Alternatives Considered but Eliminated from Further Discussion

The following alternatives were considered and analyzed during the project initiation phase and early stages of the Project Approval and Environmental Document phase. Other than specific components of alternatives that were incorporated into previous projects or the Build Alternative, these alternatives were ultimately rejected and withdrawn from further study for the reasons described below.

#### **2.1.4.1 Road Diet (with and without utilities undergrounded) (Traffic Systems Management [TSM] and Traffic Demand Management [TDM] Alternative)**

Throughout the early part of the Project Approval and Environmental Document phase and during environmental scoping, the Project Development Team (PDT) considered road diet alternatives with and without undergrounding utilities. These alternatives would have converted the existing four-lane configuration from Peninsula Avenue (PM 12.95) to Ray Drive/Rosedale Avenue (PM 15.2) in the City of Burlingame to a two-lane configuration with a center turn lane. The curb and gutter would have been shifted three feet toward the center median on either side allowing for a wider area for vegetation adjacent to the roadway. Relocation of the curb and gutter would have narrowed the roadway from the existing 44- to 46-foot width to 36- to 38-foot width. These alternatives did not propose including bicycle lanes and narrowing the roadway width permanently would preclude bicycle lanes in the future on El Camino Real within the project limits.

Relocation of the curb and gutter would have altered the drainage flow line requiring replaced storm water pipes to be installed at the new flow line. Existing pipes would have been abandoned in place. Where storm water pipes would not have required replacement, modifications to the drainage system would have been made to connect to any relocated pipes.

Because this alternative would have resulted in only one through-lane of traffic in each direction from Peninsula Avenue (PM 12.95) to Ray Drive/Rosedale Avenue (PM 15.2), this alternative would have required bus pull outs at 21 bus stops (10 northbound and 11 southbound). The bus pull outs would have allowed buses to pull clear of the lane of traffic while stopped to drop off and pick up passengers. Bus pull outs would have been 10 feet wide and 75 feet long with a 125-foot taper at the entry and a 225-foot taper at the exit. At bus pull out locations, the existing roadway width would have been widened.

This alternative was considered by the PDT to try to minimize tree removal, thereby reducing significant impacts to the environment. It was evaluated in the project's technical studies. By abandoning the existing curb and gutter in-place and creating a new curb and gutter three feet toward the center of the roadway, there could not only be more room for replanting trees but also construction impacts to existing trees could have potentially been reduced, allowing more of the existing trees to be retained. After a thorough review of this alternative, the PDT came to the following conclusions.

Reducing the number of through-lanes from two lanes to one lane in each direction would require adding bus pull outs to the roadway in order to allow SamTrans buses to clear the travel lane. This alternative was evaluated to the same standards as the Build Alternative and was found to cause a substantial increase in vehicle delays and congestion during the PM peak hour in the cities of Burlingame and San Mateo (Caltrans 2020a). This alternative would also have resulted in reduced speeds and degradation of level of service at 24 intersections within the project limits in the AM peak hour and 32 intersections in the PM peak hour. The greatest traffic degradations would have been in the northbound direction during the PM peak hour, where individual delays would have increased by more than 11 minutes and average speeds would have been reduced by 13 miles per hour. In addition, this alternative would not have accommodated traffic growth projected for the cities within the project limits. Even with the inclusion of the bus pull outs, the increased congestion would also have impacted bus service within the project limits.

This alternative would have resulted in a 2 percent decrease in the number of trees being removed for this project overall and a 5 percent decrease in the number of trees being removed that contribute to the Howard-Ralston Eucalyptus Tree Rows. However, this reduction is not enough to decrease any significant effects to the environment from tree removal. These alternatives also have the potential to create additional significant effects to the environment from increased congestion with the potential to increase greenhouse gas emissions. Therefore, the PDT decided to eliminate it from further consideration.

#### **2.1.4.2 SM 82 Relocation Alternative**

During the Project Approval and Environmental Document phase, the PDT considered relinquishing the existing SR 82 corridor to the cities of Burlingame, Millbrae, San Mateo, and the Town of Hillsborough and moving the alignment to an alternate route. This alternative was considered to provide a facility that is less deteriorated (i.e. has better drainage, visibility, roadway condition, closer to meeting ADA standards, etc.), thereby leaving the existing facility in place, in the hopes of avoiding impacts to the historic resources. There is a logical alternative route to the current SR 82. This route would start at East Poplar Avenue in the City of San Mateo; heading north from its current alignment, proceed east on East Poplar Avenue, then left (north) on San Mateo Avenue; continue on California Drive, turn right (east) on Broadway, turn left (north) on Rollins Road, turn left (west) on to Millbrae Avenue, then turn right (north) back to the current SR 82 alignment. Southbound would be the reverse. The route realignment could also begin at 3rd Avenue in the City of San Mateo, this would result in an even longer route segment on 2-lane residential streets compared to East Poplar Avenue, however. This alternative would require extensive new agreements and right-of-way to be acquired by Caltrans.

This alternative was considered primarily to attempt to avoid impacts to the Howard-Ralston Eucalyptus Tree Rows. However, the reasons for rejecting this alternative are as follows:

Under Streets and Highways Code § 73, existing SR 82 cannot be relinquished to local jurisdictions until Caltrans has placed the existing highway (including pavement, culverts, curbs, and drains) “in a state of good repair.” This would require rehabilitation of the existing pavement structural section, installation of new drainage inlets and modification of existing drainage inlets, and the replacement of substandard drainage pipes with new pipes. Such work would result in the same potentially adverse impacts the SM 82 Relocation Alternative is seeking to minimize and avoid, including the removal of a substantial number of trees from the Howard-Ralston Eucalyptus Tree Rows. Also, Caltrans identified additional potential historic resources along the alternative route that could similarly be impacted as historic resources would be on the existing route due to infrastructure upgrades. Therefore, the PDT decided to eliminate it from further consideration.

#### **2.1.4.3 Extended Phased Construction**

In response to public scoping comments, the PDT considered extending the proposed industry standard construction timeline to reduce the temporary visual effects of tree removal by slowly replacing the trees over an extended period of time. The PDT considered the alternative as a staging plan that could remove and replace some trees prior to construction, some during construction, and some after construction as well as evaluating reconstructing the project in

small segments over time to allow replanted trees to grow prior to commencing the next segment of construction.

However, trees replanted in the pre-construction planting phase would have sub-optimal growing conditions. These trees would also be subject to damage and further soil compaction when construction activities do occur. Trees replanted during construction activities could benefit from installation of new soil systems and be installed at the end of construction to reduce likelihood of damage, leaving sections bare during the construction phase. Trees replanted after construction would similarly benefit from soil systems and be protected from construction activities.

Under this alternative, the resulting canopy in the corridor would be expected to be less consistent and vigorous than under the standard practice to remove trees in advance of work and replant all trees at the end of construction because standard practice would enable installation of large-scale soil systems to benefit all replacement trees within the project limits. While this alternative may reduce sensitivity to tree loss if trees were replaced in stages, it wouldn't diminish or avoid effects to the environment, particularly to the Howard-Ralston Eucalyptus Tree Rows.

In addition, this alternative would add considerable time and inconvenience to residents, businesses, and commuters via traffic disruptions through the project limits during a longer construction period (by as much as 5-10 years). Extending the construction period would substantially increase the cost of construction based on increase in number of days multiplied by the daily overhead cost.

For all the above reasons, the PDT eliminated this approach from further consideration. However, the elimination of this alternative does not limit consideration of design or construction BMPs or innovative solutions to minimize harm to environmental resources wherever feasible.

### **2.1.5 Permits and Approvals Needed**

Table 2.1.5-1 shows the permits, reviews, and approvals that would be required for project construction.

Table 2.1.5-1: Permits and Approvals Needed

Agency	Permit/Approval	Status
SHPO	<ul style="list-style-type: none"> <li>● Concurrence on the Historic Property Survey Report (HPSR), Historic Resource Evaluation Report ([HRER] including individual historic property eligibility determinations), Finding of Effect (FOE), and Memorandum of Agreement (MOA)</li> <li>● Concurrence with Draft Individual Section 4(f) analysis</li> </ul>	<ul style="list-style-type: none"> <li>● SHPO concurrence on the HPSR was requested on August 5, 2020.</li> <li>● Caltrans sent the SHPO a <i>Notice of Moving Forward without SHPO Concurrence</i> on October 15, 2020.</li> <li>● SHPO FOE concurrence and approval of MOA is expected after circulation of the Draft EIR/EIS.</li> </ul>
San Francisco Bay Regional Water Quality Control Board (RWQCB)	Approval of the SWPPP prior to construction activities	● A Notice of Intent and SWPPP will be prepared/submitted before construction.
San Mateo	Temporary Construction Easements	To be sought after final design
Burlingame	Temporary Construction Easements	To be sought after final design
Hillsborough	Temporary Construction Easements	To be sought after final design
Millbrae	Temporary Construction Easements	To be sought after final design

## **Chapter 3 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures**

This chapter addresses the environmental impacts of the project. The environmental resource discussions presented in this chapter are based on the technical studies cited at the beginning of each discussion. An evaluation of the project consistent with CEQA checklist criteria is provided in Section 4.3. Avoidance, minimization, and/or mitigation measures are discussed in the following sections and summarized in Appendix D.

For the project, the CEQA baseline for all resource areas is May 22, 2020, when the Notice of Preparation was filed with the Governor's Office of Planning and Research. The NEPA baseline for comparing environmental impacts is the No Build Alternative.

### **Topics Considered but Determined Not to Be Relevant**

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.

#### **Existing and Future Land Use**

The project would not alter existing or future land uses as it would continue to use existing state right-of-way for transportation use, consistent with existing land use plans for the county and cities/towns adjacent to the project limits. The project would require TCEs of city and private property for construction only and would not change the permanent land use at these locations.

#### **Coastal Zone**

The project would have no effects to coastal resources because the project is not located within the California Coastal Zone.

#### **Wild and Scenic Rivers**

The project would have no effects on Wild and Scenic Rivers because no Wild and Scenic Rivers are located near the project limits.

#### **Parks and Recreational Facilities**

The project would have no effects on parks or recreational facilities because no parks or public recreational facilities are located along El Camino Real in the project limits. Pershing Park, Heritage Park, Paloma Playground, Laguna Park, and Village Park are all 700 to 1,000 feet from El Camino Real in the City of Burlingame and are separated from the project limits by structures along El Camino Real. Ray Park is 400 feet from El Camino Real in the City of Burlingame and is separated from the project limits by three rows of residential houses that abut Balboa Way and Albemarle Way.

#### **Farmlands**

The project would have no effects on farmlands because the project is not located near any farmlands.



### **Timberlands**

The project would have no effects on timberlands because the project is not located near any timberlands.

### **Growth**

Since the project would not change existing or future land use designations, change the existing capacity of the roadway, or open any new land for development, it would not induce growth in the project vicinity.

### **Relocations and Real Property Acquisition**

The project would not require any relocations or real property acquisition. The project would be contained within existing state right-of-way, and no new right-of-way would be acquired for the project.

### **Traffic and Transportation/Pedestrian and Bicycle Facilities**

The project proposes no changes to the existing number of lanes or use of the existing lanes on El Camino Real within the project limits. It also does not change any bicycle designations along El Camino Real. As noted in Section 2.1.1, pedestrian facilities within the project limits would be upgraded but no new sidewalks would be added where none currently exist. The project would not change existing transit services on El Camino Real. Therefore, the transportation pattern within the project limits would be unchanged by the project.

### **Geology/Soils/Seismic/Topography**

There are no active faults within the project limits and the soils that underlie the roadway, sidewalks, and replacement retaining walls are stiff clayey and dense sandy materials with limited liquefaction potential (Caltrans 2020b).

### **Paleontology**

The geology underlying the project limits includes marine and nonmarine (continental) sedimentary rocks of the Pleistocene and Pleistocene-Holocene ages (rock types Qoa and QC, respectively) (California Department of Conservation 2021). Rock type Qoa can contain older alluvium, lake, playa, and terrace deposits, whereas rock type QC can contain alluvium, lake playa, and terrace deposits that are unconsolidated or semi-consolidated. Rock type QC may contain nonmarine deposits throughout its distribution and marine deposits near the coast. The project would take place entirely on previously disturbed soil, except for installation of 68 traffic light poles. Traffic light poles would be installed with foundations up to 15 feet below ground surface, with cast-in-drilled-hole (CIDH) concrete piles 2 to 2.5 feet in diameter. The thickness of disturbed fill varies throughout the proposed project at depths up to 10 feet below ground surface. Predominately, Pleistocene and Holocene alluvial sediments are present below the fill. There is a low potential for paleontological resources to be found during construction.

### **Air Quality**

The project would not change the existing or future capacity of the roadway within the project limits and would therefore not affect long-term air quality. The project (both for construction and operational purposes) is exempt from project-level air quality conformity determination under 40 Code of Federal Regulations 93.126 Table 2 as a “pavement resurfacing and/or pavement rehabilitation project.”

### **Noise**

The project is not a Type I project under 23 Code of Federal Regulations 772 as it would not alter the location of a roadway, the horizontal or vertical alignment of the roadway, or increase the number of through-traffic lanes on the roadway. It is not a Type II project as it is not a project for noise abatement on an existing highway. Therefore, the project is a Type III project, no significant operational noise impacts are anticipated, and no Noise Study is required. Construction noise was analyzed, and anticipated construction noise impacts are described in Section 3.4.

### **Wetlands and Other Waters**

Waterways under the jurisdiction of the U.S. Army Corps of Engineers (USACE) were found adjacent to the project limits; however, wetlands were not found during surveys. USACE will be contacted if the scope of work results in impacts to resources under their jurisdiction. As the project does not require any in-water work, no direct impacts are anticipated. The potential for indirect impacts to waterways adjacent to the project limits is described in Section 3.2.1.

### **Plant Species**

Plants considered to be of special concern are based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. There were no special-status plant species found within the biological study area, as defined in Section 3.3.1.

### **Threatened and Endangered Species**

Caltrans has made the following determinations for species under the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) jurisdiction that were reviewed for the project: No Effect. Caltrans has determined the project will have no effect on federally listed species. Official species lists were acquired from the USFWS and NOAA Fisheries on September 15, 2020. They are presented in Appendix C.

## 3.1 Human Environment

### 3.1.1 Consistency with State, Regional, and Local Plans and Programs

#### 3.1.1.1 Affected Environment

Areas surrounding the project limits are subject to several community, regional, and transportation plans. The following types of plans were considered and are discussed below:

- Transportation plans/programs
- Regional growth plans
- General plans and related plans
- Habitat conservation plans
- Other planning influences

#### **Transportation Plans/Programs**

The project is included in the Metropolitan Transportation Commission's (MTC's) Bay Area Regional Transportation Plan (RTP), Plan Bay Area 2040 (Association of Bay Area Governments [ABAG] and MTC 2017a, amended 2020; RTP ID No. 17-10-0025). The project is in the 2019 Transportation Improvement Program (TIP), as revised with Revision Number 20192019-3941, originally adopted by the MTC on September 28, 2018, and revised on October 15, 2020 and December 11, 2020 (MTC 2018, MTC 2020; TIP ID No. VAR170006). The FHWA and Federal Transit Administration (FTA) originally approved the 2019 TIP on December 17, 2018.

The *San Mateo Countywide Transportation Plan 2040* recognizes El Camino Real as a major arterial having limited pedestrian amenities and street frontages that act as pedestrian barriers (C/CAG 2017).

The *Grand Boulevard Multimodal Transportation Corridor Plan* guides the transformation of El Camino Real into a multimodal corridor from Daly City to San Jose's Diridon Caltrain Station. The Corridor Plan details planned improvements to develop El Camino Real into a pedestrian, bicycle, and transit friendly arterial (SamTrans, VTA, and C/CAG 2010).

#### **Regional Growth Plan and Sustainable Communities Strategy**

*Plan Bay Area 2040* (ABAG and MTC 2017a) also functions as a regional growth plan for the nine-county San Francisco Bay Area. *Plan Bay Area 2040* designates priority development areas (PDAs), which are areas within existing communities that have been identified and approved by a local city or county for future growth because of proximity to transit, jobs, shopping, and other services. Promoting compact development within PDAs is intended to take development pressure off the region's open space and agricultural lands (ABAG and MTC 2017b).

There are four PDA's within one mile of the project limits: Transit Station Area PDA; Downtown PDA; Burlingame El Camino Real PDA; and, Grand Boulevard Initiative PDA (ABAG 2020).

### **General Plans and Local Plans**

General plans and local plans were reviewed for the jurisdictions that overlap the project limits including San Mateo County and the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough. However, these plans do not include objectives, goals, or policies applicable to the project as the project does not include permanent features within the jurisdiction of the plans. All of the planned permanent improvements for the project are within state right-of-way.

### **Habitat Conservation Plans**

The Pacific Gas and Electric Company (PG&E) Bay Area Operations and Maintenance Habitat Conservation Plan overlaps the project limits. However, as the Plan is specific to PG&E operation and maintenance activities, the Plan does not contain policies or goals related to the project (U.S. Fish and Wildlife Service 2017).

### **Bicycle and Pedestrian Plans**

C/CAG is updating its Countywide Bicycle and Pedestrian Plan. The *Draft San Mateo Countywide Bicycle and Pedestrian Plan* does not include designated bicycle facilities along the roadway within the majority of the project limits. The plan does identify El Camino Real from Murchison Drive to Millbrae Avenue as a recommended Class 2b buffered bicycle lane. In the Draft Plan, C/CAG also designates several areas along El Camino Real as Pedestrian Focus Areas (C/CAG 2021).

The *San Mateo County Comprehensive Bicycle and Pedestrian Plan* designates El Camino Real as one of the eight focused pedestrian improvement areas (C/CAG 2011).

The *City of San Mateo | Citywide Pedestrian Master Plan* identified El Camino Real (within the city limits) as one of the least favorite places to walk due to safety concerns, including narrow sidewalks and obstructions along sidewalks (City of San Mateo 2012).

The *City of Burlingame Bicycle and Pedestrian Master Plan* states there are no existing or planned bikeways on the roadway within the project limits in the City of Burlingame (Burlingame 2020a). California Drive, which runs roughly parallel to El Camino Real within the project limits, is designated as a Class 1 shared-use bicycle facility. The Plan recommends a Class 1 shared-use bicycle path on the existing path that currently borders El Camino Real from approximately Eastmoor Road (PM 15.1) to Clovelly Lane (PM 15.3). This path is set back from the roadway and is behind existing street trees. The Plan recommends pedestrian enhancements to several intersections within the project limits including adding high-visibility crosswalk markings and making modifications to curb ramps.

#### **3.1.1.2 Environmental Consequences**

Table 3.1.1-1 summarizes the consistency of the No Build and the Build Alternative (either with or without inclusion of the design option) with applicable plans and policies. As described above, the general and local plans as well as PG&E Bay Area Operations and Maintenance Habitat Conservation Plan are not applicable to either the No Build or Build Alternative, and are, therefore, not discussed further.

**Table 3.1.1-1: Consistency of Project with Applicable Plans and Policies**

Plan/Policy	No Build Alternative	Build Alternative
<p><b>Grand Boulevard Multimodal Transportation Corridor Plan.</b> Bicycle Network Guidelines. Bike lanes on corridor or, alternatively, sharrow markings in shared lanes. If no bike facilities on corridor (i.e. severely constrained right-of-way), parallel corridor with bike lanes, sharrow markings in shared lanes, or bicycle boulevard.</p>	<p><b>Consistent.</b> This alternative would not include bike lanes on El Camino Real within the project limits due to severely constrained right-of-way. However, the parallel roadway, California Drive, currently has a designated Class III bike route south of Broadway and a Class II bike lane north of Broadway.</p>	<p><b>Consistent.</b> This alternative would not include bike lanes on El Camino Real within the project limits due to severely constrained right-of-way. However, the parallel roadway, California Drive, has a designated Class III bike route south of Broadway and a Class II bike lane north of Broadway.</p>
<p><b>Grand Boulevard Multimodal Transportation Corridor Plan.</b> 5.2.2. Lane Narrowing Automobile travel lanes should be narrowed to the maximum extent feasible to accommodate multimodal transportation options.</p>	<p><b>Not Consistent.</b> This alternative would not change the existing configuration of the roadway. It does not include a narrowing of the traffic lanes for bike lanes.</p>	<p><b>Not Consistent.</b> This alternative would not change the existing configuration of the roadway. It does not include the narrowing of traffic lanes to include bike lanes</p>
<p><b>Draft San Mateo Countywide Bicycle and Pedestrian Plan, Policy 3.8:</b> Support multi-jurisdictional efforts and collaborations with state and regional agencies, including Caltrans, to improve safety for people walking and bicycling.</p>	<p><b>Not Consistent.</b> This alternative would not alter existing accommodations for bicyclists or pedestrians.</p>	<p><b>Consistent.</b> This alternative would upgrade existing pedestrian facilities to meet ADA standards on El Camino Real within the project limits, including installing APS and CPS systems at 20 intersections from Poplar Avenue to Millbrae Avenue to improve safety. Pedestrian hybrid beacons would also be installed at the intersections of Bellevue Avenue, Willow Avenue, and Palm Drive.</p>
<p><b>San Mateo County Comprehensive Bicycle and Pedestrian Plan, Policy 1.3:</b> Encourage and collaborate with Caltrans and local agencies to implement countywide priority facilities within their jurisdiction. In particular, encourage Caltrans to provide safe bicycle and pedestrian crossings of state highways in San Mateo County and local agencies to include bicycle and pedestrian projects in their capital improvement programs.</p>	<p><b>Not Consistent.</b> This alternative would not alter existing accommodations for bicyclists or pedestrians.</p>	<p><b>Consistent.</b> This alternative would upgrade existing pedestrian facilities to meet ADA standards on El Camino Real within the project limits, including installing APS and CPS systems at 20 intersections from Poplar Avenue to Millbrae Avenue to improve safety. Pedestrian hybrid beacons would also be installed at the intersections of Bellevue Avenue, Willow Avenue, and Palm Drive.</p>

Plan/Policy	No Build Alternative	Build Alternative
<p><b>City of San Mateo   Citywide Pedestrian Master Plan</b>, Policy 1.B.1: Identify opportunities to remove barriers, improve or add pedestrian crossings of US Highway 101, State Routes 82 (El Camino Real), State Route 92, the Caltrain railroad tracks, and major arterials.</p>	<p><b>Not Consistent.</b> This alternative would not upgrade or add pedestrian crossings.</p>	<p><b>Consistent.</b> This alternative would upgrade existing pedestrian facilities to meet ADA standards on El Camino Real within the project limits, including installing APS and CPS systems at 20 intersections from Poplar Avenue to Millbrae Avenue to improve safety. Pedestrian hybrid beacons would also be installed at the intersections of Bellevue Avenue, Willow Avenue, and Palm Drive.</p>
<p><b>City of San Mateo   Citywide Pedestrian Master Plan</b>, Goal 2: Safety. Improve pedestrian safety through the design and maintenance of sidewalks, streets, intersections, and other roadway improvements such as signage and lighting, and landscaping; as well as best practice programs to enhance and improve the overall pedestrian safety.</p>	<p><b>Not Consistent.</b> This alternative would not improve pedestrian safety.</p>	<p><b>Consistent.</b> This alternative would upgrade pedestrian facilities to meet ADA standards on El Camino Real, including installing APS and CPS systems at 20 intersections from Poplar Avenue to Millbrae Avenue to improve safety. Pedestrian hybrid beacons would also be installed at the intersections of Bellevue Avenue, Willow Avenue, and Palm Drive.</p>
<p><b>City of San Mateo   Citywide Pedestrian Master Plan</b>, Policy 2.B.1: Coordinate with Caltrans to provide median refuge islands on El Camino Real.</p>	<p><b>Somewhat Consistent.</b> This alternative would not include median refuge islands, though select pedestrian crossings on El Camino Real within the study area include median refuge islands.</p>	<p><b>Somewhat Consistent.</b> Inclusion of median refuge islands will be evaluated during final design and included where feasible within the project limits.</p>
<p><b>City of Burlingame Bicycle and Pedestrian Master Plan</b>, Policy 4: Design a connected, convenient, and comfortable pedestrian network to serve people of all ages and abilities.</p>	<p><b>Not Consistent.</b> This alternative would not upgrade or improve the pedestrian network.</p>	<p><b>Consistent.</b> This alternative would upgrade pedestrian facilities on El Camino Real, improving the pedestrian network.</p>

Based on the table above, the Build Alternative would be consistent or somewhat consistent with the majority of the policies applicable to the project.

### 3.1.1.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

### **3.1.2 Community Character and Cohesion**

#### **3.1.2.1 Regulatory Setting**

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). FHWA in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under 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.

#### **3.1.2.2 Affected Environment**

The project is in the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough in San Mateo County. The proposed project is unlikely to result in impacts to community cohesion within the cities of San Mateo, and Millbrae, and the Town of Hillsborough as the project proposes minor changes to pedestrian infrastructure, drainage facilities, and the existing roadway in these jurisdictions. Therefore, the study area pertinent to community character and cohesion is the City of Burlingame.

#### **Community Profile**

The City of Burlingame identifies itself as the 'City of Trees' (Clifford 2018). It is estimated that John McLaren, the landscape gardener that designed Golden Gate Park, planted 80 percent of the trees in the City of Burlingame. Three rows of those trees remain. As stated in Section 3.1.6, the Howard-Ralston Eucalyptus Tree Rows is entirely within the project limits and is listed on the NRHP. The Easton Drive Eucalyptus Tree Rows, a City Heritage Grove, is located on Easton Drive from El Camino Real to Vancouver Avenue. (One tree from the Easton Drive Eucalyptus Tree Rows is located within the limits of the project.) Lastly, there are two sections of trees that comprise the third tree rows including Parcel I (Jules Francard Grove) and Parcel II. The Parcel I (Jules Francard Grove) and Parcel II tree rows run parallel to the railroad tracks on California Drive between North Lane and Larkspur Drive. The Burlingame General Plan also notes four other historic resources listed on the NRHP including Burlingame Station, Kohl Mansion, Severn Lodge Dairy Wall Advertisement, and the William A. Whifler House. In addition, the Anza Expedition Camp Site is listed as a Historic Landmark and is commemorated by a plaque. The General Plan notes much of the City of Burlingame's charm comes from its historic character, which includes historic buildings and entire neighborhoods, as well as its distinguishing eucalyptus groves. It also notes the historic nature of the City contributes to creating neighborhoods that provide a cohesive historic fabric (Burlingame 2019a).

The City of Burlingame has a population of 30,459 with 12,029 households (Census 2018). The City of Burlingame was built for a working-class community. During the 20th Century, the City of Burlingame developed as a “quintessential commuter suburb”, and recently has been heavily influenced by the tech boom on the Peninsula (Burlingame 2019a). However, neither the population nor the availability of housing has increased dramatically which has resulted in a substantial rise in both the median home price and median rent. In addition, the highly regarded schools have attracted more families. The City of Burlingame has a higher proportion of both families with children and retirees than the surrounding San Mateo County. The City of Burlingame also has more rental units than the surrounding County. Half of the housing units are in multi-family structures and 53 percent of all housing units are renter-occupied (Burlingame 2019a).

Neighborhoods within the City of Burlingame that border the project limits including Downtown Burlingame, Burlingame Park, Burlingame Terrace, Easton Addition, Burlingame Grove, Ray Park, and Burlingame Village. The dominant land uses along El Camino Real within the project limits include low-and medium-density residential (e.g. single and multi-family housing), institutional uses (e.g. religious-based and schools), and commercial uses (e.g. neighborhood and regional). A majority of the El Camino Real corridor within the City of Burlingame includes single-family and multi-family residences. Burlingame Plaza, on El Camino Real between Trousdale Drive and Murchison Drive includes a wide variety of commercial establishments such as shopping centers, retail chain stores, restaurants, and medical offices. The existing local street patterns include sidewalks and transit stops. There are no designated lanes or routes for bicyclists on El Camino Real in the project limits.

Public facilities adjacent to the project limits include one school, four places of worship, and no parks. A U.S. Post Office is one block north of El Camino Real on Capuchino Avenue. The Millbrae Caltrain/BART station is just beyond the northern project limits.

The community recognized the importance of El Camino Real to the City of Burlingame and created the El Camino Real Task Force in 2017 to bring together community representatives and members with differing perspectives on the roadway and nearby resources (as described in Section 1.2).

Community cohesion is the degree to which residents have a sense of belonging to their neighborhood, a level of commitment of the residents to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Historic resources promote a strong sense of community cohesion, especially for populations that have lived in the area for a long time. Schools, churches, and sidewalks are locations that allow a community to come together and create cohesion. Within the project limits, sidewalks are frequently narrow and broken. Narrow or damaged sidewalks detract from a sense of cohesion for pedestrians along El Camino Real within the City of Burlingame, as compared to other sections of the city that feature more complete pedestrian facilities.



### **3.1.2.3 Environmental Consequences**

#### **No Build Alternative**

With the No Build Alternative, community character and cohesion would remain unchanged within the project limits. The character-defining historic resources would remain unchanged, except as noted in Section 2.1.2.

#### **Build Alternative**

The Build Alternative (either with or without inclusion of the design option) would not require the permanent acquisition of new right-of-way. Therefore, implementation of the Build Alternative would not result in the displacement of residences, businesses, or community facilities; nor would it result in the physical division of neighborhoods, change social patterns, or impede access to neighborhoods or community facilities for those living in, working in, and visiting the project study area.

The Build Alternative includes features that have the potential to improve the existing community character and cohesion. Upgrades to existing pedestrian infrastructure along El Camino Real in the project limits have the potential to create improved physical space for community cohesion and provide infrastructure for community interactions.

Project construction would require the removal of trees along El Camino Real within the project limits. This has the potential to substantially affect the look and feel of El Camino Real (described further in Section 3.1.5.3) and substantially affect the character defining features of the Howard-Ralston Eucalyptus Tree Rows (described further in Section 3.1.6.3).

Each member of the community is likely to respond differently to the removal of these trees. Responses are likely driven by many personal factors including how long the individual (or individual's family) has resided in the area, how close they live to the project limits, and how frequently they interact with the trees.

It is expected that overall, the removal of trees within the project limits and the associated changes to visual character and historic character would result in a moderate, temporary change to community character and cohesion. Replacement plantings will help the City of Burlingame retain the nickname of "the City of Trees."

#### **3.1.2.4 Avoidance, Minimization, and/or Mitigation Measures**

The mitigation measures listed in Sections 3.1.5.4 and 3.1.6.4 would address the physical impacts from the removal of trees within the project limits by requiring a replanting plan developed in consultation with the SHPO.

### 3.1.3 Environmental Justice

#### 3.1.3.1 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 2020, this was \$26,500 for a family of four. Minority is defined by Caltrans as any member of the following groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black; or Hispanic (Caltrans 2011).

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. Caltrans' 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 B of this document.

#### 3.1.3.2 Affected Environment

In order to determine the presence of environmental justice communities of concern that have the potential to be affected by the project, the environmental justice analysis includes the Census Block Groups that border the project limits. Block groups are divisions of Census tracts that are delineated by local or regional organizations and usually consist of a cluster of several blocks. For the environmental justice analysis, the study area block groups are compared to the city each block group is in (i.e. reference area). Data for the analysis was derived from the US Census Bureau, American Community Survey 5-year Estimates (2014-2018).

Caltrans identifies a community as an environmental justice community if it meets one or both of the following criteria:

- The minority population exceeds 50 percent or is meaningfully greater (e.g., more than 10 percentage points) than the minority population percentage in the general population or other appropriate unit of geographic analysis (e.g., the county overlapping the study area); or
- The low-income population comprises more than 25 percent or is meaningfully greater (e.g., more than 10 percentage points) than the low-income population percentage in the general population or other appropriate unit of geographic analysis (e.g., the county overlapping the study area).

There are 21 block groups that border the project limits. Eight block groups meet at least one of the criteria that identifies it as an environmental justice community. The results are shown in Table 3.1.3-1.

**Table 3.1.3-1: Summary of Race, Ethnicity, and Poverty Status in the Study Area and Reference Areas**

Geography	Hispanic (of any race)	Black or African American	Native American and Alaska Native Alone	Asian	Native Hawaiian/Pacific Islander	Total White, Non-Hispanic	Total Minority*	Below Poverty Level
<i>San Mateo County (reference population)</i>	24.7%	2.3%	0.4%	28.1%	1.4%	39.6%	60.4%	7.0%
<b>CT 6044, BG 3</b>	15.1%	0.9%	0.5%	53.0%	0.0%	28.9%	<b>71.1%</b>	7.4%
<b>CT 6050, BG 1</b>	14.5%	4.9%	0.0%	46.1%	0.6%	27.8%	<b>72.2%</b>	5.3%
<b>CT 6050, BG 2</b>	13.6%	0.0%	0.0%	16.1%	0.0%	70.3%	29.7%	<b>19.4%</b>
CT 6051, BG 1	6.6%	3.2%	0.0%	12.7%	0.0%	56.3%	43.7%	1.3%
CT 6051, BG 2	16.7%	0.8%	0.0%	25.0%	0.0%	53.9%	46.1%	12.6%
<b>CT 6052, BG 1</b>	6.6%	2.3%	0.0%	35.2%	0.0%	49.9%	<b>50.1%</b>	0.0%
CT 6052, BG 2	3.9%	0.0%	0.1%	20.0%	1.1%	68.3%	31.7%	4.4%
CT 6053, BG 2	13.5%	0.7%	0.0%	24.4%	0.0%	57.9%	42.1%	10.0%
CT 6053, BG 3	10.6%	0.9%	0.0%	21.7%	0.0%	60.4%	39.6%	10.3%
CT 6053, BG 4	1.3%	0.0%	0.0%	22.2%	0.0%	70.8%	29.2%	7.1%
CT 6055, BG 1	20.3%	1.6%	0.5%	18.2%	0.0%	58.7%	41.3%	5.0%
<b>CT 6055, BG 2</b>	19.8%	0.0%	0.0%	35.0%	0.0%	37.4%	<b>62.6%</b>	5.6%
<b>CT 6055, BG 3</b>	26.3%	7.3%	0.0%	22.2%	0.0%	40.5%	<b>59.5%</b>	1.9%
CT 6056, BG 1	4.1%	0.0%	0.0%	19.0%	0.0%	72.0%	28.0%	2.0%
CT 6056, BG 2	3.0%	0.0%	1.0%	11.3%	0.0%	82.2%	17.8%	0.0%
CT 6058, BG 1	10.9%	0.0%	0.0%	21.6%	0.0%	66.3%	33.7%	5.2%
<b>CT 6058, BG 2</b>	6.7%	2.0%	0.0%	14.4%	0.0%	71.4%	28.6%	0.0%

Geography	Hispanic (of any race)	Black or African American	Native American and Alaska Native Alone	Asian	Native Hawaiian/ Pacific Islander	Total White, Non- Hispanic	Total Minority*	Below Poverty Level
CT 6059, BG 1	14.8%	2.5%	1.4%	21.7%	1.2%	53.4%	46.6%	7.6%
<b>CT 6059, BG 2</b>	21.3%	0.0%	0.0%	22.5%	1.4%	49.3%	<b>50.7%</b>	6.4%
<b>CT 6059, BG 3</b>	21.1%	1.1%	0.0%	30.0%	0.4%	39.1%	<b>60.9%</b>	8.7%
CT 6064, BG 1	11.2%	0.0%	0.0%	23.6%	0.0%	59.0%	41.0%	2.0%

**Notes:** \*Minority is the sum of all U.S. Census reported groups except White, Non-Hispanic.

CT – Census Tract, BG – Block Group, *Italics* – Reference population, **Bold** – Meets at least one of the criteria of an environmental justice community

**Source:** Census 2020

### 3.1.3.3 Environmental Consequences

#### **No Build Alternative**

The No Build Alternative does not include any changes to the existing roadway within the project limits. Therefore, there would be no potential effects to environmental justice communities adjacent to the project limits.

#### **Build Alternative**

Environmental justice communities were identified in the cities of San Mateo, Burlingame, and Millbrae. From south to north, the sections of the project limits that abut either minority or low-income communities include the northbound side of El Camino Real from East Santa Inez Avenue to East Bellevue Avenue (CT 6059 BG3 and CT 6059 BG 2), both sides of El Camino Real from Peninsula Avenue to just past Floribunda Avenue (CT 6055 BG 3 and CT 6055 BG 2), and the southbound side of El Camino Real from Hillsdale Drive to Millbrae Avenue (CT 6052 BG 1, CT 6050 BG 2, CT 6050 BG 1, and CT 6044 BG 3). These block groups are shown in Figure 3.1.3-1.

The Build Alternative (either with or without inclusion of the design option) would upgrade the sidewalks and pedestrian infrastructure, drainage infrastructure, and roadway throughout the project limits. Neither the design of the Build Alternative nor the resulting improvements vary significantly among the portions of the project limits that abut environmental justice communities nor the portions of the project limits that abut non-environmental justice communities. Therefore, potential adverse effects of the project would not disproportionately affect minority and low-income populations; the environmental justice communities would experience the same improvements and the same level of construction-related effects as non-environmental justice communities within the project limits.

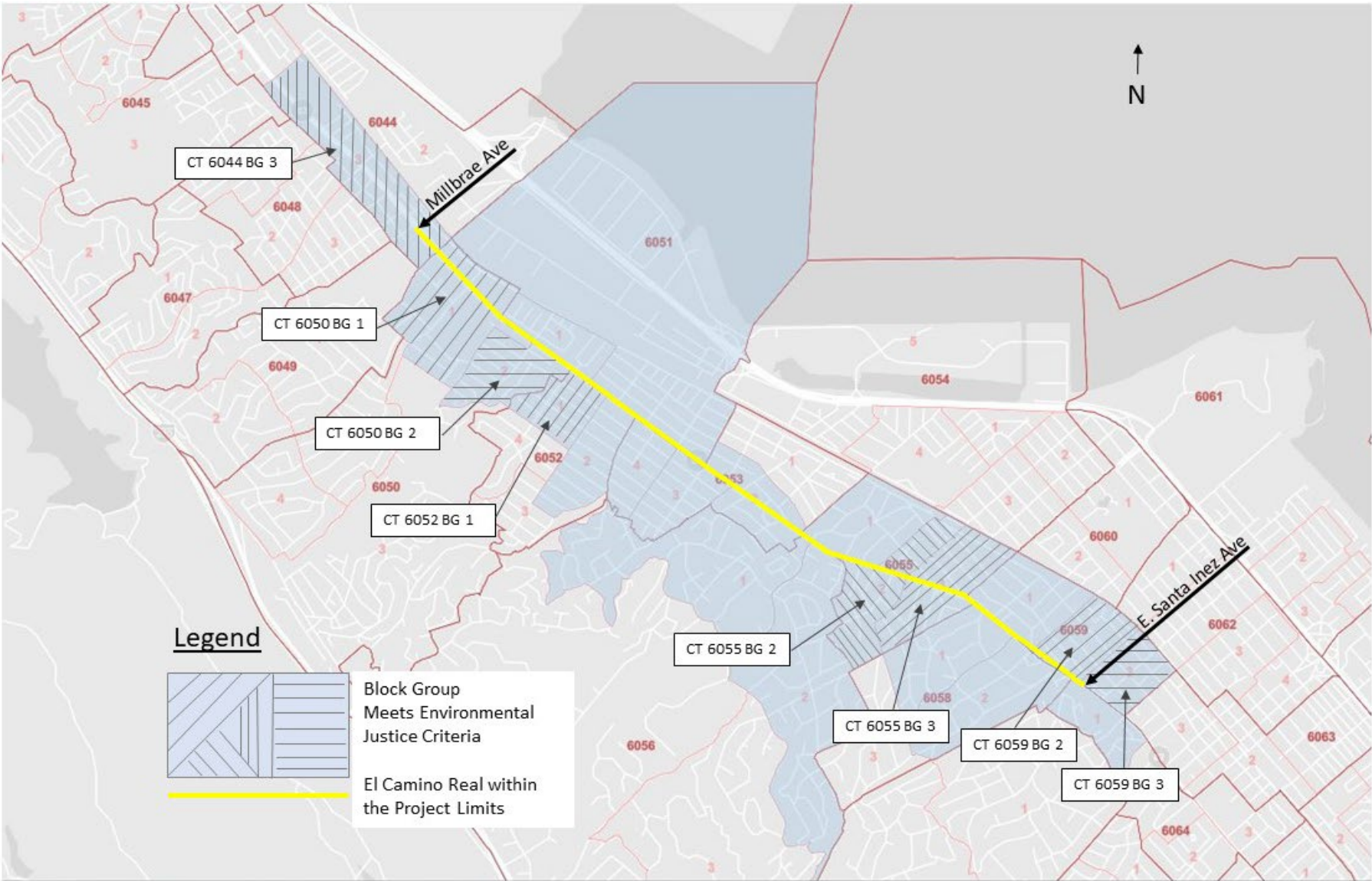


Figure 3.1.3-1: Map of Census Block Groups in the Study Area

#### **3.1.3.4 Avoidance, Minimization, and/or Mitigation Measures**

Based on the above discussion and analysis, the Build Alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

### **3.1.4 Utilities/Emergency Services**

#### **3.1.4.1 Affected Environment**

Utilities and service systems found within the project limits include water, wastewater, solid waste, electric, natural gas, and telecommunications. Water service is provided by San Francisco Public Utilities Commission. Wastewater service is provided by City of San Mateo Department of Public Works, Burlingame Sanitary District, and the Millbrae Public Works. Solid waste, organics, and recycling providers include Recology San Mateo County and South San Francisco Scavenger Company. Electricity and natural gas are provided by PG&E. Telecommunications providers include Comcast, Astound, Peninsula TV, AT&T, Verizon, T-Mobile, and Metro PCS.

Police protection and traffic enforcement services in the project limits are provided by California Highway Patrol Golden Gate Division, City of Burlingame Police Department, City of San Mateo Police Department, and San Mateo County Sheriff. Fire protection and emergency medical services are provided by Central County Fire Department and San Mateo Fire Department.

#### **3.1.4.2 Environmental Consequences**

##### **No Build Alternative**

As the No Build Alternative would not result in changes to El Camino Real, it would not require utility relocations or construction activities that could interfere with the provision of emergency services.

##### **Build Alternative**

The Build Alternative (either with or without inclusion of the design option) would require the temporary relocation of some PG&E overhead electrical lines and poles. All utility poles would be reconstructed in similar locations conforming to the reconstructed roadway during the final phases of construction. Any telecommunications services that are co-located on utility poles would be temporarily relocated/restored as well. The relocations may result in short-term, temporary interruptions of service. Final verification of utilities would be performed during the project's detailed design phase, and Caltrans would coordinate with the affected utility owner to minimize potential interruptions of service.

With the inclusion of the design option to underground utilities, overhead electrical lines and telecommunications services would be temporarily relocated during construction then placed under the roadway from Barroilhet Avenue (PM 12.9) to Ray Drive/Rosedale Avenue (PM 15.2) in the City of Burlingame. The relocations may result in short-term, temporary interruptions of service. Final verification of utilities would be performed during the project's detailed design phase, and any needed relocations would be coordinated with the affected utility owner to minimize potential interruptions of service. No impacts to water service are anticipated.

Temporary lane closures on El Camino Real would be required to construct the Build Alternative, which could affect emergency service providers. During final design, a TMP will be developed for the project to minimize construction-related delays and inconvenience to emergency service providers, transit providers, residents, and the traveling public. The TMP will include input from the jurisdictions along the project corridor and emergency service providers;

notification to emergency service providers, transit operators, and the public of lane closures; coordination with CHP and local law enforcement on contingency plans; and specifications for using portable changeable message signs and the CHP Construction Zone Enhanced Enforcement Program where possible to minimize delays. This will ensure that no emergency services would be adversely affected during construction of the project.

Law enforcement, fire, and emergency services would be maintained during project construction. The project is not expected to result in decreased response times.

Based on the above, the Build Alternative would not result in long-term effects on utilities or emergency services.

#### **3.1.4.3 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.



### 3.1.5 Visual/Aesthetics

#### 3.1.5.1 Regulatory Setting

The NEPA of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, FHWA, in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The 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]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

#### 3.1.5.2 Affected Environment

##### **Fundamentals of Visual Impact Assessments**

The information presented in this section is from the Visual Impact Assessment (VIA) and Supplemental VIA for the project completed in February 2021 (Caltrans 2021a, Caltrans 2021f). The terminology and methodology used within the VIA are based on the *Visual Impact Assessment for Highway Projects* guidelines (FHWA 1981).

This analysis focuses on the degree of resource change of the visual resources within the project corridor before and after the construction of the proposed project, related to visual character and visual quality. Resource change is one of the two major variables in the equation that determines visual impacts. The other variable is viewer response.

Both natural and created features in a landscape contribute to its visual character. The basic elements that comprise the visual character of landscape features include form, line, color, texture, dominance, scale, diversity, and continuity.

Criteria for evaluating visual quality include the concepts of vividness, intactness, and unity, as defined below (FHWA 1981):

- “Vividness” is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
- “Intactness” is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- “Unity” is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and is a combination of viewer exposure and viewer sensitivity. Two general types of viewers are considered, those with views to the project and those with views from the project. Viewer exposure depends on the number of viewers, the frequency and duration of views, and proximity of viewers to the project. Visual sensitivity is affected by viewer activity, awareness, and local values or expectations. If the viewer group values aesthetics in general or a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes.

### **Existing Visual Resources**

#### **Visual Character**

The project is located along flat land and is approximately 0.6 mile (at the closest point) west of San Francisco Bay. Land use adjacent to the project limits consists of moderately dense, low-rise development, and thus is contained within a single visual assessment unit. The outsized scale of the historic eucalyptus trees (i.e., the Howard-Ralston Eucalyptus Tree Rows) along both sides of El Camino Real dominates the visual experience of the corridor. The tree trunks are several feet in diameter and are over 100 feet tall. Eucalyptus trees have a light-colored trunk with peeling bark, which contrasts strongly with the canopy high overhead composed of elongated, medium-green leaves. El Camino Real is lined with trees along most of the project limits, but the visual mass of the large eucalyptus trees is very different from that of younger street trees that have been planted more recently.

There are approximately 700 trees lining both sides of El Camino Real within the project limits. There are approximately 600 trees along El Camino Real between Peninsula Avenue and Ray Drive (the limits of the Howard-Ralston Eucalyptus Tree Rows). Approximately 390 of these contribute to the historic Howard-Ralston Eucalyptus Tree Rows listed on the NRHP. In addition to the contrast in scale between the large eucalyptus and smaller, newer trees, the visual appearance of these trees varies greatly. The trees include both evergreen and deciduous species of different forms, sizes, and ages. The condition of the trees is also variable and visually apparent, with many trees exhibiting signs of compromised health and structure.

Within the City of Burlingame, there is a relatively narrow roadway cross-section, which contrasts with a wider roadway cross-section in the cities of Millbrae and San Mateo. The wider sections have been altered over time to accommodate increased traffic. The narrow roadway width and large trees together create a sense of enclosure and intimacy within the project limits in the City of Burlingame that is absent in other portions of the project limits.

Throughout much of the project limits, existing development limits distant views to the roadway ahead, and this is most pronounced where the massive, tall historic trees limit the horizon view to a narrow sliver in the distance. In contrast, the horizon view opens up at wider intersections, particularly where commercial development is fronted by parking lots. While the oldest trees within the project limits were planted in the late 1800s, development has occurred over several decades, resulting in a rich diversity of architectural styles and associated ages of landscaping. This diversity is enhanced by the varying residential, commercial, religious, and civic land uses that border El Camino Real in the project limits. El Camino Real within the project limits is not designated as a State Scenic Highway.

### **Visual Quality**

The historic Howard-Ralston Eucalyptus Tree Rows establish a high degree of vividness as a group and as individual specimens. The degree to which they are out of scale with even the largest of typical street trees is immediately compelling and memorable.

Intactness of the corridor is moderate. The visual features are typical of a suburban environment with a mix of mostly residential and some low-rise shopping areas. Utilities, traffic lights, street signs, and other infrastructure are all consistent with this type of environment. The strong presence and maturity of the street trees throughout most of the corridor supports the feeling of intactness.

The incremental nature of development in the corridor has influenced the unity of the setting. Buildings of different scales and architectural styles are located side by side, with 1920s single family residences sometimes adjacent to 1960s three-story multi-family residences. These factors tend to detract from unity, and intactness, to a lesser extent. Unity is also affected by other conditions including tree spacing and gaps within the Howard-Ralston Eucalyptus Tree Rows, and a somewhat haphazard assortment of trees within the project limits. Spacing between the trees varies from less than five feet to over 100 feet due to driveways, utilities and attrition of older trees over time. Large trees have been replaced with new, smaller trees, and various other tree species have been planted at different times as infill within the rows of street trees. The large eucalyptus trees are the primary element tying the visual setting together and are largely responsible for the degree of cohesiveness it does have.

### **Viewer Response**

Regular commuters travel through the project corridor daily in relatively high numbers. Much of the daytime traffic is light to moderate and the speed limit is 35 mph. Traffic can be heavy during commute hours, substantially slowing vehicle travel. This results in moderate to moderate-high exposure of these viewers to the project viewshed (the views that can be seen from the project limits or of the project limits). Commercial truck drivers have infrequent to frequent exposure to the project viewshed. Pedestrians within the project limits are predominantly residents, less numerous than vehicular travelers but with frequent exposure at slow speeds. Taken together, these viewers have a moderate to high exposure to the project viewshed.

Residents and commercial occupants along the roadway corridor have daily exposure for long hours. These viewers have a high level of exposure to the project viewshed.

The Howard-Ralston Eucalyptus Tree Rows are widely known and valued in the broader community due to their striking appearance and historic status. As noted in Section 3.1.2, within the City of Burlingame, the Howard-Ralston Eucalyptus Tree Rows are a source of pride and identity. The trees were planted in the 1870s to promote development along the corridor through beautification of the roadway. There is a history of protecting the Howard-Ralston Eucalyptus Tree Rows dating back to 1908. Notably, the City of Burlingame passed the first of its kind zoning ordinance in 1930, restricting commercial development along El Camino Real to protect the Howard-Ralston Eucalyptus Tree Rows (now encompassed with City Zoning Code Section 25.40.040, which requires minimum 15- to 20-foot setbacks for properties along El Camino Real, including 5-foot-diameter tree wells). Additionally, the City of Burlingame designated the

portion of the Howard-Ralston Eucalyptus Tree Rows within their city limits as a “Heritage Grove” in 1975, and the San Mateo Sites Committee has designated the Howard-Ralston Eucalyptus Tree Rows within the City of Burlingame as a “Point of Historic Significance.” The Howard-Ralston Eucalyptus Tree Rows are listed on the NRHP.

As noted in Section 1.2, the high level of sensitivity to potential changes to the Howard-Ralston Eucalyptus Tree Rows led to the formation of a Task Force in 2017 prior to the beginning of this project. The Task force explored opportunities for improving the safety of the roadway and sidewalks while retaining the character and health of “The Grove”. Their study evaluated expected construction impacts to the Howard-Ralston Eucalyptus Tree Rows and the potential for minimizing these impacts where feasible. Ultimately, the Task Force provided recommendations that addressed correcting functional and safety deficiencies, avoiding impacts to existing trees, maximizing replacement planting of trees unavoidably impacted, and improving pedestrians' sense of comfort and safety.

The long history of efforts to protect the Howard-Ralston Eucalyptus Tree Rows and the character of El Camino Real demonstrates viewers' extremely high sensitivity to changes affecting these resources.

### **Key Views**

Visual assessment units of an area are well-defined "outdoor rooms" with their own visual character and visual quality. It's not feasible to analyze every view of a project. Key views within visual assessment units are identified from publicly accessible places with representative views of the project limits or views to particular areas of interest within the project limits to capture existing visual resources and assess proposed changes. Figure 3.1.5-1 shows the locations and directions of the key views with the project limits. The following key views were considered:

- Key View 1 – south of the Hillside Drive/El Camino Real intersection, looking south on El Camino Real.
- Key View 2 – south of the Forest View Avenue/El Camino Real intersection, looking south on El Camino Real.
- Key View 3 – south of the Carol Avenue/El Camino Real intersection, looking south on El Camino Real.

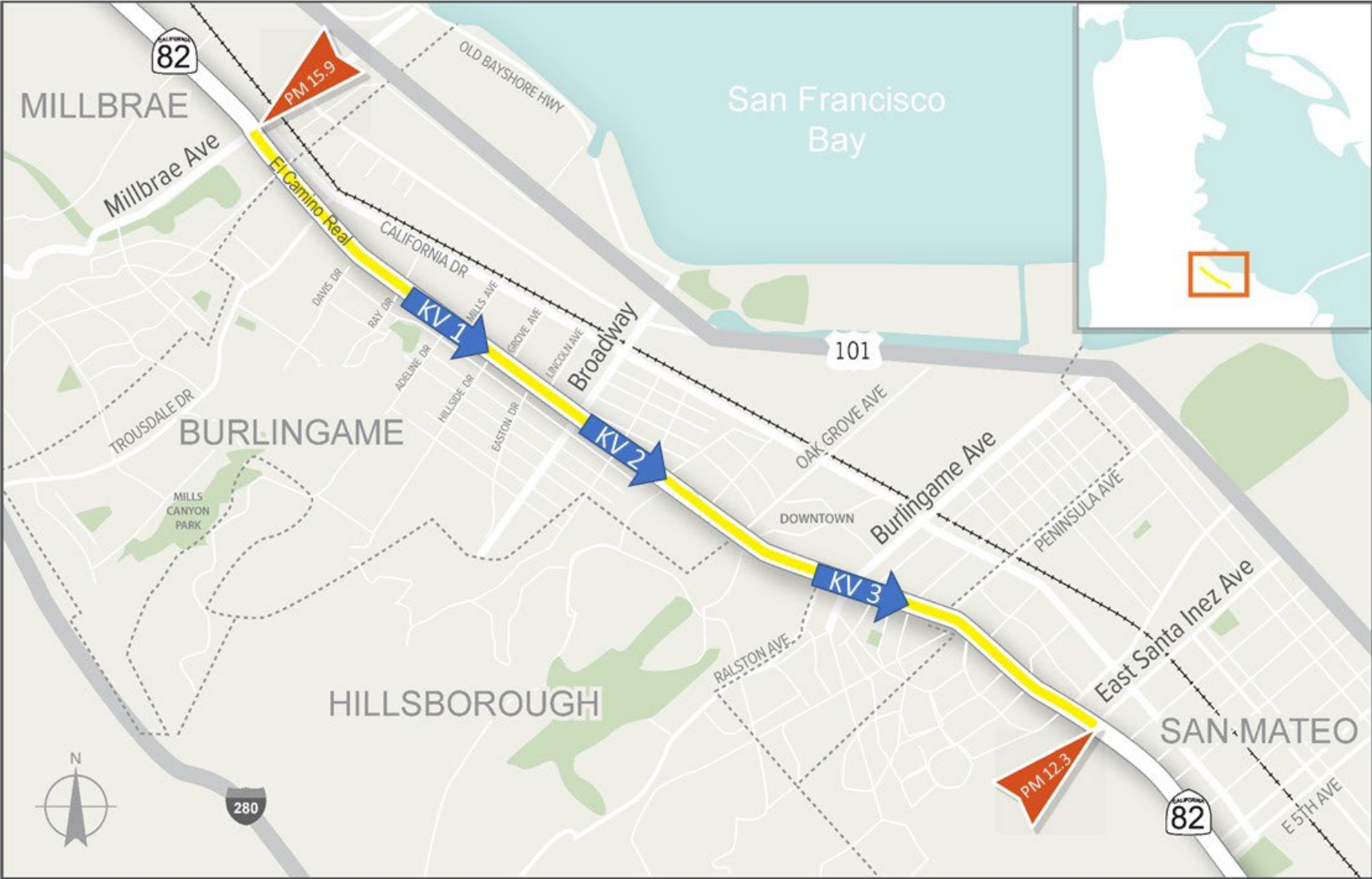


Figure 3.1.5-1: Key Viewpoints



Key View 1 demonstrates the tree-lined character of this portion of the project limits. There are a diversity of tree species and forms in Key View 1 with both moderate-sized sycamores in the foreground and taller evergreens and eucalyptus in the middle and background. The visual mass of the trees creates a feeling of enclosure and limits long distance views. Both the regular spacing of trees and continuous canopy add to the unity of the visual setting and provide a visual screen between adjacent buildings and the roadway environment. Overhead utilities and utility poles are hidden within the mass of tree trunks and canopy. While not immediately obvious, the condition of the sidewalks and roadway surface slightly detract from the visual quality. Figure 3.1.5-2 shows the existing conditions at Key View 1.



**Figure 3.1.5-2: Key View 1 Existing Condition**

Key view 2 (Figure 3.1.5-3) demonstrates the tree-lined character of this portion of the project corridor and the prominence of the century-old eucalyptus trees in the visual experience. The visual mass of the extremely large eucalyptus trees creates a feeling of enclosure, limits the view of the sky, masks the visual clutter of overhead utilities, and provides a visual screen between adjacent buildings and the roadway environment. Both the tight spacing of trees and continuous canopy enhance vividness and unity, tying the visual setting together and creating a strong sense of cohesiveness. While not immediately obvious, the condition of the sidewalks, roadway surface, and retaining walls slightly detract from the visual quality.



**Figure 3.1.5-3: Key View 2 Existing Condition**



Key View 3 (Figure 3.1.5-4) demonstrates the tree-lined character of El Camino Real and the prominence of the century-old eucalyptus trees in the visual experience. Even adjacent to the relatively larger two- to three-story multi-family residential buildings shown in Key View 3, the trees remain dominant. The visual mass of the extremely large eucalyptus trees creates a feeling of enclosure and limits long-distance views. Both the regular spacing of trees and continuous canopy enhance vividness and unity, tying the visual setting together and creating an improved sense of cohesiveness. While not immediately obvious, the condition of the sidewalks and roadway surface slightly detract from the visual quality.



**Figure 3.1.5-4: Key View 3 Existing Condition**

### **3.1.5.3 Environmental Consequences**

#### **No Build Alternative**

No near-term resource changes would result from the No Build Alternative. However, as the older trees reach the end of their lifespan and maintenance repairs are implemented to maintain traffic operations and pedestrian accessibility, it is expected that trees would still require incremental removal under the No Build Alternative. Per Caltrans' agreement with the SHPO, historic trees that require removal would continue to be replaced with elm trees.

For the purposes of this analysis, Figures 3.1.5-2 through 3.1.5-4 also represent the No Build Alternative.



## **Build Alternative**

### **Overall Viewer Response**

Overall viewer response is anticipated to be high for changes that impact the mature Howard-Ralston Eucalyptus Tree Rows. A large segment of the Howard-Ralston Eucalyptus Tree Rows is locally recognized and protected in addition to being listed in the NRHP. Changes to the roadway that do not involve removing historic trees are anticipated to have a much lower viewer response.

### **Overall Resource Change**

The Build Alternative would reconstruct roadway, sidewalks, driveways, curb and gutter, curb ramps, and low retaining walls. Drainage inlets and other below ground drainage facilities would be replaced. Replacement of existing features at or below ground do not typically affect visual character or quality. However, as the condition of the roadway and sidewalks is deteriorated, it is expected that these changes would enhance the project corridor's visual quality along with its functionality.

The Build Alternative would also replace pedestrian crossing signals, including APS and CPS throughout the project limits and install pedestrian hybrid beacons at the intersections of Bellevue Avenue, Willow Avenue, and Palm Drive. While these are above ground elements, they are typical features of local streets and are already present within the project limits. As such they would not contribute to resource change.

The primary visual change from the Build Alternative would result from the removal of existing street trees. The construction required to rehabilitate the roadway, sidewalk, and drainage involves extensive excavation within the root systems of existing mature trees making preservation efforts challenging. The large, older trees are the defining feature of this corridor and are primarily responsible for its visual character and quality. Removal of an estimated 300 to 350 trees would result in a high level of resource change.

### **Key View 1 Viewer Response**

At this Key View, roadway users are expected to have moderate to moderate-high sensitivity and neighbors are expected to have moderate-high to high sensitivity to changes. The rows of mature trees within this view are expected to have value to both roadway users and neighbors. However, the different ages, sizes, and types of trees make it less vivid than portions of the project corridor where the older, extremely large eucalyptus rows are more intact. Sensitivity is considered moderate to moderate-high. As most roadway travelers use the corridor regularly on their work or school commutes and on local trips, exposure is moderate to moderate-high for roadway users. Roadway neighbors who live and work in this area would have high exposure. The overall level of viewer response for this key view is moderate-high.

### **Key View 1 Resource Change**

With the Build Alternative, most of the trees in Key View 1 would require removal in order to replace drainage infrastructure along the southbound side of El Camino Real and to reconstruct driveways on the northbound side. The loss of these trees would change the visual setting notably by dramatically altering the tree-lined character and cohesiveness of the view. While the existing roadway configuration and width would be retained, the view would become more open and the intimate feeling would be diminished due to the removal of the double rows of large

trees and the loss of their enclosing canopy in the foreground. Utility lines and poles would be more visible revealing visual clutter. Figure 3.1.5-5 shows this Key View 20 years after project completion. Replacement trees that would be planted with implementation of the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 are simulated in this figure as well.

Replanted street trees would help to restore the visual character and quality seen in the existing condition. However, their much smaller scale post-construction and reduced number of trees would not reestablish the same visual quality as the No Build Alternative. Current restrictions on tree planting adjacent to utility poles and underneath power lines limit the potential number of replacement trees and their mature size along the southbound side of the roadway (as noted in the *Replanting Plan* in Appendix F). Since trees cannot be planted within 10 feet of a utility pole, and trees underneath power lines must not reach a height over 25 feet at maturity, the visual character and quality would not fully be restored even over time. By locating the sidewalk at the curb near the intersection as shown along the southbound side of the roadway, corner sight distance would be maintained, and tree replanting would be maximized. Beyond the required area of clear sight distance, the sidewalk would meander back to its existing location behind the planting strip to provide a buffer between pedestrians and traffic. New roadway surfaces and sidewalks would improve visual quality to some degree. The overall level of resource change would be moderate-high to high post construction and moderate-high 20 years after construction.



**Figure 3.1.5-5: Key View 1 with Build Alternative (+20 years)**

#### **Key View 2 Viewer Response**

At this Key View, both roadway users and neighbors are expected to have high sensitivity to changes because views are distinctive and memorable. Exposure is moderate to moderate-high

for roadway users as most roadway travelers use El Camino Real regularly for work or school commutes and local trips. Roadway neighbors who live and work in this area would have high exposure. The overall level of viewer response for Key View 2 is high.

### **Key View 2 Resource Change**

With the Build Alternative, most of the trees within Key View 2 would require removal in order to replace crumbling retaining walls along both sides of El Camino Real that are within state right-of-way (as described in Section 2.1.1.2). The loss of these trees would change the visual setting dramatically. While the existing roadway configuration and width would be retained, the view would become more open and the intimate feeling for highway users, and privacy enjoyed by highway neighbors would be diminished due to removal of the large trees and the loss of the enclosing canopy. Utility lines and poles would become more visible revealing visual clutter. A new pedestrian hybrid beacon would also be visible in the distance at the Palm Drive pedestrian crossing. Figure 3.1.5-6 shows this key view 20 years after project completion. Replacement trees that would be planted with implementation of the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 are simulated in this figure as well.

Replacement trees help to restore the tree-lined character and cohesiveness of the view. However, their much smaller scale post-construction and reduced number does not have the same visual quality as the No Build Alternative with its rows of towering, mature trees. In this Key View, since all of the trees require removal, replacement trees can be placed in between the roadway and sidewalk, creating a buffer from traffic for pedestrians.

As noted for Key View 1, current restrictions on tree planting adjacent to utility poles and underneath power lines limit the number of replacement trees as well as their mature size along the southbound side of the roadway. While taller tree species may be planted on the northbound side, shorter tree species would need to be planted on the southbound side. Even over time, the stature of the replacement trees on the southbound side of the roadway would never approach that of the No Build Alternative. New roadway surfaces, sidewalks, and retaining walls improve visual quality to some degree. The overall level of resource change is high post construction. Twenty years after construction, the replacement trees would reduce the level of resource change to moderate-high as their canopies increase in size and begin to enclose the roadway.



**Figure 3.1.5-6: Key View 2 with Build Alternative (+20 years)**

### **Key View 3 Viewer Response**

Both roadway users and neighbors are expected to have high sensitivity to changes at Key View 3 due to its distinctiveness and memorability. Exposure is moderate to moderate-high for roadway users as most roadway travelers use El Camino Real regularly for work or school commutes and local trips. Roadway neighbors who live and work in this area would have high exposure. The overall level of viewer response for Key View 3 is high.

### **Key View 3 Resource Change**

With the Build Alternative, many trees visible in Key View 3, primarily along the northbound side of El Camino Real, would be removed in order to replace sidewalks, driveways, and the curb and gutter. While the existing roadway configuration and width would be retained, the view would become more open and the intimate feeling would be diminished due to the removal of the large trees and the loss of their enclosing and screening canopy. This would be more pronounced in Key View 3 due to the larger scale of the buildings and the greater setback to the front of the buildings along northbound El Camino Real. The retention of some large, mature trees along the southbound side of El Camino Real would help to maintain a degree of character and quality, and utility lines and poles would remain mostly hidden in the tree canopy. Figure 3.1.5-7 shows this key view 20 years after project completion. Replacement trees that would be planted with implementation of the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 are simulated in this figure as well.

Replacement trees would help to further restore the tree-lined character and cohesiveness of the view. However, the much smaller scale of the trees post-construction and the reduced number of



potential trees planted due to sight distance requirements would not have the same visual quality as the No Build Alternative. New roadway surfaces and sidewalks would improve visual quality to some degree. Future replacement trees on southbound El Camino Real would be limited in size and number due to utility restrictions. The overall level of resource change would be moderate-high to high post construction. Twenty years after construction the level of resource change would still be considered moderate-high.



**Figure 3.1.5-7: Key View 3 with Build Alternative (+20 years)**

#### **Build Alternative with Design Option**

As described in Section 2.1.1.1, a design option is being evaluated for the project that would underground all overhead utilities between Barroilhet Avenue (PM 12.9) and Ray Drive/Rosedale Avenue (PM 15.2) in the City of Burlingame. This design option would not change the quantity or location of trees that would be removed for the Build Alternative. However, it would change the potential species, size, and quantity of replacement plantings included in the mitigation measures listed in Section 3.1.5.4. As noted in Appendix F, implementation of the design option would result in a 30 percent increase in the number of replacement trees.

#### **Key View 1 Resource Change**

Inclusion of the design option in this view would both improve unity, by reducing visual clutter and would allow more space for replacement tree planting. Replacement trees would help to restore the tree-lined character and cohesiveness of the view. Post-construction, the replacement trees under the design option would still be of a much smaller scale and would result in lower visual quality. However, over time the replacement trees would reach a stature similar to the No

Build Alternative. This design option would also allow for more trees to be replanted. The overall level of resource change would be moderate-high post-construction and moderate-low 20 years after construction. Figure 3.1.5-8 shows this key view 20 years after project completion with the design option incorporated. Replacement trees that would be planted with implementation of the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 are simulated in this figure as well.



**Figure 3.1.5-8: Key View 1 with Build Alternative and Design Option (+20 years)**

### **Key View 2 Resource Change**

Inclusion of the design option in this view would both improve unity, by reducing visual clutter and allow for the planting of a higher quantity and larger species of replacement trees. Trees replaced in similar numbers to those being removed would help to restore the tree-lined character and cohesiveness of the view. Figure 3.1.5-9 shows this key view 20 years after project completion with the design option incorporated. Replacement trees that would be planted with implementation of the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 are simulated in this figure as well.

Figure 3.1.5-9 shows eucalyptus trees on the northbound side, and elm and other varieties on the southbound side. The elms, with their smaller trunk size, would provide greater visibility for driveway users, and allow for a greater number of replacement trees to be placed in the planted buffer. Elms and other species would have different visual qualities from the No Build Alternative but would still contribute to the visual quality of this view. Post-construction, the replacement trees under the design option would still be of a much smaller scale and would result in lower visual quality. However, the replacement trees that are possible along the southbound



side of the street with the design option would bring visual quality closer to the No Build Alternative as the trees mature. The overall level of resource change would be high post construction. Twenty years after construction, the replacement trees would reduce the level of resource change to moderate as their canopies increase in size and begin to enclose the roadway creating a screen between adjacent buildings and the roadway environment.



**Figure 3.1.5-9: Key View 2 with Build Alternative and Design Option (+20 years)**

### **Key View 3 Resource Change**

In the near-term, the inclusion of the design option would have a nominal effect on visual character and quality since the overhead utilities would be largely hidden in the canopies of the retained trees. Over time as these older trees near the end of their lifespan and require replacement, the absence of the overhead utilities would result in less visual clutter. Trees being replaced in similar numbers to those being removed would help to restore the tree-lined character and cohesiveness of this key view. Post-construction, the replacement trees under the design option would still be of a much smaller scale and would result in lower visual quality. However, the replacement tree species that are possible with the design option would reach a large stature at maturity, bringing visual quality closer to the No Build Alternative as the trees mature. Without the restrictions of overhead utilities, these large-statured species could continue to be replanted in the future when the older trees need to be removed. Figure 3.1.5-10 shows this key view 20 years after project completion with the design option incorporated. Replacement trees that would be planted with implementation of the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 are simulated in this figure as well. The overall level of resource change would be moderate-high to high post construction. Twenty years after

construction, the replacement trees would reduce the level of resource change to moderate as their canopies increase in size and begin to enclose the roadway.



**Figure 3.1.5-10: Key View 3 with Build Alternative and Design Option (+20 years)**

**Visual Impact**

Resource change among the key views is a factor of the amount of tree removal at each location, the character and quality of the trees removed, the pattern of removal, and adequate space available to replace them. Viewer response is moderate-high to high across the key views and contributes to higher levels of effects to visual resources overall. Table 3.1.5-1 summarizes the effects of the Build Alternative both without and with the inclusion of the design option on the three key views identified for the project. Figure 3.1.5-11 includes a summary of Figures 3.1.5-5 through 3.1.5-10.

**Table 3.1.5-1: Effects Summary**

Key View	Visual Impact with Build Alternative (+20 years)	Visual Impact with Build Alternative and Design Option (+20 years)
1	Moderate-High	Moderate
2	High	Moderate-High
3	High	Moderate-High



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Figure 3.1.5-11: Summary of Key Views 1 through 3: Existing Conditions; with Build Alternative(+20 years); and with Design Option (+20 years)



Key View 1: Existing Condition



Key View 1: Build Alternative (+20 years)



Key View 1: Build Alternative with Design Option (+20 years)



Key View 2: Existing Condition



Key View 2: Build Alternative (+20 years)



Key View 2: Build Alternative with Design Option (+20 years)





Key View 3: Existing Condition



Key View 3: Build Alternative (+20 years)



Key View 3: Build Alternative with Design Option (+20 years)

#### 3.1.5.4 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and mitigation measures are required for the Build Alternative (with and without the design option). Additional details about determining replacement plantings are provided in the *Replanting Plan* in Appendix F.

**VIS-1.** The following minimization measures will be incorporated into the final design and construction of the project to minimize effects to trees:

- Design modifications including but not limited to sidewalk meanders around tree trunks, sidewalk ramping over tree roots, and adjustment of driveway conforms to sidewalks and the roadway will be implemented where feasible.
- Alternative construction practices including but not limited to hand excavation around structural roots and trenchless drilling will be implemented where feasible.
- Trees and vegetation outside of clearing and grubbing limits shall be protected from construction operations, equipment, and materials storage.
- Soils within planting areas shall be protected from construction operations, equipment, and materials storage to maintain suitable growing conditions for existing and replacement street trees. Protective measures shall include avoiding compaction and introduction of materials inconducive to plant growth. Corrective amendments and treatments will be used if planting area soils are damaged during construction.

**VIS-2.** Following completion of roadway construction, replacement street trees shall be planted in roadside areas of the right-of-way consistent with horticultural and maintenance guidelines and safety and sight distance standards. Removed vegetation will be replaced at a 1:1 ratio provided there is adequate space within the roadside areas of the project limits within Caltrans right-of-way. Replacement planting species and size will be determined during final design.

**VIS-3.** A permanent irrigation system for replacement plantings will be specified during final design and installed prior to replacement street tree planting within the limits of the Howard-Ralston Eucalyptus Tree Rows.

**VIS-4.** A three-year plant establishment period will be specified during final design and implemented immediately following construction of planting and irrigation systems. The three-year plant establishment period will be implemented in accordance with Section 20-4 of the standard specification.

**VIS-5.** A 20-year management plan shall be prepared in consultation with a certified consulting arborist and shall prescribe methods for the long-term care of both retained trees and replacement trees within the limits of the Howard-Ralston Eucalyptus Tree Rows, in order to ensure the sustained health and viability of the trees within the Tree Rows.

### 3.1.6 Cultural Resources

#### 3.1.6.1 Regulatory Setting

The term “cultural resources,” as used in this document, refers to the “built environment” (e.g., structures, bridges, railroads, water conveyance systems, etc.), 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 dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and Caltrans went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the “use” of land from historic properties. See Appendix A for specific information about Section 4(f).

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). 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 NRHP listing criteria. It further requires Caltrans 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 Caltrans and the 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.

### **3.1.6.2 Affected Environment**

The following cultural resource reports have been completed for the project: Archaeological Survey Report (ASR) (Caltrans 2019), Historic Resources Evaluation Report (HRER) (Caltrans and AECOM 2020), Extended Phase I (XPI) Report (Alta Archaeological Consulting 2020), Historic Property Survey Report (HPSR) (Caltrans 2020c), and Supplemental HPSR (Caltrans 2021b).

#### **Defining the Area of Potential Effects**

The study area for cultural resources is the Area of Potential Effects (APE), which encompasses all areas within the physical footprint of the improvements proposed for the Build Alternative as well as areas that may either be directly or indirectly affected by project construction activities.

The archaeological APE consists of the existing Caltrans right-of-way and all properties where TCEs are proposed. The architectural APE encompasses the archaeological APE and generally includes the entirety of the parcels where TCEs are proposed.

The vertical APE represents the maximum vertical extent of project-related activities. The vertical APE extends from the ground surface to a depth of 15 feet, the maximum proposed depth for signal pole foundations.

#### **Records and Archival Review**

A cultural resources records search was conducted by the Northwest Information Center of the California Historical Resources Information System, at California State University, Sonoma, for the APE and a 0.5-mile radius. Reports for previous studies were reviewed for each APE plus a 0.5-mile radius. Other standard cultural resource inventories and references were also reviewed, including the NRHP, CRHR, California State Historical Landmarks, California Points of Historic Interest, Burlingame Historical Society, Burlingame Building Department, San Mateo Building Department, the Burlingame Public Library, the California State Library in Sacramento, recorded maps on file with the San Mateo County Assessor, historic newspapers and journals, historic Sanborn Fire Insurance maps, historic aerial photography, primary texts, and academic works.

In addition, previous reports prepared for Caltrans within the APE were reviewed including reports for the Proposed Widening of State Highway 82 in the Town of Hillsborough, San Mateo County and reports for the Floribunda Avenue Intersection Safety Improvement Project along El Camino Real in San Mateo County (Kostura 1999, Clementino 2014). The NRHP nomination for the Howard-Ralston Eucalyptus Tree Rows of the Burlingame Historical Society (Pfaff 2011) also was reviewed.

Three archaeological resources were recorded within the archaeological APE. None of these resources has been evaluated formally for eligibility to the NRHP or the CRHR.



Within the architectural APE, there are 178 resources that had either been previously identified or are more than 45 years old and have been evaluated for this project.

### **Field Surveys**

Accessible portions of the archaeological APE were surveyed by archaeologists between September and October 2019. Although most of the APE is paved and landscaped with rocky material, there were several landscaping strips and gardens with observable soil. Several of these landscaped areas exhibited fragmented shell. Shell deposits consisted primarily of oyster with a low proportion of clam. A large swath of a park south of Rosedale Avenue at the north side of the APE was observed carefully but no cultural materials were found in this area.

Additionally, an Extended Phase 1 field investigation was conducted to identify potential buried cultural deposits of three archaeological resources previously recorded within the archaeological APE. A total of 27 cores were excavated. However, the results determined that these areas do not appear to be highly or very highly sensitive for buried archaeology, as previously mapped (Blake 2019). No intact archaeological materials were identified within the project limits. Extended Phase 1 field investigations determined the three previously identified archaeological resources are not present within the project APE.

Built resources within the architectural APE were surveyed by architectural historians in November 2019 and January 2020 from the state right-of-way.

### **Native American Consultation**

The NAHC was contacted on July 25, 2019, to request a search of the Sacred Lands File for cultural resources of significance to Native Americans within or near the APE.

The NAHC responded on July 30, 2019, reporting negative search results. The NAHC provided a list of Native American parties and individuals with potential interest in the project and their contact information. Letters providing project information and requesting input were sent to each individual and organization on the list on August 1, 2019. Follow-up calls were conducted on November 6, 2019, and the following is a summary of the responses from the calls:

- Ms. Irenne Zwierlein of the Amah Mutsun Tribal Band of Mission San Juan Bautista expressed interest in providing monitoring services should any further archaeological work be conducted for this project.
- Ms. Ann Marie Sayers of the Indian Canyon Mutsun Band of Costanoan recommended that archaeological and Native American monitors be present for any ground disturbing work and would like to be kept informed of studies and scheduling.
- Mr. Andrew Galvan of the Ohlone Indian Tribe identified the project area as one of high cultural sensitivity and recommended monitoring of ground-disturbing activities.

All the above individuals were provided with information regarding a public information meeting on December 11, 2019. Those individuals on the NAHC list who have not responded were emailed information about the meeting. No other responses were received.

Consultation among the Native American parties and individuals and Caltrans is ongoing.

### **Community Consultation**

Caltrans District 4 conducted the public participation and interested parties' outreach for this project. Caltrans identified potential local interested parties and sent notification letters to the following organizations:

- Burlingame Historical Society (August 1, 2019)
- Burlingame Planning Department (August 1, 2019)
- Burlingame Planning Commission (September 9, 2019)
- Cultural Landscape Foundation (September 9, 2019)
- California Garden & Landscape History Society (September 9, 2019)
- Town of Hillsborough (August 1, 2019)
- San Mateo Planning Department (August 1, 2019)
- Millbrae Historical Society (January 8, 2020)
- San Mateo County Historical Society (August 1, 2019)

A summary of the responses received are below:

- The Cultural Landscape Foundation would like to review the draft environmental document for the project when it becomes available.
- The California Garden & Landscape History Society responded that the organization did not have any comments on the project.
- San Mateo Planning Department responded that the Saint Joseph Parish at 770 N. El Camino Real located within the APE for the project is an informal community landmark.
- Jennifer Pfaff, President of the Burlingame Historical Society, initially responded in August 2019 and consultation is ongoing with the organization regarding the project. Ms. Pfaff has assisted with background research of the materials held within the Burlingame Historic Society archives.
- The Millbrae Historical Society responded with no concerns.
- A public information meeting/open house was held at the Burlingame Recreation Center on January 28, 2020. A virtual open house scoping comment period website was posted online for 45 days from the May 26, 2020 to July 6, 2020.

### **SHPO Consultation**

Consultation with the SHPO was initiated on March 11, 2020, with an in-person meeting with Natalie Lindquist and Lucinda Woodward of the California Office of Historic Preservation (OHP) and the following Caltrans staff: Frances Schierenbeck, Senior Environmental Planner, Caltrans District 4 Office of Cultural Resources Studies (OCRS); Christopher Caputo, Office



Chief, OCRS; and David Price, Section 106 Coordinator, Caltrans Cultural Studies Office (CSO) - Sacramento. Caltrans sent results of cultural resource studies to the SHPO on August 4, 2020, for concurrence on the Determination of Eligibility of cultural resources in the APE for the NRHP; no response was received. Because 30 days for comment had passed, per stipulation VIII.C.6a of the January 2014 PA, on October 15, 2020, Caltrans sent the SHPO a Notice of Moving Forward without SHPO concurrence on its Determination of Eligibility for the SM 82 ADA and Rehabilitation Improvements Project (EA 0K810, EFIS 046000142).

**Cultural Resources within the APE**

There are 32 historic resources within the APE. Twenty-eight resources are historic properties subject to Section 106 of NHPA: one resource that is currently listed on the NRHP; two resources that were previously determined eligible for listing on the NRHP; and 25 resources that have been determined eligible for listing on the NRHP as a result of the analysis for this project. One of these resources, the Easton Drive Eucalyptus Tree Rows, was not included in the original APE nor was it evaluated for the NRHP in the initial studies. Caltrans D4 OCRS requested and received permission from CSO on February 16, 2021, to assume the resource eligible for the NRHP under Criteria C for the purposes of the undertaking as outlined under Stipulation VIII.C.4 of the January 2014 PA. Four additional resources are historical resources for the purposes of CEQA only. The 32 historic resources are listed in Table 3.1.6-1 and further described below.

One additional resource in the APE, California Historical Landmark No. 48: Anza Expedition Camp, does not meet the CRHR criteria outlined in PRC 5024.1 and is not considered a historical resource under CEQA, per CEQA guidelines 15064.5, nor is it subject to Section 106 of the NRHP.

Due to the similar age and style of many of the buildings, a preliminary analysis of the APE was done to determine if there was a potentially a historic district. Although there are NRHP eligible and listed cultural resources within the APE, there are not enough eligible buildings nor cohesiveness with regards to the locations of the buildings to make a district.

**Table 3.1.6-1: Historic Properties in the APE**

<b>Name Address</b>	<b>NRHP Eligibility / Criteria<sup>1</sup></b>	<b>Period of Significance<sup>2</sup></b>
Howard-Ralston Eucalyptus Tree Rows NRHP #12000127	Listed in NRHP / A and C	1873 to 1930
Easton Drive Eucalyptus Tree Rows	Eligible for NRHP / C	1873 to 1876
Adeline Apartments 1479 El Camino Real, Burlingame	Eligible for NRHP / C	1958
1265 El Camino Real, Burlingame	Eligible for NRHP / A and C	1938; 1946
The El Camino 1136 El Camino Real, Burlingame	Eligible for NRHP / C	1928
La Solana 1124 El Camino Real, Burlingame	Eligible for NRHP / C	1930
1045 El Camino Real, Burlingame	Eligible for NRHP / C	1936
1041 El Camino Real, Burlingame	Eligible for NRHP / A	1924
El Rey Apartments 1021 El Camino Real, Burlingame	Eligible for NRHP / C	1931
1501 Forest View Avenue, Burlingame	Eligible for NRHP / C	1931
New Life Community Church 1430 Palm Drive, Burlingame	Eligible for NRHP / C; Criterion Consideration A	1930 to 1950
Russian Church of All Saints 744 El Camino Real, Burlingame	Eligible for NRHP / C; Criterion Consideration A	1963
Arcamino West 1515 Arc Way, Burlingame	Eligible for NRHP / A and C	1961 to 1964
Sharon Estate Speculative House / Newlands Estate 1615 Floribunda Avenue, Hillsborough	Eligible for NRHP / A and C	1893 to 1940s
Sharon Estate Speculative House / A. Page Brown Cottage 50 Kammerer Court, Hillsborough	Eligible for NRHP / A and C	1893 to 1940s
The Viking 500 El Camino Real, Burlingame	Eligible for NRHP / C	1958
St. Paul's Episcopal Church Complex 415 El Camino Real, Burlingame	Eligible for NRHP / B and C; Criterion Consideration A	1936 to 1953
Former office and residence of Dr. A.L. Lachman 405 El Camino Real, Burlingame	Eligible for NRHP / C	Circa 1934
Burlingame Towers 1469 Bellevue Avenue, Burlingame	Eligible for NRHP / A and C	1962
Burlingame United Methodist Church 1443 Howard Avenue, Burlingame	Eligible for NRHP / C; Criterion Consideration A	1925 to 1952
120 El Camino Real, Burlingame	Eligible for NRHP / C	1929
90 El Camino Real, Burlingame	Eligible for NRHP / C	1963
15 Park Road, Burlingame	Eligible for NRHP / C	1928
The Carol 55 El Camino Real, Burlingame	Eligible for NRHP / C	1961
1500-1504 Barroilhet Avenue, Burlingame	Eligible for NRHP / C	1922
St. Joseph Parish 770 N. El Camino Real, San Mateo	Eligible for NRHP / C; Criteria Considerations A and B	Circa 1870
Two Clark Drive Apartments 2 Clark Drive, San Mateo	Eligible for NRHP / C	1961
Royal Pines Apartments 525 N. El Camino Real, San Mateo	Eligible for NRHP / C	1959
El Camino Real Bell Guideposts	N/A: CEQA Only Resource	N/A

Name Address	NRHP Eligibility / Criteria <sup>1</sup>	Period of Significance <sup>2</sup>
The Marquis Apartments 1439 El Camino Real, Burlingame	N/A: CEQA Only Resource	1962
Hillside Manor 1500 Hillside Drive, Burlingame	N/A: CEQA Only Resource	1964
1246 El Camino Real, Burlingame	N/A: CEQA Only Resource	1929

Notes:

1. NRHP Criteria:

- A: Associated with events that have made a significant contribution to the broad patterns of our history.
- B: Associated with the lives of persons significant in our past.
- C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

NRHP Criteria Considerations

- A: Associated with events that have made a significant contribution to the broad patterns of our history.
- B: Associated with the lives of persons significant in our past.
- C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- D: A cemetery which derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.
- E: A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.
- F: A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.
- G: A property achieving significance within the past 50 years if it is of exceptional importance.

2. All resources listed are significant at the local level.

### Howard-Ralston Eucalyptus Tree Rows, Burlingame and Hillsborough

The Howard-Ralston Eucalyptus Tree Rows along El Camino Real in the City of Burlingame and the Town of Hillsborough is listed in the NRHP (NRHP #12000127) and is a Caltrans-owned resource on the Master List of Historical Resources per PRC 5024. The Howard-Ralston Eucalyptus Tree Rows is listed under NRHP Criterion A for its association with the founding of the City of Burlingame and Town of Hillsborough and under Criterion C as an excellent example of master landscape gardener John McLaren’s early work. The period of significance for the Howard-Ralston Eucalyptus Tree Rows is 1873, the first year the trees were planted, to 1930, when voters elected officials to create zoning restrictions to prohibit commercial development along El Camino Real/SR 82 to save the Howard-Ralston Eucalyptus Tree Rows. The Howard-Ralston Eucalyptus Tree Rows begin at Peninsula Avenue (PM 12.3) and end at Ray Drive/Rosedale Avenue (PM 15.9). The Howard-Ralston Eucalyptus Tree Rows today consist of 390 trees, 252 of which are original trees (238 eucalyptus, 14 elms) and 138 are new replacement elm trees.

### Easton Drive Eucalyptus Tree Rows, Burlingame

The Easton Drive Eucalyptus Tree Rows, between El Camino Real and Vancouver Avenue in the City of Burlingame, is assumed eligible for the NRHP under Criterion C as an excellent example of master landscape gardener John McLaren’s early work. The period of significance for the Easton Drive Eucalyptus Tree Rows is 1873 to 1876 when the trees were planted.

### 1479 El Camino Real, Burlingame

The Adeline Apartments at 1479 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as a rare surviving example of Dingbat architecture that retains a high level of historic integrity and as an important local example of a

multi-story, multi-family building designed by Danish-born architect Mogens Mogensen, American Institute of Architects (AIA). Its period of significance is 1958. The boundary of the property is its legal parcel. The character-defining features are its footprint and form, scale and massing, flat roof, stone veneer façade, Adeline Apartments signage, vertical wood pilasters and projecting wood trellis, cantilevered wood frame balconies and railings, concrete terrace with low stone wall/planter along the facade, and yucca trees within the setback of the property.

#### **1265 El Camino Real, Burlingame**

This property consists of a Monterey style apartment house constructed in 1938, a Minimal Traditional Stucco Box-type ancillary building with Monterey style details constructed in 1946, and associated landscaping at 1265 El Camino Real, Burlingame. The property is eligible for inclusion in the NRHP at the local level of significance under Criterion A as an excellent example of 1930s and post-war multi-family residential development along El Camino Real in the City of Burlingame and under Criterion C as an excellent example of a Monterey style apartment house constructed in 1938 with a relatively high-style Minimal Traditional Stucco Box-type ancillary building with Monterey style details, and their associated landscaping.

The deep setback of the apartment house from El Camino Real with the curved driveway, lawn, and ornamental plantings is a rare feature for properties along the busy transportation corridor and serves as a stark visual contrast to the densely built-up surroundings. Overall, the property retains a high level of historic integrity to its periods of significance (1938 and 1946). The character-defining features of this property are the footprint and form; small scale and massing of the apartment house and the ancillary building; the location of the ancillary building behind the apartment house; and the deep setback of the apartment house from El Camino Real with the curved driveway, lawn, and ornamental plantings. Character-defining features of the apartment house are the symmetrical façade with a centrally located entry; horizontal wood board and wood shingle siding; entry with five-light double doors between full-height, decorative wood shutters and crowned by a simple cornice; façade bays; two wood-frame Monterey style balconies and French doors that access them; and the octagonal and narrow, three-light wood frame casements on the façade. Character-defining features of the ancillary building is the stucco siding; original multi-light casement, double-hung and fixed wood windows flanked by decorative wood shutters; metal balconet; cantilevered upper story with decorative wood braces; Spanish tile recessed central entry; gable-roofed porches; and original overhead tilt-up wood garage doors.

#### **1136 El Camino Real, Burlingame**

The El Camino apartment house at 1136 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an excellent example of 1920s/1930s Revival style suburban apartment house architecture in the City of Burlingame. Its period of significance is 1928. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, thick stucco siding, Mission style parapet with red tile on the two-story bay on the façade, wood frame casement windows, metal balconets, and the external chimney on the façade

#### **1124 El Camino Real, Burlingame**

La Solana apartment house at 1124 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an excellent example of 1920s/1930s Revival style suburban apartment house architecture in the City of Burlingame.

Its period of significance is 1930. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, thick stucco siding, red tile roof, two-story bays with decorative angles wood brackets, wood frame casement windows, balconies, and the integrated garage with vertical wood plank doors with small metal grilles.

#### **1045 El Camino Real, Burlingame**

The apartment house at 1045 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an excellent example of 1920s/1930s European Eclectic style suburban apartment house architecture in the City of Burlingame. Its period of significance is 1936. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form; scale and massing; stucco siding with quoins on the first floor of the façade; pent roof; Flemish ends and brick chimneys; circular, arched, and spade-shaped wood windows with fixed and casement operation; metal balconets; and decorative metal grilles on the third-story circular windows. The carport at the rear of the property is not a character-defining feature, nor is the landscaping along the façade of the apartment house.

#### **1041 El Camino Real, Burlingame**

The Craftsman Bungalow single-family residence at 1041 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion A as a rare, surviving example of early single-family residential development along El Camino Real in the City of Burlingame. The deep setback of the house from El Camino Real and the mature trees in the front yard are rare features for properties along the busy transportation corridor and serve as a stark visual contrast to the densely built-up surroundings. The period of significance is 1924. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, small scale and massing, horizontal wood board and wood shingle siding, gable roof porch, row of tall sash windows in the sunroom, deep setback from the street, mature trees and landscaping in the front yard, and wood picket fence.

#### **1021 El Camino Real, Burlingame**

El Rey Apartments at 1021 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an excellent example of 1920s/1930s Spanish Revival style suburban apartment house architecture in the City of Burlingame. Its period of significance is 1931. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, troweled stucco siding, multi-pane wood casements with transoms and wood sashes, French doors, decorative iron window grilles, oriel window with red clay barrel roof tiles, and clay tiles that accent other roof sections, Plateresque door surround, arched wall openings, and integrated parking on the ground level with arched vehicular opening. The carport, which was constructed between 1949 and 1956, and the landscaping are not character-defining features of the apartment house.

#### **1501 Forest View Avenue, Burlingame**

The apartment house at 1501 Forest View Avenue, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an excellent example of 1920s/1930s Revival and Classical style suburban apartment house architecture in the City of Burlingame. Its period of significance is 1931. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, symmetrical façade, thick stucco siding, flat roof with parapet with pent sections clad in red clay tiles along

the façade, simplified pilasters with decorative Classical-inspired corbels, flat roof porch hood with cornices sheltering the entrance, multi-pane wood front door with arched multi-pane sidelights, and wood frame windows. The detached carport and the landscaping planted within the setback from Forest View Avenue are not character-defining features.

#### **1430 Palm Drive, Burlingame**

New Life Community Church at 1430 Palm Drive, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an important example of Spanish Colonial Revival architecture in the City of Burlingame designed by master architectural firm Willis Polk & Company. The period of significance is 1930 to 1950. The boundaries of the property are its legal parcel. The character-defining features are the hand troweled stucco exterior, offset four-story tower with arcaded windows at the top of the tower, Spanish clay tile roof, large rose-style window divided by floral petals above the main entry, Neo-Gothic style coping below the roof eave in the tower and gable front of the school, arched wood doors, decorative columns, arched metal windows and triple, rectangular, divided-light metal casement windows throughout. The building also meets NRHP Criterion Consideration A.

#### **744 El Camino Real, Burlingame**

Russian Church of All Saints at 744 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as a rare example of Russian-influenced architecture in the City of Burlingame constructed in the 1960s. The period of significance is 1963. The boundaries of the property are its legal parcel. The character-defining features are its massing, smooth stucco exterior with recessed arches, onion domes on corner towers and central tower capped with Orthodox crosses, exterior murals, decorative main entrance doors, and low-sloped gable rooflines with wide overhangs. The perimeter fence built in 1967 is not a character-defining feature. The building also meets NRHP Criterion Consideration A.

#### **1515 Arc Way, Burlingame**

The Arcamino West apartment building at 1515 Arc Way, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion A for its contribution to the broad patterns of Burlingame history. The building is associated with the local fight against high-rise apartments in residential areas along El Camino Real, which ultimately prevented further high-rise apartment tower development along the corridor. It is also eligible for inclusion in the NRHP at the local level of significance under Criterion C as a rare example of New Formalism multi-family residential architecture in the City of Burlingame. Its period of significance is 1961 to 1964. The boundaries of the property are its legal parcel. The character-defining features are the full-height recessed arches on the exterior, the heavy flat roof, the first-story parking with units above, the exterior lanai balconies with solid panels visually connected with vertical supports, and the parabolic canopy to the lobby entrance.

#### **1615 Floribunda Avenue, Hillsborough**

The Sharon Estate Speculative House/Newlands Estate, 1615 Floribunda Avenue, Hillsborough, was determined eligible for inclusion in the NRHP at the local level of significance under both Criterion A for its association with the planning and development of the Town of Hillsborough and the City of Burlingame and Criterion C for residential architecture and the work of a master, A. Page Brown. Its period of significance is 1893 to the 1940s. The boundaries of the property

are its legal parcel. Previous recordations did not identify character-defining features of the residence. However, they appear to be its footprint and form; cross-gable and gable roof dormers on the symmetrical façade; verge boards in the gables; smooth stucco siding with half-timbering; second-story balustrade on the façade; curved knee-brackets; wood framed casement and double-hung windows, some with diamond-pane leaded glass; and oriel windows next to the primary entry door. Curvilinear half-timbering added in the 1990s, a two-story addition at the rear, and a garage addition are not character-defining features of the property.

#### **50 Kammerer Court, Hillsborough**

The Sharon Estate Speculative House/A. Page Brown Cottage, 50 Kammerer Court, Hillsborough, was determined eligible for inclusion in the NRHP at the local level of significance under both Criterion A for its association with the planning and development of the Town of Hillsborough and the City of Burlingame and Criterion C for residential architecture and the work of a master, A. Page Brown. Its period of significance is 1893 to the 1940s. The boundaries of the property are its legal parcel. Previous recordations did not identify character-defining features of the residence. However, they appear to be its footprint and form; cross-gable roofs; symmetrical façade; boards in the gables; smooth stucco siding with half-timbering; wood framed casement, double-hung, and arched windows, some with diamond-pane leaded glass; and single-story glass-enclosed porch on the west end. The modern gate entry is not a character-defining feature. Caltrans Office of Cultural Resources identified character-defining and non-character-defining features of the property in 1999 as: “The dirt path at the north boundary of the property and the adjacent modern-era wall are not contributors to its historic significance; neither is the modern gate at the Kammerer Court entrance to the property (Kostura 1999). The eucalyptus trees on El Camino Real were planted before the house was built, and contribute to its historic setting, but do so in a minor way, as they are separated from the house by the modern-era wall.”

#### **500 El Camino Real, Burlingame**

The Viking apartment building at 500 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an important local example of a multi-story, multi-family building designed by Danish-born architect Mogens Mogensen. Its period of significance is 1958. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, tuck-under parking, stepped-height building sections, flat roofs, wood frame curtain walls with plastic laminate panels and windows, tile entry wall, board-and-batten entry wall, and sculptural dingbat. The landscaping on the property is not a character-defining feature.

#### **415 El Camino Real, Burlingame**

The religious buildings on the St. Paul’s Episcopal Church complex at 415 El Camino Real, Burlingame, are eligible for inclusion in the NRHP at the local level under both Criteria B and C as a rare example of Late Gothic Revival architecture in the City of Burlingame. The period of significance is 1936 to 1953. The boundary of the historical resources are the footprints of the religious buildings. The character-defining features are the footprint and form, scale and massing, scored stucco exteriors to mimic stone, steeply pitched roofs with parapets and slate tiles, the three-story steeple church tower with pinnacles and battlements, buttresses, stained-glass lancet windows with traceries, stained-glass rose window, heavy wood door entrances, multi-light windows, toothed quoins, and window crowns. The building at 405 El Camino Real

within the legal parcel of church property was acquired in 1960 and is not a character-defining feature of, or a contributor to, the historical resource. Neither the landscaping within the parcel boundary nor the trees in the El Camino Real right-of-way are character-defining features. The complex also meets NRHP Criterion Consideration A.

#### **405 El Camino Real, Burlingame**

The former office and residence of Dr. A.L. Lachman at 405 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level under Criterion C as a rare surviving example of 1930s Colonial Revival commercial architecture in the City of Burlingame. The period of significance is circa 1934. The boundaries of the property are the footprint of the building. The character-defining features are its footprint and form, scale and massing, stucco siding, cross-gable roof system, two small gable-roof dormers with vents, symmetrical façade with the arched porch hood, wood frame casement windows, and flat roof porches with paired pilasters and plain cornices on the façade. The use of the building changed in 1960 from a doctor's office and residence to the Nursey School for St. Paul's Episcopal Church, so it no longer retains integrity of association, but it retains sufficient physical features to convey its significance.

#### **1469 Bellevue Avenue, Burlingame**

The Burlingame Towers high-rise apartment building at 1469 Bellevue Avenue, Burlingame is eligible for inclusion in the NRHP at the local level of significance under Criterion A for its contribution to the broad patterns of Burlingame history. The building is associated with the local fight against high-rise apartments in residential areas along El Camino Real, which ultimately prevented further high-rise apartment tower development along the corridor. It is also eligible for inclusion in the NRHP at the local level of significance under Criterion C as a rare example of high-rise apartment tower construction in the City of Burlingame. Burlingame Towers is the only apartment building that was granted a height variance over four stories and is also the tallest building in the City of Burlingame. Its period of significance is 1962. The boundaries of the property are its legal parcel. The character-defining features are its location on El Camino Real, rectangular footprint, eight stories and parking area, cantilevered balconies, curtain wall system with aluminum frame windows sets and spandrels, and decorative concrete screen block in the north tower and parking area.

#### **1443 Howard Avenue, Burlingame**

The Burlingame United Methodist Church complex at 1443 Howard Avenue, Burlingame, is eligible for inclusion in the NRHP at the local level under Criterion C as a rare example of 1920s Romanesque Revival religious architecture in the City of Burlingame. The period of significance is 1925 to 1952. The boundaries of the historical resources are the footprints of the religious buildings. The character-defining features are the smooth stucco exterior, Spanish tile roof, arcaded corbel table below the roof lines, tall central tower/dome, round stained-glass window in the gable end, heavy wood door entrances, decorative doorways, arched doorways and windows, multi-light windows, and massing. The complex also meets NRHP Criterion Consideration A.

#### **120 El Camino Real, Burlingame**

The former County Road Garage at 120 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level under Criterion C because it is a good example of 1920s Mission Revival commercial automotive architecture that retains a high level of historic integrity. The



period of significance is 1929. The boundaries of the property are the footprint of the building. The character-defining features are its footprint and form, scale and massing, hump-and-bump troweled stucco pattern on the façade, Mission Revival shaped parapet on the façade, two window openings on the façade, and overhead garage door flanked by four large multi-light metal frame windows. A detached residence on the parcel is not a character-defining feature of the property.

#### **90 El Camino Real, Burlingame**

The office building at 90 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an important local example of a commercial building designed by Danish-born architect Mogens Mogensen. Its period of significance is 1963. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, floating foundation with subterranean parking, flat roof with wide overhang and a tall, plastic-paneled cornice, parabolic shaped roof vent, vertical grooved plywood siding, and aluminum frame windows with blue mosaic panels below, and light-green tile entry wall and planter.

#### **15 Park Road, Burlingame**

The apartment house at 15 Park Road, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an excellent example of 1920s to 1930s Spanish Revival style suburban apartment house architecture in the City of Burlingame. Its period of significance is 1928. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, troweled stucco siding, flat roof with tile coping, Mission style parapet with red tile on the southeast elevation, recessed main entrance under the parapet, red tile gable roofs on façade and rear elevations, applied decorative tile in the parapet and gable roof projections, multi-light metal frame casement windows throughout, metal balconet in parapet projection, wood balconies, multi-light glazed wood balcony doors, single-light glazed wood doors, integrated garage with wood panel doors, decorative metal grilles on ground level windows, and full-height stuccoed chimney.

#### **55 El Camino Real, Burlingame**

The Carol at 55 El Camino Real, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an important local example of a multi-story, multi-family building designed by Danish-born architect Mogens Mogensen. Its period of significance is 1961. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, subterranean parking, flat roof with wide boxed overhangs, walls clad with vertical grooved plywood siding, aluminum-frame curtain walls with fixed and one-over-one sash windows sets with two sizes and two colors of blue plastic laminate panels. The landscaping on the property is not a character-defining feature of the building.

#### **1500-1504 Barroilhet Avenue, Burlingame**

The duplex at 1500-1504 Barroilhet Avenue, Burlingame, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as a rare, surviving example of low-density multi-family housing. The property appears to be one of the few remaining of this building type and period that fully embodies the high-quality, early 1920s Revival style residential architecture in the City of Burlingame. The duplex exhibits high artistic value through a combination of Spanish Revival and Italian Renaissance Revival details. Its period of significance is 1922. The

boundaries of the property are its legal parcel. The character-defining features of the duplex are its U-shaped footprint and form, scale and massing, stucco siding, tall water table, symmetrical stepped façade featuring two primary mirror-image entrances within the center courtyard, angled recessed main entries with arched openings and multi-light glazed wood doors, multi-light casement door adjacent to each main entrance, red tile roofs, applied vigas, rope pilasters, decorative chimney hoods capped with red clay tiles, three groups of multi-light wood frame casement windows topped by recessed arched and rectangular panels and cartouches, and eight-over-one and six-over-one wood sashes and six-pane wood casement windows. The detached garages' character-defining features are their footprint, form, scale, and massing, stucco cladding, flat parapet roofs with central pent roof with red clay tiles, one-car vehicular opening, and 12-light wood windows. The landscaping and hardscaping in the setbacks from El Camino Real and Barroilhet Avenue are not character-defining features.

### **770 North El Camino Real, San Mateo**

St. Joseph Parish at 770 North El Camino Real, San Mateo, is eligible for inclusion in the NRHP at the local level under Criterion C as a rare example of nineteenth century Carpenter Gothic Revival architecture. The redwood-constructed church is one of the last surviving examples of this property type in the Bay Area. The period of significance is circa 1870. The boundaries of the property are its legal parcel. The character-defining features are its redwood-framed construction and exterior wide-wood boards, decorative-shaped wood shingle roof, symmetrical façade with offset tall steeple capped with a cross, buttresses, lancet window openings, oculus and lancet stained-glass windows, steep pitched front gable roof with no overhang, decorative finial topped with a cross at the gable peak of the façade, and shorter gable roof building section at the rear. It also meets NRHP Criteria Considerations A and B.

### **2 Clark Drive, San Mateo**

Two Clark Drive Apartments at 2 Clark Drive, San Mateo, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an important local example of a multi-story, multi-family building designed by Danish-born architect Mogens Mogensen. Its period of significance is 1961. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, flat roofs, aluminum frame curtain walls, and cantilevered balconies connected by vertical wood beams. The landscaping is not a character-defining feature of the building.

### **525 North El Camino Real, San Mateo**

Royal Pines Apartments at 525 North El Camino Real, San Mateo, is eligible for inclusion in the NRHP at the local level of significance under Criterion C as an important local example of a multi-story, multi-family building designed by Danish-born architect Mogens Mogensen. Its period of significance is 1959. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, stepped-height building sections, flat roofs, wood frame curtain walls with colored plastic laminate panels, and large angle concrete bends. The pine trees on the parcel are character-defining features of the property.

### **El Camino Real Bell Guideposts**

The length of the El Camino Real from Mission San Francisco de Asis in San Francisco to Mission San Diego de Alcalá in San Diego (Primary Number P-38-002967) was designated California Historical Landmark (CHL) No. 784 in 1963, and it is listed in the CRHR and is a

historical resource for the purposes of CEQA. As a whole, the resource lacks historic integrity for inclusion in the NRHP. The El Camino Real Guideposts are assumed to be contributors to CHL No. 784. CHLs 770 and above are automatically listed in the CRHR. The guideposts themselves do not appear to be individually significant, but they derive their assumed historic significance as part of the larger commemorative route.

#### **1439 El Camino Real, Burlingame**

The Marquis Apartments at 1439 El Camino Real, Burlingame, is eligible for inclusion in the CRHR at the local level of significance under Criterion 3 as an excellent example of Dingbat architecture in the City of Burlingame. The building has two small replacement windows on the primary façade, as well as throughout the building; however, the property as a whole retains sufficient historic character to convey its significance for listing in the CRHR. Its period of significance is 1962. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, tuck-under parking, flat roof with overhang, scored stucco façade and decorative Roman brick on the first level, affixed “The Marquis Apts.” signage and address number, the full-height metal screen, the window openings (but not the replacement windows), and the Himalayan Windmill palm planted in the setback from El Camino Real. The property is a CEQA-only historical resource.

#### **1500 Hillside Drive Burlingame**

The Hillside Manor apartment building at 1500 Hillside Drive, Burlingame, is eligible for inclusion in the CRHR at the local level of significance under Criterion 3 as an excellent example of Dingbat architecture in the City of Burlingame. The building has replacement windows throughout; however, the property as a whole retains sufficient historic character to convey its significance for listing in the CRHR. Its period of significance is 1964. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, tuck-under parking with original wood tilt up garage doors with applied geometric designed garage doors, aggregate tile and aggregate full-height panels on the primary north elevation, applied round ornamentation on the façade, full-height vertical wood frames flanking windows on the façade, concrete masonry block and decorative concrete screen block stairwells towers, and the Yucca plants, a Himalayan Windmill Palm, a mature Magnolia tree, large lava rocks, low shrubs planted in the setback from El Camino Real. The property is a CEQA-only historical resource.

#### **1246 El Camino Real, Burlingame**

The apartment house at 1246 El Camino Real, Burlingame, is eligible for inclusion in the CRHR at the local level of significance under Criterion 3 as a rare example of 1920s-1930s Colonial Revival style suburban apartment house architecture in the City of Burlingame. Minor alterations to the property including replacement windows in the dormers and removal of a chimney have somewhat diminished the integrity of materials and design of the building; however, it retains sufficient historic character to physically convey its significance. Its period of significance is 1929. The boundaries of the property are its legal parcel. The character-defining features are its footprint and form, scale and massing, saltbox side-gable roof, narrow horizontal wood siding, symmetrical façade with a centrally located entry door with a porch shelter with balanced window sets, multi-light wood frame French door with fanlight pediment, multi-light wood frame windows on the façade with pedimented windows at the roof line, and small roof dormers.

The detached circa 1978 building and the paved setback from El Camino Real are not character-defining features. The property is a CEQA-only historical resource.

### 3.1.6.3 Environmental Consequences

#### **No Build Alternative**

The No Build Alternative would not affect any cultural resources.

#### **Build Alternative**

The Build Alternative (either with or without inclusion of the design option) would not affect any archaeological resources or any tribal cultural resources.

Under the Build Alternative, the project would include sidewalk replacement, curb ramp upgrades, roadway pavement reconstruction, drainage work, installation of APS and CPS systems, as well as associated relocation, adjustment, and upgrading of traffic signal poles, light poles, signs, utility cabinets, fire hydrants, and other utilities (such as gas, fiber optic cables, sewer, and water lines). These actions have the potential to affect historic resources within the APE. Table 3.1.6-2 includes a summary of the preliminary effects determinations for these resources. Potential adverse effects resulting from the Build Alternative with or without the design option would be similar. Therefore, they are not discussed separately. The four resources listed with an “Adverse Effect” determination in Table 3.1.6-2 (including the Howard-Ralston Eucalyptus Tree Rows; 1479 El Camino Real, Burlingame; 1265 El Camino Real, Burlingame; and 1041 El Camino Real, Burlingame) are further described below. These effects determinations are preliminary; consultation with the SHPO and other consulting parties regarding the assessment of effects is ongoing.

**Table 3.1.6-2: Potential Effects Determinations under Section 106 of the NRHP to Historic Resources in the APE**

<b>Address/Name</b>	<b>Potential Effect</b>
Howard-Ralston Eucalyptus Tree Rows NRHP #12000127	Adverse Effect. Loss of a substantial number of contributing trees and destruction of part of the historic property.
Easton Drive Eucalyptus Tree Rows	No Adverse Effect.
Adeline Apartments 1479 El Camino Real, Burlingame	Adverse Effect. Removal of character-defining features (concrete terrace, steps, and low stone wall/planter along the façade) from existing Caltrans right-of-way.
1265 El Camino Real, Burlingame	Adverse Effect. Removal of character-defining features (setback, ornamental planting and curved driveway) from existing Caltrans right-of-way.
The El Camino 1136 El Camino Real, Burlingame	No Adverse Effect.
La Solana 1124 El Camino Real, Burlingame	No Adverse Effect.
1041 El Camino Real, Burlingame	Adverse Effect. Removal of character-defining features (wood picket fence, landscaping, and trees) from existing Caltrans right-of-way.
1045 El Camino Real, Burlingame	No Adverse Effect.
El Rey Apartments 1021 El Camino Real, Burlingame	No Adverse Effect.
1501 Forest View Avenue, Burlingame	No Adverse Effect.

Address/Name	Potential Effect
New Life Community Church 1430 Palm Drive, Burlingame	No Adverse Effect.
Arcamino West 1515 Arc Way, Burlingame	No Adverse Effect.
Russian Church of All Saints 744 El Camino Real, Burlingame	No Adverse Effect.
Sharon Estate Speculative House / Newlands Estate 1615 Floribunda Avenue, Hillsborough	No Adverse Effect.
Sharon Estate Speculative House / A. Page Brown Cottage 50 Kammerer Court, Hillsborough	No Adverse Effect.
Burlingame Towers 1469 Bellevue Avenue, Burlingame	No Adverse Effect.
The Viking 500 El Camino Real, Burlingame	No Adverse Effect.
St. Paul's Episcopal Church 415 El Camino Real, Burlingame	No Adverse Effect.
Former office and residence of Dr. A.L. Lachman 405 El Camino Real, Burlingame	No Adverse Effect.
United Methodist Church 1443 Howard Avenue, Burlingame	No Adverse Effect.
120 El Camino Real, Burlingame	No Adverse Effect.
90 El Camino Real, Burlingame	No Adverse Effect.
The Carol 55 El Camino Real, Burlingame	No Adverse Effect.
15 Park Road, Burlingame	No Adverse Effect.
1500-1504 Barroilhet Avenue, Burlingame	No Adverse Effect.
St. Joseph Parish 770 North El Camino Real, San Mateo	No Adverse Effect.
Two Clark Drive Apartments 2 Clark Drive, San Mateo	No Adverse Effect.
Royal Pines Apartments 525 North El Camino Real, San Mateo	No Adverse Effect.
El Camino Real Bell Guideposts	Not subject to Section 106 of the NRHP. No Impact under CEQA.
The Marquis Apartments 1439 El Camino Real, Burlingame	Not subject to Section 106 of the NRHP. No Impact under CEQA.
Hillside Manor 1500 Hillside Drive, Burlingame	Not subject to Section 106 of the NRHP. No Impact under CEQA.
1246 El Camino Real, Burlingame	Not subject to Section 106 of the NRHP. No Impact under CEQA.

### Howard-Ralston Eucalyptus Tree Rows, Burlingame and Hillsborough

The Build Alternative would introduce new visual elements of roadway and utilities infrastructure within the setting of the Howard-Ralston Eucalyptus Tree Rows. However, visual

elements of the existing roadway and utilities infrastructure have already altered the setting in that in that these visual elements do not date to the resource's period of significance.

Implementation of the Build Alternative would result in the removal of approximately 250 of the 390 contributing trees in the NRHP-listed Howard-Ralston Eucalyptus Tree Rows. Tree removals were carefully considered with all available data including right-of-way, tree health, and preliminary design. Field surveys of existing trees were conducted to determine general condition of trees and their likely resilience to anticipated construction impacts. Through analysis of both tree health and the proximity of project construction activities, preliminary assessments of anticipated tree removals were generated. More information is found in Appendix F.

The Build Alternative also has the potential to directly affect the roots of additional contributing trees that may be within the existing roadway. Potential damage to tree roots encountered during construction could result in additional unanticipated tree removal. Contributing eucalyptus and elm trees that require removal would be replaced as described in the *Replanting Plan* in Appendix F. However, the loss of contributing trees would constitute physical destruction of part of the historic resource. Removal of the contributing trees would diminish the integrity of location, design, materials, workmanship, feeling, and association of the Howard-Ralston Eucalyptus Tree Rows.

#### **1479 El Camino Real, Burlingame**

Implementation of the Build Alternative would require the removal of the character-defining concrete terrace with low stone wall/planter along the façade that currently exists within the Caltrans right-of-way adjacent to 1479 El Camino Real. This direct impact on a character-defining feature of the property would diminish the property's integrity of design, materials, and workmanship, resulting in an adverse effect to the historic resource. Implementation would also result in a change to physical features of the property's setting by removing contributing elements of the Howard-Ralston Eucalyptus Tree Rows that are adjacent to but not within the historic resource and by introducing new visual elements of roadway and utilities infrastructure. However, the significance of 1479 El Camino Real is derived from the building's architectural characteristics and its association with architect Mogens Mogensen; therefore, the indirect visual changes to the setting of the historic resource would not diminish its overall integrity or ability to convey its significance. In addition, implementation of the Build Alternative would not cause 1479 El Camino Real to be removed from its historic location.

Although implementation of the Build Alternative would alter the historic resource due to removal of one of its character-defining features within Caltrans right-of-way, implementation would not result in substantial impairment of this historic resource to convey its significance. The remaining character-defining features (including its footprint and form, scale and massing, flat roof, stone veneer façade, "Adeline Apartments" signage, vertical wood pilasters and projecting wood trellis, cantilevered wood frame balconies and railings, and yucca trees within the setback of the property) would not be impacted by the Build Alternative. Therefore, implementation of the Build Alternative would not affect the eligibility of 1479 El Camino Real for inclusion on the NRHP.

### **1265 El Camino Real, Burlingame**

Implementation of the Build Alternative would require the removal of existing character-defining features of 1265 El Camino Real, including the ornamental planting, and would alter the property's setback, curved driveway, and lawn, which are within the Caltrans right-of-way. The loss of these character-defining features would result in an adverse effect to the historic resource. However, the Howard-Ralston Eucalyptus Tree Rows does not contribute to 1265 El Camino Real's historic significance. The Build Alternative would introduce new visual elements of roadway and utilities infrastructure. However, visual elements of the roadway and utilities infrastructure would replace existing infrastructure that has already altered its setting and does not date to its period of significance. In addition, implementation of the Build Alternative would not cause the 1265 El Camino Real to be removed from its historic location.

Although implementation of the Build Alternative would result in an adverse effect to this historic resource due to removal of some of the character-defining features of the property within Caltrans right-of-way, implementation would not result in substantial impairment of this historic resource. The remaining character-defining features of 1265 El Camino Real (including the footprint and form, small scale and massing of the apartment house and the ancillary building, and the location of the ancillary building behind the apartment house) would not be impacted. Therefore, implementation of the Build Alternative would not affect the eligibility of 1265 El Camino Real for inclusion on the NRHP.

### **1041 El Camino Real, Burlingame**

Implementation of the Build Alternative would require the removal or alteration of the existing wood picket fence and landscaping that currently exists within the Caltrans right-of-way adjacent to 1041 El Camino Real. This direct impact on character-defining features of the property would diminish the property's setting, design, materials, workmanship, and feeling, resulting in an adverse effect to this historic resource. Implementation of either build alternative would also reconfigure the existing driveway within existing Caltrans right-of-way. However, this is not a character-defining feature of 1041 El Camino Real. Indirect impacts would include potential removal of adjacent historic trees that are contributing elements of the Howard-Ralston Eucalyptus Tree Rows. However, the Howard-Ralston Eucalyptus Tree Rows does not contribute to the 1041 El Camino Real's historic significance. In addition, implementation of the Build Alternative would not cause the 1041 El Camino Real to be removed from its historic location.

Although implementation of the Build Alternative would result in an adverse effect to 1041 El Camino Real due to removal of some of the character-defining features of the property within Caltrans right-of-way, implementation would not result in substantial impairment of this historic resource. The remaining character-defining features (including its footprint and form, small scale and massing, horizontal wood board and wood shingle siding, gable roof porch, row of tall sash windows in the sunroom, deep setback from the street, and mature trees in the front yard) would not be impacted by the Build Alternative. Therefore, implementation of the Build Alternative would not affect the eligibility of 1041 El Camino Real for inclusion on the NRHP.

### **Additional Resources**

The Build Alternative would require TCEs to conform existing driveways to the new sidewalk configuration or to expand the sidewalk into landscaping within state right-of-way at four

historic resources in the City of Burlingame within the project limits, including 1124 El Camino Real, 1045 El Camino Real, 1021 El Camino Real, and 1501 Forest View Avenue. However, project-related construction within the TCEs would not affect the character-defining features of these historic resources.

As described in Section 2.1.1.3, historic resources with character-defining features that are close to state right-of-way will be protected from construction impacts through the use of high-visibility exclusion fencing and will be designated as Environmentally Sensitive Areas (ESAs) as appropriate.

The Build Alternative with and without the design option would result in an overall Finding of Adverse Effect to cultural resources.

For a discussion of impacts to historic resources that also qualify for protection under Section 4(f), please refer to Appendix A.

#### **3.1.6.4 Avoidance, Minimization, and/or Mitigation Measures**

**VIS-1** Will minimize effects to contributing trees to the Howard-Ralston Eucalyptus Tree Rows (see Section 3.1.5.4).

**CUL-1.** To emphasize the importance of cultural resources and the purpose and necessity of protecting them, prior to construction, all construction personnel will be instructed on the protection and avoidance of cultural resources, including state and federal laws regarding cultural resources. This will include a review of the locations of ESAs and what is being protected at each location.

**CUL-2.** Mitigation Measures VIS-2 and VIS-5 will be done in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties, where possible.

**CUL-3.** Caltrans is continuing to consult with the SHPO regarding the effect's findings and resolutions of these effects and will continue to consult with stakeholders to develop mitigation measures for impacted historic properties, pursuant to Stipulation XI of the 2014 Section 106 PA and 36 CFR Part 800.6. The mitigation measures will be included in an MOA, which will be executed in consultation with the SHPO and other stakeholders.



## **3.2 Physical Environment**

### **3.2.1 Hydrology and Floodplain**

#### **3.2.1.1 Regulatory Setting**

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration (FHWA) requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

#### **3.2.1.2 Affected Environment**

The following discussion is based on the Hydraulics Memorandum (Caltrans 2019d) for the project, which was completed in August 2019; the Natural Environment Study-Minimal Impacts (Caltrans 2021c) which was completed in October 2020; and the Water Quality Study (Caltrans 2020d) which was completed in December 2020.

There are four waterways that cross or abut El Camino Real within the project limits and that have a potential to flood. They are described from south to north and are shown as blue lines that appear perpendicular to El Camino Real in Figure 3.2.1-1. Between Howard Avenue and Ralston Avenue beginning on the southbound side of El Camino Real, Cherry Canyon Creek stretches for three blocks. It is an unnatural intermittent stream bed with a dirt and concrete bottom and 20-foot-high brick sides. Sanchez Creek, an intermittent streambed with a dirt and rock bottom with 20-foot-high brick sides, is between Sanchez Avenue and Carmelita Avenue. Easton Creek, an intermittent streambed, is between Sherman Avenue and Lincoln Avenue. Neither Sanchez Creek nor Easton Creek is visible from El Camino Real. El Camino Real crosses over Mills Creek which is located between Adeline Drive and Ray Drive. Mills Creek is an intermittent streambed that flows under El Camino Real.



Figure 3.2.1-1: Flood Hazard Zones within the Project Limits

## **Floodplains**

As determined from FEMA Flood Insurance Rate Maps, Special Flood Hazard Area Zone A floodplains were identified adjacent to the project limits (FEMA 2021). They are associated with four waterways shown as Zone A in Figure 3.2.1-1.

Zone A regions represent special flood hazard areas where no base flood elevation has been identified. Zone X areas are also present within the project limits. Zone X represents either areas of minimal flood hazard or areas of moderate flood hazard with an annual chance of flooding of 0.2 percent.

Except for the waterways noted above, El Camino Real overlaps Zone X (0.2 percent annual chance of flooding) from Peninsula Avenue to Murchison Drive. The portions of the project limits that are not Zone A or Zone X (with a 0.2 percent annual chance of flooding) are designated Zone X with a minimal flood hazard.

## **Natural and Beneficial Floodplain Values**

The waterways in or near the project limits provide the beneficial use of groundwater recharge and help to support diverse vegetation such as large trees growing in between houses in the City of Burlingame.

### **3.2.1.3 Environmental Consequences**

#### **No Build Alternative**

The No Build Alternative would not affect the floodplains within the project limits.

#### **Build Alternative**

The Build Alternative (either with or without inclusion of the design option) would not add new impervious surfaces within the project limits, nor would it remove access to existing drainages. In addition, the Build Alternative would improve existing roadway drainage facilities and reduce roadway flooding.

#### **Longitudinal Encroachment**

FHWA defines a longitudinal encroachment as an action within the limits of the base floodplain that is longitudinal to the normal direction of the floodplain. That is, a longitudinal encroachment is an encroachment that is parallel to the direction of water flow. For instance, a location where a highway runs along the edge of a river, when the river swells and floods, it is likely to flood the highway. In this example, the highway is encroaching into the floodplain of the river, so the highway would be considered a longitudinal encroachment. El Camino Real does not represent a longitudinal encroachment to any waterway within the project limits.

The Build Alternative does not propose project features that would increase the risk of flooding. There would be no encroachment into the floodplain.

#### **Risks of the Action**

The project would not result in risks associated with hydrology and floodplains.

**Natural and Beneficial Floodplain Values**

The Build Alternative does not propose features or construction in any areas designated as Zone A. Therefore, the Build Alternative would not affect the natural and beneficial floodplain values. None of the waterways below or near the roadway would be changed by the project.

**Incompatible Floodplain Development**

The project would follow the existing El Camino Real roadway within the project limits and would not create new access to developed or undeveloped land in the flood zone. Therefore, the project would not support incompatible floodplain development.

**Measures for Floodplain Impacts/Values**

No measures are needed to minimize floodplain impacts or to preserve/restore beneficial floodplain values.

**3.2.1.4 Avoidance, Minimization and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.

## 3.2.2 Water Quality and Storm Water Runoff

### 3.2.2.1 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 complies with an 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. RWQCBs 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 U.S. This permit program is administered by the 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 individual. There are two types of general permits: Regional and Nationwide. 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 Regional or Nationwide permit may be permitted under one of the USACE’s Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with United States Environmental Protection Agency’s (U.S. EPA) Section 404 (b)(1) Guidelines (40 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. 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<sup>1</sup> 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 water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those 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 nonpoint 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, nonpoint, 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. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

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<sup>1</sup> The U.S. EPA defines “effluent” as “wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall.”

## **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 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 Caltrans as an owner/operator of an MS4 under federal regulations. Caltrans’ MS4 permit covers all Caltrans 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.

Caltrans MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the state to effectively control storm water and non-storm water discharges; and
3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) 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, Caltrans 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 Caltrans 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 Caltrans 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 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. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a 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 Construction General 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 SWPPPs; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 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 SWPPP. In accordance with Caltrans SWMP and Standard Specifications, a Water Pollution Control Program is necessary for projects with DSA less than one acre.

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 U.S. 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 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.

### **3.2.2.2 Affected Environment**

This section is based on the Water Quality Study (Caltrans 2020d), District Preliminary Geotechnical Report (Caltrans 2020b), and Natural Environment Study-Minimal Impacts (Caltrans 2021c).

#### **Surface Water Resources**

The project is within the South Bay Hydrologic Unit, San Mateo Bayside Hydrologic Area, and Undefined Hydrologic Sub Area (HSA 204.4). The project is within the San Francisco Bay and the San Mateo Creek-Frontal San Francisco Bay Watershed. The watershed of San Mateo Creek has a drainage area of approximately 192 acres.

The project is in a Mediterranean climate region characterized by warm summers and mild wet winters, with the rainy season between October 15 and April 15. The project location experiences average minimum and maximum annual temperatures of 47.1 and 66.8 degrees



Fahrenheit (°F), respectively, with an average annual temperature of 56.95°F. The average annual precipitation is 20.16 inches, with the majority falling between December and February.

San Mateo Creek and San Francisco Bay are the receiving water bodies for the proposed work along SR 82. San Mateo Creek is 2,905 feet southeast of the project limits and flows in an eastward direction for a distance of 7,730 feet until outfall to the southern portion of San Francisco Bay.

San Francisco Bay is listed on the 2014-2016, 303(d) list of impaired water bodies. Both San Mateo Creek and San Francisco Bay are CWA Section 303(d) listed water bodies with limited water quality segments.

Beneficial uses for San Mateo Creek and its tributaries include freshwater replenishment, cold freshwater habitat, fish migration, preservation of rare and endangered species, fish spawning, warm freshwater habitat, wildlife habitat, and water recreation. Beneficial uses for the southern portion of San Francisco Bay include industrial service supply, commercial and sport fishing, shellfish harvesting, estuarine habitat, fish migration, preservation of rare and endangered species, fish spawning, wildlife habitat, water recreation, and navigation.

### **Groundwater Resources**

The project is within the Westside Basin (Basin Number 2-35D). Beneficial uses for groundwater include municipal and domestic supply, industrial process supply, and industrial service supply. The groundwater depth varies greatly along El Camino Real within the project limits. Groundwater elevations change seasonally depending on the amount of rainfall but groundwater levels are assumed to be 8 feet below the existing ground surface. The main direction of groundwater flow is to the northeast.

### **3.2.2.3 Environmental Consequences**

#### **No Build Alternative**

##### **Short-Term (Construction) Impacts**

No short-term water quality impacts would occur with the No Build Alternative because the No Build Alternative would not require any construction activities.

##### **Long-Term (Permanent) Impacts**

The No Build Alternative would have potential long-term water quality impacts due to existing inadequate drainage, which contributes to frequent, localized flooding on the roadway. Traffic operations would be maintained with the No Build Alternative but localized flooding and downed utility lines similar to what has been recorded in the past would continue to occur.

Roadway storm water runoff has the potential to affect receiving water quality. Heavy metals associated with vehicle tire and brake wear, oil and grease, and exhaust emissions are the primary pollutants associated with transportation corridors. Generally, roadway storm water runoff contains total suspended solids, nitrate nitrogen, total Kjeldahl nitrogen, phosphorus, ortho-phosphate, copper, lead, and zinc. The pollutants are dispersed from tree leaves, combustion products from fossil fuels, and the wearing of brake pads and tires.

## **Build Alternative**

### **Short-Term (Construction) Impacts**

The Build Alternative (either with or without inclusion of the design option) would have potential temporary impacts to existing water quality resulting from the release of fluids, concrete material, construction debris, sediment, and litter beyond the perimeter of staging and active construction areas. This has the potential to result in changes to localized pH and turbidity of San Mateo Creek. As described in Section 2.1.1.3, temporary construction site BMPs, such as silt fencing, fiber rolls, check dams, drainage inlet protections, concrete wash-outs, street sweeping, and job site management and construction entrances, would be used for sediment control and material management. Implementation of the temporary construction site BMPs would prevent or reduce sediments from entering nearby water bodies, such as from unintended discharge beyond the perimeter of the construction site, and would thereby reduce any substantial increase to localized pH and turbidity of San Mateo Creek.

The Build Alternative would result in 29.5 acres of disturbed soil area. Since the project's disturbed soil area is greater than 1.0 acre, a SWPPP will be required in the project's construction phase. Prior to commencement of construction activities, a SWPPP must be prepared by the contractor and approved by Caltrans. The SWPPP will address the temporary water quality impacts resulting from the construction activities via implementation of appropriate BMPs (such as those mentioned in Section 2.1.1.2), to the maximum extent practicable. BMPs incorporated into the SWPPP would include measures to reduce or prevent discharge of contaminants into storm water collection systems or waterways. The project is not expected to result in any in-water work and, therefore, no downstream water quality sampling and monitoring will be required.

The Build Alternative has the potential to encounter groundwater during the construction of cast-in-drilled-hole piles for traffic lights and other signs. This construction activity would require use of the slurry method, where a slurry/water is used to stabilize the holes for the piles. Any construction activity deeper than this may require dewatering. In addition, the design of replacement retaining walls would be tailored to the available slope to provide stability. Backfill or compaction of materials below any retaining wall structural sections would conform with the 2018 Caltrans standard specifications. Refined foundation recommendations will be detailed during final design.

With the BMPs described above, no short-term construction impacts to water quality are anticipated.

### **Long-Term (Permanent) Impacts**

The Build Alternative would add no new impervious surfaces but would replace 24.4 acres of impervious surface. Since the total of new and replaced impervious surface is greater than 1.0 acre, the project will provide storm water treatment (i.e. bioretention or biofiltration devices) up to 24.4 acres to be in compliance with Caltrans NPDES permit requirements. The implementation of storm water treatment devices is expected to prevent long-term impacts of pollutant discharge to water bodies. Stormwater treatment devices, such as bioretention or bioretention devices, would remove pollutants from project-related storm water runoff to avoid the potential to substantially alter drainage patterns, violate water quality standards, or

substantially degrade water quality. Construction details for these design features will be incorporated into the final project design documents.

The project limits have not been identified as a Significant Trash Generation Area (areas identified by Caltrans and concurred by the State Water Resources Control Board as contributing trash to the state's waterways), therefore Trash Capture is not required. However, final trash capture requirements will be determined during final design.

In summary, due to implementation of storm water treatment devices, there will be no new long-term impacts to existing water quality caused by deposition or transport of sediment and vehicular-related pollutants. The Build Alternative is not anticipated to result in a long-term impact to water quality.

#### **3.2.2.4 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.

### 3.2.3 Hazardous Waste/Materials

#### 3.2.3.1 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 (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA, often referred to as “Superfund,” is to identify and cleanup 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 (EO) 12088, 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 also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact 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.

### 3.2.3.2 Affected Environment

The following section is based on the Assessment of Hazardous Materials Potentially Affecting the El Camino Real, State Route 82, Renewal Project, EA 04-0K810/0K81U Memorandum prepared for the project (Caltrans 2021). The memorandum was prepared to identify containments of concern that could be disturbed during project construction. The assessment included a review of reports and histories covering the regulated sites in the project area.

#### **Hazardous Materials Sites**

A search of the Department of Toxic Substances Control’s EnviroStor and the State Water Quality Control Board’s GeoTracker databases identified 10 hazardous materials release sites along the project corridor. These 10 sites are shown in Table 3.2.3-1. Five of the release sites’ cases are closed. These five sites have had their regulatory oversight mitigation work concluded for at least 10 years and have been either completely redeveloped or are completely vacant, with all station structures and appurtenances removed. The remaining five hazardous materials release sites have been identified as having the potential for project construction work (i.e. subsurface work) to be affected by groundwater contaminant plumes.

**Table 3.2.3-1. Hazardous Materials Release Sites along the Project Corridor**

Site	Address	Cross Street	Site Status
ARCO gas station	402 El Camino Real	East Poplar Street	Eligible for case closure
76 gas station	1480 Broadway	Broadway	Ongoing fuel remediation
Lux Cleaners	1560 Trousdale Drive	Trousdale Drive	Ongoing solvent remediation
76 gas station	1876 El Camino Real	Murchison Drive	Ongoing fuel remediation
76 gas station	5 El Camino Real	Millbrae Avenue	Ongoing fuel remediation
Chevron station	610 El Camino Real	E. & W. Bellevue Avenue	Closed
Shell station	1490 Burlingame Avenue	Burlingame Avenue	Closed
Chevron station	260 El Camino Real	Burlingame Avenue	Closed
Chevron station	1501 El Camino Real	Adeline Drive	Closed
Chevron station	1810 El Camino Real	Trousdale Drive	Closed

Source: Caltrans 2021

Depth-to-water measurements taken at various sites in the project area, such as those discussed above, show that the water table is usually about 10 feet deep, with a depth closer to 14 feet in the summer and fall dry seasons.

#### **Aerially Deposited Lead (ADL)**

Lead alkyl compounds were added to gasoline from 1920 up to the mid-1980s. As a result, shallow soils along highway corridors have the potential to be contaminated with aerially deposited lead (ADL) from historical vehicle emissions. During construction of the proposed project, excavation performed for retaining walls, traffic signals, and drainage systems would occur to depths greater than three feet within soils having anticipated average lead concentrations below the regulatory threshold. Typically, the deeper the excavation, the lower the estimated average lead concentration of the waste soil is likely to be due to the surface deposition and adsorption of ADL during the era of leaded fuel use. However, shallow soils encountered during

project construction, such as for performing shallow excavations in currently unpaved areas for upgraded sidewalks, have the potential to be contaminated with ADL.

### **3.2.3.3 Environmental Consequences**

#### **No Build Alternative**

The No Build Alternative would not affect potential sources of hazardous materials in the project area.

#### **Build Alternative**

Identified hazardous materials release sites along the project corridor are shown in Table 3.2.3-1 above.

#### **Handling and Storage of Hazardous Materials**

Project construction and maintenance activities are expected to involve the routine transport, use, and disposal of hazardous materials (e.g., fuels, paints, and lubricants) that would not pose a threat to human health or the environment if properly managed. The transport, use, and disposal of hazardous materials during construction is regulated and enforced by federal and State agencies. In addition, spill prevention and control methods addressing hazardous materials, such as fuels for construction equipment, would be addressed in Caltrans Standard Specifications.

Workers who handle hazardous materials are required to adhere to OSHA and Cal/OSHA health and safety requirements. Hazardous materials must be transported in accordance with RCRA and USDOT regulations and disposed of in accordance with RCRA and the California Code of Regulations (CCR) at facilities that are permitted to accept the waste.

In accordance with the SWRCB, a SWPPP must be prepared and implemented during construction for coverage under the Construction General Permit. The SWPPP requires implementation of BMPs for hazardous materials storage and soil stockpiles, inspections, maintenance, training of employees, and containment of releases to prevent runoff into existing storm water collection systems or waterways.

Adherence to federal and State regulations during project construction and maintenance reduces the risk of exposure to hazardous materials and accidental hazardous materials releases. Compliance with existing regulations is mandatory; therefore, construction of the Build Alternative is not expected to create a hazard to construction workers, the public, or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. As a result, the project would have no adverse effects related to the routine transport, use, disposal, or accidental release of hazardous materials during construction and maintenance activities and no mitigation is required.

#### **Disturbance of Hazardous Materials**

ADL from the historical use of leaded gasoline exists along roadways throughout California. Soils with elevated concentrations of lead as a result of ADL are likely present on the State highway system right-of-way within the project limits of the proposed project. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control (DTSC). This ADL Agreement allows such soils to be safely reused within the project

limits as long as all requirements of the ADL Agreement are met. Project construction could result in the potential disturbance of hazardous materials in soil and groundwater. Shallow soils in currently unpaved areas that would be excavated during construction could likely contain ADL at concentrations above DTSC-regulated levels. Additionally, project construction could encounter groundwater containment plumes originating from hazardous waste release sites close enough to reach the project footprint, as noted in Table 3.2.3-1 above. Minimal groundwater is anticipated to be encountered during project construction as traffic signal foundation depths would be 15 feet.

The disturbance of hazardous materials during project construction and maintenance activities, such as excavation, would not pose an adverse effect to human health and the environment if properly managed. As described in Section 2.1.1.3, implementation of Caltrans standards and compliance with applicable federal and State regulations would ensure potential hazardous materials in soil, groundwater, and building materials are investigated before construction. Site-specific control measures would be incorporated into the final project design to address and minimize any potential adverse effects to human health and the environment that could result from the disturbance of hazardous materials.

#### **3.2.3.4 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.



## **3.2.4 Energy**

### **3.2.4.1 Regulatory Setting**

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

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

### **3.2.4.2 Affected Environment**

This section describes existing conditions in the project limits and the State of California that affect energy usage.

#### **Project Limits**

The project is within a relatively urbanized environment, and the surrounding land uses include mixed residential and commercial development with many driveways. El Camino Real is a signalized major thoroughfare that connects several downtown areas and communities in San Mateo County. Within the project limits, El Camino Real has various roadside advisory, warning, and regulatory signs and features light poles and luminaries. There are left turn lanes to facilitate the efficient movement of traffic at the intersections of East Poplar Avenue, Trousdale Drive, Murchison Drive, and Millbrae Avenue. As noted in Section 1.3.2.1, the roadway features cracking, rutting, and a high roughness indicator. Twenty-two thousand vehicles a day travel on El Camino Real within the project limits, including 640 trucks (approximately 3% of total vehicles) (Caltrans 2016b).

#### **California**

In California, the transportation sector consumes the most energy (nearly 40 percent in 2017; U.S. Energy Information Administration 2019a). The high consumption of transportation fuels in California is attributed to the state's abundance of airports, military bases, public transportation, and automobiles. In addition, major metropolitan areas, such as San Francisco and Los Angeles, experience extremely long commute travel times and delay because of high traffic congestion and long distances of travel between homes and jobs.

Fossil fuels are the predominant source of energy consumed by the transportation sector. Approximately 56 percent of fossil fuels consumed by the California transportation sector is gasoline (U.S. Energy Information Administration 2019b). Alternatives to fossil fuels have helped decrease the dependence on gasoline and other fossil fuels. The following alternatives to fossil fuels are currently used in California (U.S. Energy Information Administration 2019c):

- Compressed natural gas
- Electricity
- Ethanol, 85 percent

- Hydrogen
- Liquefied natural gas
- Liquefied petroleum gas

### 3.2.4.3 Environmental Consequences

Energy use under the No Build Alternative and the Build Alternative (either with or without inclusion of the design option) was evaluated to determine if the project would result in a net increase in energy use and/or decrease in energy efficiency. The Caltrans Standard Environmental Reference, Volume 1, Chapter 13, Energy (Caltrans 2015) was used as guidance to analyze the direct and indirect energy consumption attributed to the project. Direct energy refers to the fuel consumed by vehicles that would use the project facility as well as the one-time energy expenditure involved in constructing a project. Indirect energy refers to all the remaining energy consumed to run a transportation system including maintenance and operation energy.

#### **Direct Energy**

To assess gasoline and diesel consumed by construction equipment and vehicles, the Road Construction Emissions Model (RCEM), version 9.0.0, provided by the Sacramento Metropolitan Air Quality Management District, was used to quantify carbon dioxide emissions and vehicle miles traveled by construction workers. The U.S. Environmental Protection Agency greenhouse gas equivalencies formulas were used to convert the emissions and vehicle miles traveled into fuel volumes (Caltrans 2021d). Table 3.2.4-1 shows the direct energy consumption that would result from construction of the Build Alternative. The No Build Alternative, since it involves no construction, would result in no direct energy consumption.

**Table 3.2.4-1. Direct energy consumption from construction activities**

<b>Build Alternative</b>	<b>Diesel Consumption (in gallons)</b>	<b>Gasoline Consumption (in gallons)</b>
Annual	39,282	1,348
Total for 3 years	117,847	4,043

Source: Caltrans 2021d

Energy use during construction is dependent on the equipment being used for each activity at any given time, but the average annual fuel consumption is shown in Table 3.2.4-1. The total consumption for the 3-year project span would be 117,847 gallons of diesel and 4,043 gallons of gasoline.

Because construction activities are short-term, the increase of consumption within the project limits would also be short-term. As noted in Section 2.1.1.3, the following measures will be included in the construction contract to minimize energy consumption from construction activities and reduce the total direct energy requirement:

- Regular vehicle and equipment maintenance.
- Recycle non-hazardous waste and excess materials, where possible, to reduce offsite disposal.

The Build Alternative would rehabilitate the roadway and would not propose changes to the operation of the roadway that could result in either increased capacity or decreased congestion. As such, the Build Alternative would not result in changes to traffic volumes, vehicle mix, or any other factor that would cause an increase in energy consumption (i.e. vehicle fuel) of the project from that of the No Build Alternative. The project would not increase the capacity of the roadway, therefore, total direct energy use would be the same for the Build Alternative and the No Build Alternative.

### **Indirect Energy**

The Build Alternative includes several features to reduce indirect energy consumption when compared with the No Build Alternative. These features include:

- Upgraded sidewalks (widths, profiles, and cross slopes)
- Upgraded curbs (ramp slope, landing, and detectable warning surface)
- Accessible pedestrian signals (APS) and countdown pedestrian signal (CPS)
- High-visibility crosswalk markings
- Rehabilitated roadway section
- Upgraded drainage infrastructure

These improvements would reduce indirect energy consumption by decreasing fuel use in two ways: the Build Alternative would include long-life pavement which requires less frequent maintenance and would improve pedestrian access in the project limits, potentially encouraging pedestrian use over vehicle use.

### **Consistency with Energy Conservation Plans**

The *California Energy Action Plan* was approved in 2003 by the Energy Resources Conservation Development Commission (also known as the California Energy Commission [CEC]), the California Public Utilities Commission (CPUC), and the Consumer Power and Conservation Financing Authority (which is now defunct). The goal of the Plan was to ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound. A second Energy Action Plan was adopted in 2005, and an update was issued in 2008. In 2019, CEC issued the *California Energy Efficiency Action Plan*, which focuses on reducing energy use in sectors other than transportation; separately, the CPUC has been consolidating efforts to implement directives from the Legislature and the Governor's Office to accelerate investment in transportation electrification (CEC 2019a).

CEC also prepares a biennial integrated energy policy report that assesses major energy trends and issues and provides policy recommendations to conserve resources, and issues updates and associated policy recommendations in alternate years. The 2019 *Integrated Energy Policy Report* assesses the state of “clean transportation” in California, including the target of deploying 5 million zero-emission vehicles (ZEVs), including transit and school buses and freight vehicles, statewide by 2030 in accordance with Executive Order B-48-18 (CEC 2019b).

The project is included in the current RTP for the San Francisco Bay Area (MTC and ABAG 2017, amended 2020; reference number 17-10-0025). The RTP integrates a Sustainable Communities Strategy on land use, housing, and transportation to meet targets in energy efficiency and reduction in fossil fuel consumption, as required by SB 375. In addition, the RTP provides for funding carpooling incentives, including private sector ride-matching applications, that target use HOV/express lane use.

Direct energy consumption for the Build Alternative would include short term construction activity. However, with the inclusion of project features (such as longer pavement lives, improved traffic management plans, and changes in materials), energy consumption during construction would be offset to some degree by longer intervals between maintenance and rehabilitation activities. Also, the Build Alternative would potentially encourage pedestrian mobility and further decrease the energy used on maintenance of the roadway. Therefore, the Build Alternative would not conflict with a state or local plan for renewable energy or energy efficiency.

Energy use during the construction of the project would be temporary and a necessary commitment or expenditure that is associated with any infrastructure improvement project. The construction contractor would have a financial disincentive to waste fuel used by the construction equipment (i.e., excess fuel usage reduces profits). Therefore, it is generally assumed that fuel used during construction would be conserved to the maximum extent feasible. Furthermore, regulations enforced by CARB (Title 13, Section 2485 of California Code of Regulations) limit the idling time of diesel construction equipment to five minutes. Therefore, it is anticipated that energy consumption during the construction period would be minimized to the maximum extent practicable. Therefore, the construction of the project would not conflict with a state or local plan for renewable energy or energy efficiency.

#### **3.2.4.4 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.

### 3.3 Biological Environment

#### 3.3.1 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, fish passage, 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. Information herein is summarized from the *Natural Environment Study-Minimal Impacts* (Caltrans 2021c) for the proposed project, which was completed in October 2020 and revised in May 2021.

##### 3.3.1.1 Affected Environment

A biological study area (BSA) was established to evaluate the effects of the project on natural communities and other biological resources. The BSA is 85 acres in size and covers the footprint where work would be performed as well as a 100-foot buffer around the work area. The roadway is bordered by businesses, sidewalks, residential buildings, and mature trees and contains traffic lights and crosswalks throughout.

As noted in Section 3.2.1, there are several water features that run through or near the BSA that are described as intermittent streams (USFWS 2020a). Essential Fish Habitat for Pacific salmonids also exists over the entire San Francisco Bay including the BSA.

Riparian corridors exist at some of the creek crossings that run through the BSA including Cherry Canyon Creek, Sanchez Creek, and Mills Creek. These riparian or semi-riparian sites may act as foraging areas for insectivorous birds or pathways for small mammals and turtles. These creeks do not typically contain water for more than a few weeks each year in these locations and the water table is typically well below ground surface (USFWS 2020a).

There are no Habitat Conservation Plans (HCP) or Natural Community Conservation Plans in the BSA with jurisdiction over this project type. The PG&E Bay Area Operations & Maintenance HCP overlaps with the project limits, but only consists of PG&E-owned facilities for operation and maintenance activities and does not contain policies or goals related to the project (USFWS 2017). The other nearest HCP is the San Bruno Mountain HCP, which is over 4.5 miles north of the project limits (San Mateo County 1982). The BSA also contains no natural landscape areas according to the California Essential Habitat Connectivity Map (Spencer 2010).

Urban trees that have been planted by local municipalities are not considered natural habitat but they do serve as a resource (provide habitat) that is often used by native wildlife species such as birds, small mammals and insects. Large amounts of city trees NES(MI) 24 May 2021, or patches of open space within cities are often referred to as “urban forests” and can contribute to a rich biodiversity with input from city planners and urban foresters (Alvey 2006). There is an abundance of city trees and shrubs in a 1-mile area (700 acres) surrounding the project limits. Tree removal will occur only along the sidewalks of the project limits (about 38 acres).

Wildlife that may use the BSA include American crow (*Corvus linnaeus*), honey bee (*Apis mellifera*), herons and egrets (Ardeidae family), hummingbirds (Trochilidae family), red-eared slider (*Trachemys scripta elegans*), western pond turtle (*Actinemys marmorata*), gulls (Laridae

family), red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), Cooper's hawk (*Accipiter cooperii*), Eastern gray squirrel (*Sciurus carolinensis*), house finch (*Haemorrhous mexicanus*), black phoebe (*Sayornis nigricans*), and California scrub-jay (*Aphelocoma californica*).

### **3.3.1.2 Environmental Consequences**

#### **No Build Alternative**

The No Build Alternative would not affect vegetation, migratory corridors, or fish passage.

#### **Build Alternative**

Project construction would be limited to the existing roadway, sidewalks, driveways, and other previously disturbed surfaces.

The project would result in the removal of 300 to 350 trees out of approximately 700 trees in the project limits. About 250 of these trees contribute to the Howard-Ralston Eucalyptus Tree Rows—less than half of them are original (150+ years old) eucalyptus and the rest are younger trees of various species and ages. Tree removal would occur only along the sidewalks within the project limits (about 38 acres). A tree removal schedule will be decided in later phases with coordination from the design engineers, landscape architects, and the SHPO. Trees will be replaced at a 1:1 ratio with various species to promote biodiversity.

As further described in Section 3.3.2.3, construction activities such as tree removal and other project-related ground disturbances or equipment operation are subject to the Migratory Bird Treaty Act. Therefore, the contractor would be required to comply with the Migratory Bird Treaty Act, which involves the implementation of BMPs to substantially reduce conflict with nesting and foraging birds.

Tree removal during construction is not anticipated to adversely affect the urban forest in the project limits or its value to native species over the long-term. There will be an abundance of mature trees in the project area post-construction. Caltrans will replant trees as part of the project. No work would occur within waterways or riparian corridors. Overall, the project would have no effect on designated natural communities.

### **3.3.1.3 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.

### **3.3.2 Animal Species**

#### **3.3.2.1 Regulatory Setting**

Many state and federal laws regulate impacts to wildlife. The USFWS, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and 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 Acts. Species listed or proposed for listing as threatened or endangered are discussed at the beginning of Chapter 3. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations relevant to wildlife include the following:

- NEPA
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

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

#### **3.3.2.2 Affected Environment**

The identification of special-status animal species with potential to occur in the region was based on a search of the California Natural Diversity Database (CDFW 2020), California Native Plant Society Online Inventory of Rare and Endangered Plants (CNPS 2020), USFWS species list (Appendix C) (USFWS 2020b), NOAA Fisheries species list (Appendix C) (NOAA Fisheries 2020), USFWS designated critical habitat mapper (USFWS 2020c), and the National Wetlands Inventory (USFWS 2020a). A list of special-status species with potential to occur in the region is included in Appendix C. A field review of the BSA was conducted in October 2020. Caltrans biologists determined this project would have no effect to federally listed species. This determination was made under Section 7 of the federal Endangered Species Act. Additionally, this project is not anticipated to adversely affect state-listed or other regulated species (Caltrans 2021c). Additionally, Caltrans does not anticipate effects to animals that are fully protected or species of special concern under CDFW.

#### **Migratory Birds**

All migratory birds in the BSA are protected by the Migratory Bird Treaty Act and Section 3513 of the California Fish and Game Code. Many species of migratory birds may inhabit the BSA at any given time and would typically use similar nesting locations. Migratory birds comprise many different bird species, including many common species. Potential nesting locations for migratory birds in the BSA include street trees, dense shrubs, and human-made structures. Migratory birds



nesting near the project limits would likely be tolerant of the disturbances and noise associated with the urban environment. Migratory birds could nest in the BSA during construction.

### **3.3.2.3 Environmental Consequences**

#### **No Build Alternative**

The No Build Alternative would not affect animal species within the BSA.

#### **Build Alternative**

##### **Migratory Birds**

Under the Build Alternative (either with or without inclusion of the design option) Caltrans has identified the risk of impacting active nests during construction or disrupting foraging habitat during construction. Construction activities such as tree removal and other project-related ground disturbances or equipment operation are subject to the Migratory Bird Treaty Act. Therefore, the contractor would be required to comply with the Migratory Bird Treaty Act, which involves following BMPs to substantially reduce conflict with nesting and foraging birds as follows:

- Construction activities (including vegetation removal) will be conducted between September 30 and January 30 or a qualified biologist will conduct a nesting migratory bird survey within 72 hours prior to construction.
- If active nests of migratory birds are detected within 50 feet of construction activities for passerines or within 300 feet of construction activities for raptors, the biological monitor will establish an appropriate non-disturbance buffer to avoid direct effects of construction-related disturbance until work has been completed or birds have fledged.
- Should construction activities be suspended for a period longer than 14 days, then a new pre-construction nesting migratory bird survey will be conducted within 14 days prior to resuming construction activities.

### **3.3.2.4 Avoidance and Minimization Measures**

No avoidance, minimization, or mitigation is required.

### 3.3.3 Invasive Species

#### 3.3.3.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed 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.” 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 NEPA analysis for a project.

#### 3.3.3.2 Affected Environment

The BSA supports a number of non-native species. Nearly all of the invasive species observed during the field visit were landscaped plants, some of which are on private property. Invasive species in the BSA include English ivy (*Hedera helix*), Cape ivy (*Delairea odorata*), blackwood acacia (*Acacia melanoxylon*), red gum eucalyptus (*Eucalyptus camaldulensis*), blue gum eucalyptus (*Eucalyptus globulus*), wild oat (*Avena fatua*), cotoneaster (*Cotoneaster sp.*), woolly cotoneaster (*Cotoneaster pannosus*), hawthorn (*Crataegus monogyna*), firethorn (*Pyracantha coccinea*), Himalayan blackberry (*Rubus armeniacus*), and Siberian elm (*Ulmus parvifolia*).

Red gum and blue gum eucalyptus and some elms within the project limits are considered invasive species and yet are also contributors to the Howard-Ralston Eucalyptus Tree Rows. These trees are a protected resource listed on the NRHP. These trees do not appear to be propagating into adjacent ecosystems, such as creeks within the BSA, or elsewhere within the project limits. This is likely due to the extensive nature of land development and armored creek banks within the BSA. California Invasive Plant Council (Cal-IPC) categorizes both blue gum and red gum eucalyptus as “limited—these species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic” (Cal-IPC 2021). The Cal-IPC database does not contain any elm species.

#### 3.3.3.3 Environmental Consequences

##### No Build Alternative

The No Build Alternative would not introduce invasive species into the BSA.

##### Build Alternative

##### **Short-Term (Construction)**

The Build Alternative (either with or without inclusion of the design option) would remove trees that are listed as both historic and generally categorized as invasive. In addition, all construction carries the potential to introduce new invasive species or provide an opportunity for them to flourish. However, project construction would require implementation of a SWPPP. The BMPs to be included in the SWPPP such as soil stabilization and sediment control (Section 2.1.1.2)

apply to all exposed soil areas, thereby substantially reducing the risk of invasive species establishing or spreading during construction activities.

**Long-Term (Operations)**

Following project construction, no areas of exposed soil would be present within the project limits. This would reduce the risk of long-term small invasive plant propagation. As noted in the *Replanting Plan* in Appendix F, invasive species will not be used for replanting. The Build Alternative, with and without the design option, would comply with Executive Order 13112 to reduce the spread of invasive species. Therefore, in the long term, the Build Alternative would not substantially contribute to the spread of invasive species.

**3.3.3.4 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation is required.

### 3.4 Construction Impacts (Noise)

Construction impacts have been described throughout Chapter 2 and in Sections 3.1 through 3.3. However, since the project is not a Type I project per 23 CFR 772, a traffic noise analysis pursuant to that regulation is not required and is not included in this EIR/EIS. However, the Build Alternative would require both daytime and nighttime construction in close proximity to hundreds of receptors. Therefore, this section presents an evaluation of the noise that could be generated by construction of the Build Alternative. The following discussion is based on the *Construction Noise Analysis Memorandum* (Caltrans 2021e).

The No Build Alternative would not result in a change in existing noise levels.

The Build Alternative would require sidewalk replacement and curb ramp upgrades, pedestrian and signalized infrastructure upgrades, pavement demolition, pavement reconstruction, drainage upgrades, and tree removal, clearing, and grubbing. These activities were modelled at 14 locations within the project limits as well as at four typical locations at 50, 100, 200, and 500 feet from construction activities.

The Roadway Construction Noise Model was used to estimate noise levels during construction. This model is FHWA's national model for the prediction of construction noise. The model includes representative sound levels for the most common types of construction equipment and the estimated percentage of time that the equipment would be operating at full power. Vehicles and equipment likely to be used during each construction activity were input into the model. The model estimates the maximum hourly noise levels ( $L_{max}$ ) and the average hourly noise levels ( $L_{eq}$ ) at the modelled locations within the project limits. The locations considered in this noise analysis and the estimates of noise resulting from construction of the Build Alternative are shown in Table 3.4-1.

$L_{max}$  is the highest instantaneous noise level modelled for each specific activity.  $L_{eq}$  is the average noise level for the activity. In some instances, the maximum noise level estimated is slightly lower than the average noise level. The average noise level accounts for noise fluctuations from moment to moment by averaging the louder and quieter moments together and it gives more weight to the louder moments.

The model assumes noise decreases as distance from the noise source increases but it does not take into account noise being absorbed or shielded by trees, structures, or other physical impediments within the project limits. Therefore, the predicted noise levels shown in Table 3.4-1 are conservative. Predicted noise levels are shown in A-weighted decibels (dBA) or relative loudness as perceived by the human ear.

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Table 3.4-1: Build Alternative Construction Noise

Address	Type	Receptor Distance (feet)	Sidewalk Replacement/ Curb Ramp Upgrade L <sub>max</sub>	Sidewalk Replacement/ Curb Ramp Upgrade Leq	Pedestrian and Signalized Infrastructure Upgrade L <sub>max</sub>	Pedestrian and Signalized Infrastructure Upgrade Leq	Pavement Demolition L <sub>max</sub>	Pavement Demolition Leq	Pavement Reconstruction L <sub>max</sub>	Pavement Reconstruction Leq	Drainage Upgrades L <sub>max</sub>	Drainage Upgrades Leq	Tree Removal, Clearing, and Grubbing L <sub>max</sub>	Tree Removal, Clearing, and Grubbing Leq	Utility Relocation L <sub>max</sub> (Design Option Only)	Utility Relocation Leq (Design Option Only)
Hypothetical location at 50 feet	-	50	<b>89.6</b>	<b>87.1</b>	84.4	82.1	<b>89.6</b>	<b>86.8</b>	85.0	85.0	83.2	81.6	83.7	82.7	84.4	81.9
Hypothetical location at 100 feet	-	100	83.6	81.1	78.3	76.1	83.6	80.7	79.0	79.0	77.2	75.6	77.5	76.7	78.3	75.9
Hypothetical location at 200 feet	-	200	77.5	75.1	72.3	70.0	77.5	74.7	73.0	73.0	71.2	69.5	71.7	70.7	72.3	69.9
Hypothetical location at 500 feet	-	500	69.6	67.1	64.4	62.1	69.6	66.8	65.0	65.0	63.2	61.6	63.7	62.7	64.4	61.9
1648 Albemarle Way Burlingame	Residential	38	<b>92.0</b>	<b>89.5</b>	<b>86.7</b>	84.5	<b>92.0</b>	<b>89.9</b>	<b>87.4</b>	<b>87.4</b>	85.6	84.0	<b>86.1</b>	85.1	<b>86.7</b>	84.3
1605 Westmoor Road Burlingame	Residential	31	<b>93.7</b>	<b>91.3</b>	<b>88.5</b>	<b>86.2</b>	<b>93.7</b>	<b>90.9</b>	<b>89.2</b>	<b>89.2</b>	<b>87.4</b>	85.7	<b>87.9</b>	<b>86.9</b>	<b>88.5</b>	<b>86.1</b>
1150 Oxford Road Burlingame	Residential	24	<b>96.0</b>	<b>93.5</b>	<b>90.7</b>	<b>88.5</b>	<b>96.0</b>	<b>93.1</b>	<b>91.4</b>	<b>91.4</b>	<b>89.6</b>	<b>88.0</b>	<b>90.1</b>	<b>89.1</b>	<b>90.7</b>	<b>88.3</b>
Burlpres, 1500 Easton Drive Burlingame	Place of Worship	124	81.7	79.2	76.5	74.2	81.7	78.9	77.1	77.1	75.3	73.7	75.8	74.8	76.5	74.1
1308 El Camino Real Burlingame	Residential	35	<b>92.7</b>	<b>90.2</b>	<b>87.5</b>	85.2	<b>92.7</b>	<b>88.9</b>	<b>88.1</b>	<b>88.1</b>	<b>86.3</b>	84.7	<b>86.8</b>	85.8	<b>87.5</b>	85.0
1013 El Camino Real Burlingame	Residential	66	87.2	84.7	81.9	79.7	<b>87.2</b>	84.3	82.6	82.6	80.8	79.2	81.3	80.3	81.9	79.5
1442 Edgehill Drive Burlingame	Residential	28	<b>94.6</b>	<b>90.6</b>	<b>89.4</b>	<b>87.1</b>	<b>94.6</b>	<b>91.8</b>	<b>90.0</b>	<b>90.1</b>	<b>88.3</b>	<b>86.6</b>	<b>88.8</b>	<b>87.8</b>	<b>89.4</b>	<b>87.0</b>
McKinley Elementary 701 Paloma Avenue Burlingame (Exterior)	School	40	<b>91.5</b>	<b>87.5</b>	<b>86.3</b>	84.0	<b>91.5</b>	<b>88.7</b>	<b>86.9</b>	<b>87.0</b>	85.2	83.5	85.7	84.7	<b>86.3</b>	83.9
McKinley Elementary 701 Paloma Avenue Burlingame (Interior)	School	40	<b>71.5</b>	<b>89.1</b>	<b>66.3</b>	<b>84.0</b>	<b>71.5</b>	<b>88.7</b>	<b>66.9</b>	<b>87.0</b>	<b>65.2</b>	<b>83.5</b>	<b>65.7</b>	<b>84.7</b>	<b>66.3</b>	<b>83.9</b>
1615 Floribunda Avenue Hillsborough	Residential	120	82.0	79.5	76.8	74.5	82.0	79.1	77.4	77.4	75.6	74.0	76.1	75.1	76.8	74.3
10 Kammerer Court Hillsborough	Residential	46	<b>90.3</b>	<b>87.9</b>	85.1	82.8	<b>90.3</b>	<b>87.5</b>	85.7	85.7	84.0	82.3	84.4	83.5	85.1	82.7
1501 Cypress Avenue, Burlingame	Residential	22	<b>96.7</b>	<b>94.3</b>	<b>91.5</b>	<b>89.2</b>	<b>96.7</b>	<b>93.9</b>	<b>92.1</b>	<b>92.1</b>	<b>90.4</b>	<b>88.7</b>	<b>90.9</b>	<b>89.9</b>	<b>91.5</b>	<b>89.1</b>
820 North El Camino Real San Mateo	Residential	30	<b>94.0</b>	<b>91.6</b>	<b>88.8</b>	<b>86.5</b>	<b>94.0</b>	<b>91.2</b>	<b>89.4</b>	<b>89.5</b>	<b>87.7</b>	<b>86.0</b>	<b>88.2</b>	<b>87.2</b>	<b>88.8</b>	<b>86.4</b>
450 North El Camino Real San Mateo, CA 94401	Residential	31	<b>93.7</b>	<b>91.3</b>	<b>88.5</b>	<b>86.2</b>	<b>93.7</b>	<b>90.9</b>	<b>89.2</b>	<b>89.2</b>	<b>87.4</b>	85.7	<b>87.9</b>	<b>86.9</b>	<b>88.5</b>	<b>86.1</b>
West Poplar Avenue San Mateo	Residential	37	<b>92.2</b>	<b>89.8</b>	<b>87.0</b>	84.7	<b>92.2</b>	<b>89.4</b>	<b>87.6</b>	<b>87.6</b>	85.8	84.2	<b>86.3</b>	85.4	<b>87.0</b>	84.6

Note: **Bolded** numbers indicate an exceedance of the Caltrans standard noise limit.

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### 3.4.1.1 Avoidance, Minimization, and/or Mitigation Measures

According to the 2018 Caltrans Standard Specifications Section 14-8.02, construction activities are not to exceed 86 dBA  $L_{max}$  at a distance of 50 feet from 9 p.m. to 6 a.m. In addition, California Streets and Highway Code Section 216 requires that average hourly construction noise (as measured by  $L_{eq}$ ) heard internally at school locations not exceed 52 dBA.

All construction activities modelled would exceed these noise limits for at least one location within the project limits. Noise measures NOI-1 and NOI-2 will be implemented to avoid, minimize, and mitigate impacts from construction noise.

**NOI-1.** A temporary noise barrier or other control measure will be put in place in front of McKinley Elementary to attenuate noise to less than 52 dBA whenever work is planned within 500 feet of the school during regular school hours. Noise levels will be verified through noise monitoring during construction.

**NOI-2.** The project plans will include a specification for the contractor to create and implement a Noise Control and Monitoring Plan. The plan will require the contractor to implement measures to limit noise levels to comply with 2018 Caltrans Standard Specifications Section 14-8.02 and California Streets and Highway Code Section 216. Noise levels will be verified through noise monitoring during construction.

### **3.5 Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity**

Project implementation would result in attainment of short-term and long-term transportation goals at the expense of some long-term aesthetic and cultural impacts.

#### **No Build Alternative**

The No Build Alternative would offer none of the gains or have any of the losses listed for the Build Alternative. It would also not meet the purpose and need to correct roadway deficiencies and improve safety.

#### **Build Alternative**

Short-term losses would include: construction impacts such as noise and dust; motorized and non-motorized traffic delays; potential for temporary short-term interruption of utilities during construction activities; and short-term disruption of access to pedestrian facilities and private property (e.g. driveway reconstruction) during construction.

Short-term benefits would include: increased jobs and revenue generated during construction.

Long-term losses would include: loss of visual and cultural resources from the removal of trees within the project limits, some of which may be eventually restored after replacement trees mature; use of construction materials and energy; removal of personal property and cultural resources from within state right-of-way (e.g. fence).

Long-term gains include: improved traffic safety and road quality, improved drainage efficiency to reduce localized flooding, enhanced pedestrian infrastructure and user visibility and safety, ADA access, and a long-term management plan for the trees within the project limits.

### **3.6 Irreversible and Irretrievable Commitment of Resources**

The proposed action involves a commitment of a range of natural, physical, human, and fiscal resources.

Considerable amounts of fossil fuels, labor, and highway construction materials such as cement, aggregate, and bituminous material would be used. Additionally, large amounts of labor and natural resources are used in the making of construction materials. These materials are generally not retrievable. However, they are not in short supply and their use would not have an adverse effect upon continued availability of these resources. Any construction would also require a substantial one-time use of both state and federal funds, which are not retrievable; project-related savings in energy, time, and an improvement in roadway, drainage, and pedestrian infrastructure would offset this use. In addition to the costs of construction and right-of-way would be costs for roadway maintenance, including pavement, roadside, signs and markers, electrical and storm maintenance. The removal of trees with cultural value is an irreversible and irretrievable commitment of resources.

The commitment of these resources is based on the concept that residents in the immediate area, region, and state would benefit from the improved quality of the transportation system. These benefits would consist of correcting roadway, drainage, and pedestrian infrastructure deficiencies, which are expected to outweigh the commitment of these resources.

## 3.7 Cumulative Impacts

### 3.7.1 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 limits 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.

### 3.7.2 Cumulative Impact Analysis

This cumulative impact analysis determines whether the project, in combination with projects that are planned, approved, or under construction, would result in a cumulative effect, and, if so, whether the project's contribution to the cumulative impact would be considerable. Projects considered in the cumulative impact analysis include land use developments, infrastructure, and other transportation improvements that would be located near the project. The projects included in the cumulative impact analysis are described in Table 3.7-1.

The cumulative impacts analysis follows the Caltrans 8-step process established in the *Guidance for Preparers of Cumulative Impact Analysis: Approach and Guidance* (Caltrans 2005) as follows:

- **Step 1:** Identify resources to consider in the cumulative impact analysis.
- **Step 2:** Define the Resource Study Area (RSA), or geographic boundary, for each cumulative impact analysis.
- **Step 3:** Describe the current health [and historical context] of each resource.
- **Step 4:** Identify any direct and/or indirect impacts the Build Alternative may contribute to a cumulative impact on the identified resources.
- **Step 5:** Identify a set of active projects to include in the cumulative impact analysis.

**Table 3.7-1. Projects Considered in the Cumulative Impact Analysis**

Project Title	Distance to Project	Lead Agency(s)	Description	Project Status
25 <sup>th</sup> Ave Grade Separation Project	2.5 miles south	Caltrain	Caltrain, in cooperation with the City of San Mateo, will raise the tracks and slightly lower the road (grade separation) at East 25th Avenue in the City of San Mateo. This will improve safety for both motorists and pedestrians, and it will reduce local traffic congestion in the City of San Mateo.	Construction: Fall 2017 to Fall 2021
Burlingame Broadway Grade Separation Project	0.3 miles east	Caltrain	Caltrain, in cooperation with the City of Burlingame, will separate the tracks from the road at Broadway in Burlingame. This will improve safety for motorists, pedestrians, bicyclists and Caltrain railroad operations, as well as reduce local traffic congestion in Burlingame. The project will also construct a new elevated Broadway Station with new amenities that eliminates the current hold-out rule in which only one train is allowed at the station at a time.	Environmental Clearance: Summer 2020  Construction: July 2023 to July 2026
Grade Crossing Improvement Projects in the City of San Mateo	0.6 miles southeast	Caltrain	Caltrain, in cooperation with city partners, will begin a project to improve the safety at 5 at-grade crossings (intersections where train tracks cross a street) in the City of San Mateo. These improvements will increase the safety for vehicles, pedestrians and cyclists. Grade crossing improvement sites include: 1st Avenue and S. Railroad Avenue, San Mateo 2nd Avenue and S. Railroad Avenue, San Mateo 3rd Avenue and S. Railroad Avenue, San Mateo	Construction is expected to start in early 2021 and be completed at all locations by the end of 2021.
Flood Zone Improvements	1.25 miles	City of San Mateo	In September 2020, construction started on the North Shoreview Flood Improvement Project. Some of the work includes improvements to the Coyote Point and Poplar Avenue Pump Stations and will prompt the temporary detour of the Bay Trail through the North Shoreview Neighborhood.	September 2020 to April 2023
High Speed Rail	0.2 miles northwest	CA High Speed Rail Authority	The California High Speed Rail Authority is working to develop a station area plan that will allow for the station to serve as a hub for high-speed rail. This joint effort will guide the design of the high-speed rail station and the area surrounding the station to help the city promote economic development, encourage station area development, and enhance connectivity to other modes of transportation.	Environmental clearance is scheduled to be completed in 2021
Hillsdale Pedestrian/Bicyclist Bridge	3 miles southeast	City of San Mateo	The Hillsdale Pedestrian/Bicyclist Bridge project envisions a Class I pedestrian and bicycle grade separated crossing over US 101 south of the Hillsdale interchange and a Class II facility on Hillsdale from Norfolk to the San Mateo/Foster City limits. The proposed bridge and Class II facility will allow for safe and unimpeded bicycle access apart from the high vehicular volumes at the Hillsdale Boulevard interchange while connecting the bicycle network from the Hillsdale Caltrain Station to Foster City and neighborhoods east of US 101.	Preliminary Design

Project Title	Distance to Project	Lead Agency(s)	Description	Project Status
North San Mateo Drive "Complete Streets"	0.2 miles east	City of San Mateo	The City of San Mateo's Public Works Department is implementing "Complete Streets" improvements to North San Mateo Drive from Baldwin Avenue to Peninsula Avenue. San Mateo Drive is the County of San Mateo Bicycle route through the city. The project provides pedestrian and bicycle safety improvement that are consistent with the Pedestrian, Bicycle, and Sustainable Streets Master Plans. The Project consists of implementation of a road diet that converts the existing four-lane to two-lane with center turn lane and bicycle lanes from Poplar Avenue to Peninsula Avenue.	Construction began August 2020
El Camino Real Master Plan (SR92 to the Belmont city border)	1.8 miles south	City of San Mateo	The Master Plan is a framework for decision making for developers, designers, city officials, and concerned citizens interested in making the City of San Mateo a better place to live and work.	Approved in 2021
San Mateo Rail Corridor Transit-Oriented Development Plan	0.6 miles southeast	City of San Mateo	The intent of the San Mateo Rail Corridor Transit-Oriented Development Plan is to "allow, encourage, and provide guidance for the creation of world class transit-oriented development (TOD) within a half-mile radius of the Hillsdale and Hayward Park Caltrain station areas, while maintaining and improving the quality of life for those who already live and work in the area." As defined by the plan, "TOD refers to the concept of creating pedestrian friendly neighborhoods and districts in close and convenient proximity to transit stations, with the idea that a desirable living environment is being created, which is served by transit."	Adopted in 2005
937-939 N. Idaho Street	1 mile northeast	City of San Mateo	This project includes a site plan and architectural review for the demolition of an existing attached carport for the construction of an attached 429 square-foot garage serving two garage spaces for an existing duplex. Vesting tentative parcel map for the conversion of an existing duplex from single entity ownership to condominiums. The project does not propose expansion of the existing dwelling units or the addition of dwelling units.	Approved application
526/528 N. Claremont Street	0.5 mile northeast	City of San Mateo	This project includes a tentative parcel map for the conversion of an existing duplex from single entity ownership to condominiums. The project does not propose expansion of the existing dwelling units or the addition of dwelling units.	Approved application
210 S Fremont Street	0.5 miles northeast	City of San Mateo	Planning application for a site plan and architectural review, site development planning application, and subdivision map. Development of a four-story, 15-unit residential condominium building with below grade parking located at the southeast corner of 2nd Avenue and Fremont Streets.	Approved application
180 East 3rd Avenue	0.5 miles south	City of San Mateo	Site plan and architectural review to demolish the existing building (Aaron Brothers and office space at 300 S. Ellsworth Avenue) and construct a 17,187 square-foot three-story mixed-use building with one basement level. The proposed uses include 3,380 square feet of retail on the ground floor, and a total of 19,608 square feet of office in the basement, second, and third floors. A private rooftop terrace is also proposed. The applicant does not propose to provide parking on-site and has requested to pay Central Parking and Improvement District parking in-lieu fees.	Approved application

Project Title	Distance to Project	Lead Agency(s)	Description	Project Status
Essex at Central Park	0.6 miles south	City of San Mateo	A planning application has been submitted for the development of a five-story retail and residential housing located at the southern side of the block bordered by San Mateo Drive and 4th Avenue to the north across from Central Park's baseball diamond and tennis courts. The project will utilize the existing surface parking lot to develop 80 new residences, which range from one to three-bedroom apartments over a garage and 7,000 square feet of retail. The project will provide six Below-Market Rate housing units for Very-Low income households. All dwellings will be for rent.	Approved application
401 East Millbrae Avenue	0.5 miles south	City of Millbrae	The project would require modification to an approved specific development plan, design review, amendment to the MMC Chapter 10.10 Sign Regulations, Master Sign Program and Parking Variance to allow less than the required parking for the construction of a new hotel ("Moxy Hotel") at the Weston and Aloft Hotel site.	Application review complete
480 El Camino Real	0.5 miles south	City of Millbrae	The project would require design review, conditional use permit, and lot merger/subdivision to allow the demolition of a paved, surface parking lot and construction of a 4-story, 9 residential unit, and two commercial space, condominium building on a 5,807 square foot site, located in a Commercial Zoning District. The Planning Commission has recommended approval to the City Council, which takes final action on subdivisions.	Application review Complete
1 and 45 Adrian Court	0.5 miles east	Burlingame	The project consists of two parcels that currently include two commercial buildings, surface parking, and landscaping. The project entails the demolition of these features and the merging of the two parcels to create a 2.83-acre site for a seven-story, 265-unit mixed use development. Approximately 14.3 percent of the residential units (38 units) would be designated for low income households. The project would entail 3,701 square feet of commercial/office space on the ground floor and a publicly accessible private park. Parking would be provided in an at-grade garage, containing two levels of parking for a total of 314 parking spaces.	Approved project
1499 Bayshore Highway	0.8 miles east	Burlingame	The project would include 271,565 SF of building area and 144,518 SF of above-ground structured parking. Hotel amenities would include 6,200 SF of hotel bar/café/buffet space, 3,200 SF of conference/meeting space, a 1,900 SF pool bar and grill, a 1,700 SF rooftop bar/lounge, and an 1,800 SF fitness center. A 2,900 SF free-standing "signature" restaurant would adjoin the hotel at the street front. The building would have an overall height of 136 feet.  The proposed project would have a total of 289 on-site parking spaces. Parking would be provided in a four-story structure integrated into the rear of the building.	Approved project



Project Title	Distance to Project	Lead Agency(s)	Description	Project Status
601 California Drive	0.3 miles east	Burlingame	<p>The City of Burlingame has approved an application for construction of a new five-story, 25-unit live/work development at the corner of California Drive and Floribunda Avenue within the Downtown Specific Plan planning area.</p> <p>The proposed building includes 25 live/work units, with seven units located on each of the second, third, and fourth floors, and five units located on the fifth floor. The ground floor will consist of an entrance lobby and an at-grade parking garage for 25 vehicles. There is only one point of vehicular ingress and egress from the garage, which is provided off Floribunda Avenue.</p>	Approved project
619-625 California Drive	0.3 miles east	Burlingame	<p>The City of Burlingame has approved an application for construction of a new four-story, 26-unit live/work development at the corner of California Drive and Oak Grove Avenue within the Downtown Specific Plan planning area.</p>	Approved project
1214 Donnelly Avenue	0.3 miles east	Burlingame	<p>The City of Burlingame has approved an application for Amendment to the Zoning Code and Downtown Specific Plan, Mitigated Negative Declaration, Design Review, Conditional Use Permit for building height and Lot Combination for construction of a new 14-unit mixed use commercial/residential building at 1214 Donnelly Avenue.</p> <p>The proposed project site encompasses three parcels with addresses of 1214, 1218, and 1220 Donnelly Avenue. The applicant proposes to re-purpose the site with a new approximately 35,075 gross-square-foot mixed use building consisting of retail uses on the ground floor (4,704 square feet) and 14 residential units on the second and third floors.</p>	Approved project
1128-1132 Douglas Avenue	0.3 miles east	Burlingame	<p>An application has been approved for design review, conditional use permit for building height, front setback landscape variance, parking variance for driveway width, and tentative parcel map for lot combination related to construction of a new, five-story 27-unit residential apartment building with at-grade and below-grade parking at 1128-1132 Douglas Avenue. The project includes three studio, fourteen 1-bedroom, nine 2-bedroom, and one 3-bedroom apartment units.</p> <p>The project site is currently developed with six residential units within three structures. All of the existing structures will be removed from the property as part of the project. The existing single-family residence at 1132 Douglas Avenue has been identified as a potential historic resource and as part of the development project, the front portion of the house is to be relocated to another site located at 524 Oak Grove Avenue, where it will be refurbished and enlarged as a single-family residence.</p>	Approved project
1457 El Camino Real	0 miles	Burlingame	<p>The City of Burlingame has approved an application for construction of a new four-story, 9-unit residential condominium at 1457 El Camino Real.</p>	Approved project

Project Title	Distance to Project	Lead Agency(s)	Description	Project Status
1766 El Camino Real	0 miles	Burlingame	The City of Burlingame has approved an application for Amendment to the Zoning Code (Off-Street Parking Regulations) to reduce the office parking ratio for properties located in the North Burlingame Mixed Use Zone; Mitigated Negative Declaration pursuant to CEQA, Design Review, and Conditional Use Permit for mechanical parking stackers for a new seven-story, mixed-use development with retail, office and 60 residential units with below grade parking at 1766 El Camino Real.	Approved project
1870 - 1876 El Camino Real	0 miles	Burlingame	The City of Burlingame has approved an application for Environmental Review, Design Review, and Density Bonus for a new 7-story, 169-unit apartment development at 1870 - 1876 El Camino Real, within the North Burlingame Mixed Use area.  The project site is composed of two parcels totaling 1.14 acres at the corner of El Camino Real and Murchison Drive. The site is currently occupied by a gasoline station and a two-story office building; the interior parcel with the office is a through lot to California Drive.	Approved project
556 El Camino Real	0 miles	Burlingame	An application has been approved for environmental review, Condominium Permit, Design Review, and Conditional Use Permit for Building Height for construction of a new five-story, 21-unit residential condominium building with below-grade parking at 556 El Camino Real. The proposed project includes three 1-bedroom units, twelve 2-bedroom units and six 3-bedroom units. The existing apartment complex would be demolished to build the proposed condominium building.	Approved project
1433 Floribunda Avenue	0.1 miles east	Burlingame	An application for Design Review, Condominium Permit, and Conditional Use Permit for building height has been approved for construction of a new four-story, 8-unit residential condominium building with at-grade parking at 1433 Floribunda Avenue, zoned R-3. The proposed project includes eight 2-bedroom units. This proposed project replaces the 10-unit condominium previously approved in May of 2015.	Approved project
21 Park Road	0 miles	Burlingame	An application has been approved for Design Review and Condominium Permit for a new 3-story, 7-unit condominium building at 21 Park Road.	Approved project
1095 Rollins Road	0.5 miles east	Burlingame	The City of Burlingame has approved an application for the construction of a new 150-unit apartment development at 1095 Rollins Road, Burlingame. The project site is composed of two parcels that currently contain a restaurant and elevated tennis courts, with parking below. The proposal includes merging the two parcels to create a 46,827 square foot site, demolishing the existing structures and constructing a new 6-story, 150-unit apartment building.	Approved project
128 Lorton Ave	0.2 miles east	Burlingame	The City of Burlingame has approved an application for construction of a new five-story, 19-unit residential condominium building at 128 Lorton Avenue with at-grade enclosed parking garage.	Approved project
30 Ingold Rd	0.2 miles east	Burlingame	The City of Burlingame has approved an application for construction of a new seven-story, 298-unit mixed-use development at 30 Ingold Road, within the RRMU (North Rollins Road Mixed-Use) District.	Approved project

Project Title	Distance to Project	Lead Agency(s)	Description	Project Status
Proposed Eucalyptus Avenue Pathway and Tree Renewal Project	0.5 miles southwest	Hillsborough	Hillsborough is proposing to initiate a tree vegetation renewal program on Eucalyptus Avenue, between the 500 and 700 blocks of Eucalyptus Avenue. The proposed plan includes removing up to 15 aged, non-native Eucalyptus trees; installation of 50 plus local, native trees; landscaped, vegetated shoulders; the addition of approximately 1,400 feet of pedestrian pathways; and curb and gutter installation for improved storm water conveyance.	Conceptual plan
Gateway at the Millbrae Station	0.1 miles northeast	BART	Mixed-use transit-oriented development on approximately 9 acres located at the Millbrae BART Station. The proposal includes 151,583 SF of office space, 320 market-rate apartments units, 80 affordable apartment units, 164 hotel rooms, and 44,123 SF of ground floor retail.	Construction until 2022

Sources: Caltrain 2020, San Mateo 2020a, San Mateo 2020b, Millbrae 2020a, Burlingame 2020b, Hillsborough 2020, BART 2020, California High-Speed Rail Authority 2020

- **Step 6:** Assess cumulative impacts.
- **Step 7:** Report the results of the cumulative impacts analysis.
- **Step 8:** Assess the need for additional avoidance, minimization, or mitigation measures to address any cumulative impacts.

Under the No Build Alternative, no construction would occur within the project limits. Existing conditions would be perpetuated, and the impacts associated with the Build Alternative (either with or without inclusion of the design option) would not occur. Therefore, this alternative would not contribute to cumulative environmental effects in combination with other projects, and no cumulative impacts would occur.

### **3.7.3 Resource Areas with No Contribution to Cumulative Effects**

Based on the 8-step methodology outlined above, since direct and/or indirect impacts of the Build Alternative are not anticipated for the following resources areas (Caltrans 2005), no cumulative effects from the project are anticipated:

- Consistency with State, Regional, and Local Plans and Programs (Section 3.1.1);
- Community Character and Cohesion (Section 3.1.2);
- Environmental Justice (Section 3.1.3);
- Utilities/Emergency Services (Section 3.1.4);
- Hydrology and Floodplain (Section 3.2.1);
- Water Quality and Storm Water Runoff (Section 3.2.2);
- Energy (Section 3.2.4);
- Natural Communities (Section 3.3.1);
- Animal Species (Section 3.3.2); and
- Invasive Species (Section 3.3.3).

In addition, no cumulative effects from the project are anticipated for any of the topics considered but determined not to be relevant.

### **3.7.4 Resources Considered for Contribution to Cumulative Effects**

The proposed project would result in significant and unavoidable impacts to visual/aesthetic resources and cultural resources due to the removal of approximately 300-350 existing trees including approximately 250 trees that contribute to the Howard-Ralston Eucalyptus Tree Rows. Therefore, a cumulative impact analysis is required for these topic areas, which is presented below.

### 3.7.4.1 Visual/Aesthetics

The project would adversely affect visual/aesthetic resources under NEPA and CEQA. The Resource Study Area (RSA) for the cumulative visual/aesthetic analysis encompasses the areas within the project limits.

#### **Degradation of Visual Character and Quality**

As described in Section 3.1.5.2, there are approximately 700 trees lining both sides of El Camino Real within the project limits. There are approximately 600 trees along El Camino Real between Peninsula Avenue and Ray Drive (the limits of the Howard-Ralston Eucalyptus Tree Rows). Approximately 390 of these contribute to the historic Howard-Ralston Eucalyptus Tree Rows. The oversized scale of the historic eucalyptus trees along both sides of El Camino Real dominates the visual experience of the corridor. The tree trunks are several feet in diameter and are over 100 feet tall. Eucalyptus trees have a light-colored trunk with peeling bark, which contrasts strongly with the canopy high overhead composed of elongated, medium-green leaves. The tree-lined character of El Camino Real is continuous throughout the project corridor, but the visual mass of the historic eucalyptus trees is very different from that of younger street trees that have been planted more recently. The younger street trees include both evergreen and deciduous species of different forms, sizes, and ages.

The Howard-Ralston Eucalyptus Tree Rows are widely known and valued in the broader community due to their striking appearance and historic status. The Howard-Ralston Eucalyptus Tree Rows was planted by landscape gardener John McLaren in the 1870s to promote development along the corridor through beautification of the roadway. The Howard-Ralston Eucalyptus Tree Rows are listed on the NRHP.

The historic Howard-Ralston Eucalyptus Tree Rows establish a high degree of vividness as a group and as individual specimens. The degree to which they are out of scale with even the largest of typical street trees is immediately compelling and memorable. However, the trees along El Camino Real within the project limits range in age and health. Many historic trees exhibit signs of disease and have been damaged by infrastructure construction and maintenance throughout their long lives. The health of the resource is considered to be declining and many trees may need to be removed in the coming decades for public safety.

The project would require removal of approximately 300 to 350 of the 700 trees within the project limits including 250 trees that contribute to the Howard-Ralston Eucalyptus Tree Rows. The loss of these trees would change the visual setting notably, dramatically altering the tree-lined character and cohesiveness of the project limits. The project would result in a pronounced adverse effect.

There are five projects including 1457 El Camino Real, 1766 El Camino Real, 1870-1876 El Camino Real, 556 El Camino Real, and 21 Park Road in the City of Burlingame with the potential to change the viewshed within the project limits. They are all new buildings, some of which are taller than existing buildings. However, given the setback requirements along El Camino Real and permit requirements for removal of protected trees by projects authorized by the City of Burlingame, they are unlikely to affect existing trees. Therefore, these projects are unlikely to incrementally contribute to a cumulative impact to the visual resources in the RSA.

No additional avoidance, minimization, or mitigation measures are necessary to address any cumulative impacts.

#### **3.7.4.2 Cultural Resources**

The project would adversely affect the Howard-Ralston Eucalyptus Tree Rows under NEPA and would result in a substantial adverse change to this historical resource under CEQA. The Resource Study Area (RSA) for the cumulative cultural analysis encompasses all three McLaren tree rows within the City of Burlingame.

##### **McLaren Tree Rows**

The City of Burlingame is known as “The City of Trees” as a result of the efforts of John McLaren, a landscape gardener who planted trees on several large estates encompassing more than 8,000 acres in the City of Burlingame and the surrounding area. The trees were planted between 1874 and 1880. Over time, as urban development occurred throughout the Peninsula, most of the trees were gradually cut down. However, a portion of the eucalyptus and elm trees that were planted along El Camino Real still exist as the approximately 2.2-mile-long Howard-Ralston Eucalyptus Tree Row, which is listed on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).

Two other rows of trees planted by John McLaren in the late 1800s remain in the City of Burlingame including the Easton Drive Eucalyptus Tree Rows, a City Heritage Grove (on Easton Drive from El Camino Real to Vancouver Avenue) and two sections of trees that comprise what is known as Parcel I (Jules Francard Grove) and Parcel II. Parcel I (Jules Francard Grove) and Parcel II run parallel to the railroad tracks on California Drive between North Lane and Larkspur Drive. The six-block portion of the trees planted by John McLaren along Easton Drive was designated as a Heritage Grove by the Burlingame City Council in 1976. The project would result in the removal of one tree from the Easton Drive Eucalyptus Tree Rows but would not result in an adverse effect to this resource. The project would not affect the tree rows known as Parcel I (Jules Francard Grove) and Parcel II. Together, these three tree rows make up the RSA considered for this cumulative impact analysis.

Since its incorporation, the City of Burlingame has had a long history of community support to provide legal protection for its heritage trees. In an effort to save the row of eucalyptus and elm trees along El Camino Real from a proposed widening of the county road for commercial development, at the behest of the Burlingame Women’s Club, the City of Burlingame, and Mayor Treadwell enacted an ordinance in 1908 “prohibiting the cutting, injuring or destroying of trees on public streets, highways or parks of the Town of Burlingame.” A year later, the Parks Commission was created by the City’s Board of Trustees. The City of Burlingame has a long history of court battles to preserve the strip of trees along El Camino Real from widening and commercial use, as well as the Francard Grove of trees along the railroad tracks. In 1930, zoning restrictions were created to prohibit commercial development along El Camino Real to preserve the Howard-Ralston Eucalyptus Tree Rows.

Nonetheless, the health of the McLaren tree rows is declining. All of the tree rows have been subject to gradual deterioration over time, due to age, disease, and conflict with infrastructure such as roadways, railroad tracks, and power lines. Where possible, trees that have been substantially pruned or removed have been replaced; however, in many cases the replacement

trees have been of a different species that mature to a smaller size, in order to help reduce fire hazards from conflicts with overhead power lines and from continued roadway and sidewalk damage due to tree roots.

The Howard-Ralston Eucalyptus Tree Rows is within the project limits and would be adversely affected by removal of approximately 250 contributing trees.

As noted in Section 3.7.4.1, there are five projects including 1457 El Camino Real, 1766 El Camino Real, 1870-1876 El Camino Real, 556 El Camino Real, and 21 Park Road in Burlingame with the potential to remove additional trees within the project limits. In addition, two projects (601 California Drive and 619-625 California Drive) are adjacent to the Parcel I (Jules Francard Grove) and Parcel II tree rows. Section 3.7.4.1 noted little potential for the projects on El Camino Real and Park Road to affect tree rows. The projects near the Parcel I (Jules Francard Grove) and Parcel II tree rows are located on the south side of California Drive whereas the tree rows are located on the north side of California Drive. Therefore, these projects would also have little potential for removing or affecting these trees. None of the projects listed in Table 3.7-1 are anticipated to require removal of trees from any of the three McLaren tree rows. Therefore, these projects are unlikely to incrementally contribute to a cumulative impact to the cultural resources in the RSA.

None of the projects identified in Table 3.7-1 would contribute to cumulative impacts to visual/aesthetic or cultural resources. Therefore, no cumulative impacts would occur with the Build Alternative. No additional avoidance, minimization, or mitigation measures are necessary to address any cumulative impacts.



## Chapter 4 California Environmental Quality Act Evaluation

### 4.1 Significant Irreversible Environmental Changes

Significant irreversible environmental changes are discussed in Section 3.6, Irreversible and Irretrievable Commitments of Resources.

### 4.2 Determining Significance under CEQA

The proposed project is a joint project by Caltrans and the FHWA and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and the 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 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans. Caltrans 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 Caltrans 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.

### 4.3 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 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 2 and 3 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 3 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 3. This checklist incorporates by reference the information contained in Chapters 2 through 3.

**AESTHETICS**

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

- a) **No Impact.** The project viewshed is limited to views of the project limits or views from within the project limits, including the immediately adjacent buildings and landscaping. The size and number of the surrounding buildings and associated landscaping limits views far beyond the roadway. There are no scenic vistas within the project limits. Thus, there would be no impact.
- b) **No Impact.** El Camino Real within the project limits is not a designated as a State Scenic Highway. Thus, there would be no impact.
- c) **Significant and Unavoidable Impact.** The project is located in a highly urbanized area on state right-of-way that traverses the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough. However, due to the presence of an extensive visual resource within the project limits, this section discusses both if the project would substantially degrade the existing visual character of the public view and if the project conflicts with applicable zoning and other regulations governing scenic quality.

### *Defining the Visual Character of the Scenic Resource*

As noted in Section 3.1.5, the project limits contain approximately 700 trees; approximately 390 of these trees are part of the historic Howard-Ralston Eucalyptus Tree Rows, which were planted by landscape gardener John McLaren in the late 1800s; they are massive trees, over 100 feet tall, with huge trunks and high canopies. The Howard-Ralston Eucalyptus Tree Rows extend along El Camino Real from Peninsula Avenue to Ray Drive/Rosedale Avenue, in the City of Burlingame. The historic tree rows, along with the other existing established trees, are the primary visual resource in the project limits, and they help to create an intimate, “neighborhood” feel within the area they occur.

The Howard-Ralston Eucalyptus Tree Rows are widely known and valued in the broader community due to their striking appearance and historic status. Within the City of Burlingame, the Howard-Ralston Eucalyptus Tree Rows are a source of pride and identity. The trees were planted by John McLaren in the 1870s to promote development along the corridor through beautification of the roadway. There is a history of protecting the Howard-Ralston Eucalyptus Tree Rows dating back to 1908. Notably, the City of Burlingame passed the first of its kind zoning ordinance in 1930, restricting commercial development along El Camino Real to protect the Howard-Ralston Eucalyptus Tree Rows. Additionally, the city designated the portion of the Howard-Ralston Eucalyptus Tree Rows within their city limits as a “Heritage Grove” in 1975, and the San Mateo Sites Committee has designated the Howard-Ralston Eucalyptus Tree Rows within the City of Burlingame as a “Point of Historic Significance.”

### *Applicable Zoning and Other Regulations Governing Scenic Quality*

The jurisdictions that surround the project limits all have regulations that govern trees, especially the type of trees within the project limits. Examples include:

- Burlingame Municipal Code, Title 11 which regulates actions throughout the City regarding trees and vegetation. The Howard-Ralston Eucalyptus Tree Rows are considered “protected trees” by the City of Burlingame.
- Burlingame’s Zoning Code Table 25.40-3 (Section 25.40.040) defines the minimum width of these setbacks along El Camino Real as 15 to 20 feet, and the setbacks must include a walk zone, landscape planters, and 5-foot-wide tree wells.
- Millbrae’s Municipal Code Chapter 8.60 regulates the City’s Tree Protection and Urban Forestry Program, which was established to maintain established trees and maximize tree cover; promote a stable and sustainable urban forest; and promote and maintain the aesthetic value of the community.
- San Mateo’s Municipal Code Chapter 13.52 sets forth the City’s Heritage Tree Ordinance which states the City has been forested with a variety of healthy and valuable trees which must be protected and preserved for the health and welfare of its citizens.

- Hillsborough Municipal Code Chapter 14.04 sets forth the Town's Tree Removal Ordinance with the intent to establish regulations for the removal of trees in order to retain as many trees as possible (consistent with the ordinance) and maintain the reasonable economic enjoyment of private property.

The project would be implemented on land owned by the state, and as a state agency, Caltrans is not subject to local plans, policies, and ordinances. However, Caltrans has taken the local ordinances into consideration when designing the project. In addition, Caltrans has met with representatives from the local jurisdictions to discuss this project, including participating in the El Camino Real Task Force. The recommendations of the Task Force will be included during final design, where feasible.

#### *Impacts to Existing Visual Character or Quality of Public Views*

Visual simulations of three key views were prepared for the Build Alternative (either with or without inclusion of the design option) in order to demonstrate the change in visual character and help evaluate the change in visual quality. They are presented in Figures 3.1.5-5 through 3.1.5-10. These simulations include the avoidance, minimization, and mitigation measures listed in Section 3.1.5.4 and are shown 20 years after project completion.

The Build Alternative (either with or without inclusion of the design option) would require removal of approximately 300 to 350 trees, including 250 trees that contribute to the Howard-Ralston Eucalyptus Tree Rows. As discussed in detail in Section 3.1.5.3, tree removal would change the visual setting notably, dramatically altering the tree-lined character and cohesiveness of these views. While the existing roadway configuration and width would be retained, the view would become very open and the intimate feeling would be lost without the double rows of large, historic trees, and their enclosing canopy. Following project construction, these views would no longer retain the same visual character due to the tree loss. Therefore, this change represents a potentially significant impact to public views.

Therefore, the project would implement avoidance, minimization, and mitigation measures VIS-1 through VIS-5. The Build Alternative (without the design option) would not allow for a return to the visual character that exists today. The restrictions on tree replacement under and around PG&E infrastructure would result in 30 percent fewer trees being replanted and an uneven distribution of trees after 20 years. Therefore, the Build Alternative would result in a **Significant and Unavoidable** impact.

Implementation of the Build Alternative with the design option included along with avoidance, minimization, and mitigation measures VIS-1 through VIS-5 would allow for a return to the visual character that exists today. Until the trees reach maturity (after approximately 20 years), the impact would be significant. After 20 years, the impact would be less than significant. Therefore, the Build Alternative with the design option would result in a **Less Than Significant Impact with Mitigation Incorporated**.

- d) **No Impact.** The project-related improvements would not change the amount of lighting or glare as compared to existing conditions. Thus, there would be **no impact**.

**AGRICULTURE AND FORESTRY 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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	-	-	-	X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	-	-	-	X
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))?	-	-	-	X
d) Result in the loss of forest land or conversion of forest land to nonforest use?	-	-	-	X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to nonforest use?	-	-	-	X

a, b, c, d, and e) **No Impact.** There are no designated farmlands or forest lands within or adjacent to the project limits (CDOC 2021). The project is located within an urbanized area and would not convert any farmland to non-agricultural use; convert any forest land to non-forest use; or conflict with existing agricultural or timberland zoning.

**AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	-	-	X	-
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	-	-	X	-
c) Expose sensitive receptors to substantial pollutant concentrations?	-	-	X	-
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	-	-	X	-

a, b, c, d, and e) **Less Than Significant Impact.** The project is located in the San Francisco Bay Area Air Basin (SFBAAB) and is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The project is included in the ABAG and MTC most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), *Plan Bay Area 2040*, which was found to be conforming. The Build Alternative would not interfere with the implementation of *Plan Bay Area 2040*. This project is not a capacity-increasing transportation project and the project would generate a less-than-significant amount of pollutants during construction due to the temporary nature of project construction. With implementation of construction standards adopted by BAAQMD and Caltrans-standardized procedures for minimizing air pollutants during construction (as described in Section 2.1.1.3), the project would not violate or contribute to a violation of any air quality standard, result in a cumulatively considerable net increase of any criteria pollutant, expose sensitive receptors to substantial pollutant concentrations, or result in emissions or odors that would adversely affect a substantial number of people.

**BIOLOGICAL RESOURCES**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service, or NOAA Fisheries?	-	-	X	-
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	-	-	-	X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	-	-	-	X
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?	-	-	-	X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	-	-	X	-
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?	-	-	-	X

- a) **Less Than Significant Impact.** No threatened or endangered species (federal or state) are present within the project limits. No special-status plants were noted within the project limits. The only special-status animal species found within the BSA, as described in Section 3.3.1, were birds subject to the MBTA. However, the Contractor would be required to implement BMPs, described in Section 3.3.2.3 to reduce conflicts with nesting birds.
- b) **No Impact.** As described in Section 3.3.1.1, riparian corridors exist at some of the creek crossings within the BSA, including Cherry Canyon Creek, Sanchez Creek, and Mills Creek. Project construction would be limited to the existing roadway, sidewalks, driveways, and other previously disturbed surfaces. The project would perform no construction activities within waterways or riparian corridors. Therefore, the project would have no impact on natural communities.

- c) **No Impact.** Waterways under the jurisdiction of the USACE were found adjacent to the project limits, but no such wetlands are present within the project limits. The project does not require any in-water work.
- d) **No Impact.** Project construction would be limited to the existing roadway, sidewalks, driveways, and other previously disturbed surfaces. The project would have no impact on any migratory wildlife corridors or the movement of any native resident or migratory fish or wildlife species, and it would not impede the use of native wildlife nursery sites.
- e) **Less Than Significant Impact.** As noted for question C under Aesthetics in this section, the project would be constructed on land owned by the state, and as a state agency, Caltrans is not subject to local plans, policies, and ordinances. However, Caltrans has taken the local ordinances into consideration when designing the project. In addition, Caltrans has met with representatives from the local jurisdictions to discuss this project, including participating in the El Camino Real Task Force. The recommendations of the Task Force will be included during final design, where feasible.
- f) **No Impact.** There are no Habitat Conservation Plans (HCP) or Natural Community Conservation Plans in the BSA with jurisdiction over this project type, as described in Section 3.3.1.1.



**CULTURAL RESOURCES**

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

- a) **Significant and Unavoidable Impact.** As described in Section 3.1.6.3, the Build Alternative (both with or without the design option) has the potential to change features of some historic resources. See Table 3.1.6-2 for a summary of how the Build Alternative would directly and indirectly affect architectural resources within the APE.

Three historic resources (1479 El Camino Real, Burlingame; 1265 El Camino Real, Burlingame; and 1041 El Camino Real, Burlingame) each contain character-defining features that are within existing state right-of-way. These features would be removed to construct the Build Alternative (with and without the inclusion of the design option). However, removal would not result in substantial impairment of these four historic resources. Their remaining character-defining features would not be impacted by the Build Alternative. Therefore, implementation of the Build Alternative would not affect the eligibility of these three from inclusion on the NRHP and the impacts would be **less than significant**.

The Build Alternative may require the removal of one tree from the Easton Drive Eucalyptus Tree Rows. Removal of one tree from the approximately 63 trees included in the Easton Drive Eucalyptus Tree Rows is not enough to diminish what makes the Easton Drive Eucalyptus Tree Rows potentially eligible for the NRHP. The remaining trees would still convey the overall presence of two rows of trees lining Easton Drive. The experience of passersby would also not change. Therefore, the impacts would be **less than significant**.

The project would remove 250 of the 390 trees that contribute to the Howard-Ralston Eucalyptus Tree Rows. The project also has the potential to directly affect the roots of additional contributing trees that may be within the existing roadway. Potential damage to tree roots encountered during construction could result in additional unanticipated tree removal. Contributing eucalyptus and elm trees that require removal would be replaced according to the Replanting Plan in Appendix F. However, the loss of contributing trees would constitute physical destruction of part of the historic property. Removal of the contributing trees would diminish the integrity of location, design, materials, workmanship, feeling, and association of the

Howard-Ralston Eucalyptus Tree Rows, resulting in a Finding of Adverse Effect on the Howard-Ralston Eucalyptus Tree Rows. Before the implementation of CUL-1 through CUL-3, the project would represent a **significant and unavoidable** impact. Even with implementation of CUL-1 through CUL-3, the project would result in a substantial adverse change in the significance of the Howard-Ralston Eucalyptus Tree Rows and would represent a **significant and unavoidable** impact.

- b) **No Impact.** Three archaeological resources were previously recorded within the archaeological APE. Field surveys and Extended Phase 1 testing found the sites are not present within the APE. In addition, a total of 27 cores were excavated and areas did not appear to be highly or very highly sensitive for buried archaeology, as previously mapped (Blake 2019). No intact archaeological materials were identified within the project limits. The project is not anticipated to affect any archaeological resources.
- c) **Less Than Significant Impact.** There are no known interred human remains within the project vicinity. Standard Caltrans practices described in Section 2.1.1.3 would be followed should human remains be discovered.

**ENERGY**

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

- a) **No Impact.** While energy use during construction is dependent on the equipment being used for each activity at any given time, the total consumption for the 3-year project span is estimated to be approximately 117,000 gallons of diesel fuel and approximately 4,000 gallons of gasoline fuel. The short-term energy consumption required during construction would allow for the long-term, continued operation of El Camino Real. No additional energy use would be necessary during operation beyond that of existing operations. Therefore, energy use during construction would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Because construction activities are short-term, the increase of energy consumption within the project limits would also be short-term.

As described in Section 3.2.4.3, the project would not result in changes to traffic volumes, vehicle mix, or any other factor that would cause an increase in energy consumption (i.e. vehicle fuel) of the project from that of the existing condition. The project includes several features to reduce indirect energy consumption. The project would not result in an inefficient, wasteful, and unnecessary consumption of energy.

- b) **No Impact.** The project would increase the ease and appeal of pedestrian mobility and decrease the energy used on maintenance of the roadway. Therefore, the project would not conflict with a state or local plan for renewable energy or energy efficiency.

**GEOLOGY AND SOILS**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	-	-	-	X
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.	-	-	-	X
ii) Strong seismic ground shaking?	-	-	-	X
iii) Seismic-related ground failure, including liquefaction?	-	-	-	X
iv) Landslides?	-	-	-	X
b) Result in substantial soil erosion or the loss of topsoil?	-	-	-	X
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?	-	-	-	X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	-	-	-	X
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?	-	-	-	X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	-	-	-	X

- a) **No Impact.** No active or potentially active faults cross the project limits therefore, the risk of surface fault rupture does not exist. However, the project limits may be subject to strong ground motions from nearby earthquake sources during the design life of the proposed retaining walls. Additionally, based on the project's preliminary geotechnical report, the potential for liquefaction does not exist in the locations of the proposed retaining walls due to the presences of clayey and dense sandy materials (Caltrans 2020b). However, because of strong shaking motion, localized liquefaction may occur due to the presence of medium dense sandy lenses. The project limits are located in a fairly flat area and no major fills are proposed for the project, therefore, landslide and slope instability are not of concern.

Although the project could be affected by faults that have the potential of producing strong seismic shaking during an earthquake, Caltrans' design and construction guidelines incorporate engineering standards that address seismic risks. Project elements will be designed and constructed to meet seismic design requirements for ground shaking and ground motions, as determined for the project vicinity and site conditions. Caltrans also requires additional geotechnical subsurface and design investigations to be performed during the final project design and engineering phase. These standards and requirements would minimize the risk of the project being damaged during a seismic event. Due to the lack of project structures included in the proposed project, the project would not cause a potential substantial risk of loss, injury, or death from a seismic event.

- b) **No Impact.** A Storm Water Pollution Prevention Plan (SWPPP) will be prepared before project construction, which would require implementation of BMPs to minimize erosion and topsoil loss. Potential erosion and transportation of soil particles would be managed through standard construction BMPs, such as installation of silt fences, which would substantially reduce potential sediment transport from the construction site. With implementation of BMPs required by the SWPPP and Caltrans standards and requirements as described in Sections 2.1.1.2 and 2.1.1.3, there would be no impact.
- c) **No Impact.** The risk of lateral spreading due to sloping ground conditions or open stream banks does not exist within the project limits. Discussion of earthquake-induced landslides and other seismic related ground failure are discussed previously under Impact (a).
- d) **No Impact.** The project would not include construction of habitable structures, and therefore is not expected to create substantial risks to life or property. Since the soil is classified as Urban Land, properties such as shrink-swell have not been rated.
- e) **No Impact.** The project would not include the use of septic tanks or alternative wastewater disposal systems.
- f) **No Impact.** The project would take place entirely on previously disturbed soil, however, there remains a very low potential for paleontological resources to be found during construction based on the geology underlying the project limits as discussed at the beginning of Chapter 3. Implementation of Caltrans' Standard Specification 14-7.03 that provides for stopping work, securing the area, and performing further investigation if paleontological resources are encountered during project construction would ensure any impacts to paleontological resources remain less than significant.

**GREENHOUSE GAS EMISSIONS**

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

- a) **Less than Significant Impact.** Section 4.5.3. provides an analysis of construction-related and operational GHG emissions.

Construction-related GHG emissions were calculated using the Road Construction Emissions Model (RCEM), version 9.0.0, provided by the Sacramento Metropolitan Air Quality Management District. The total project construction duration would be 36 months and the total amount of CO<sub>2</sub> produced due to construction would be 1,343.81 tons. While the project would result in GHG emissions during construction, because the project would not increase the number of travel lanes on El Camino Real, no increase in vehicle miles traveled would occur. Therefore, it is anticipated that the project would not result in any increase in operational GHG emissions and construction-related impacts would be less than significant with implementation of construction GHG-reduction measures as identified in Section 4.5.4.

- b) **No Impact.** Section 4.5.4. describes the various GHG reduction strategies Caltrans is committed to implementing to reduce GHG emissions.

As discussed above, no increase in vehicle miles traveled would occur as result of the project. The project would be consistent with SB 375 as it is included in the current RTP, *Plan Bay Area 2040* and will incorporate applicable GHG reduction measures from the RTP. The project includes significant upgrades to the pedestrian infrastructure within the project limits that would promote walking. This would help decrease the Bay Area’s per-capita carbon dioxide production. In addition, the project would not generate GHG emissions that would have a significant impact on the environment as discussed above. Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

**HAZARDS AND HAZARDOUS MATERIALS**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	-	-	-	X
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?	-	-	-	X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	-	-	-	X
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?	-	-	X	-
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	-	-	-	X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	-	-	-	X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	-	-	-	X

- a, b) **No Impact.** Project construction and maintenance activities are expected to involve the routine transport, use, and disposal of hazardous materials (e.g., fuels, paints, and lubricants) that could pose a significant threat to human health or the environment if not properly managed. Adherence to federal and state regulations during project construction and maintenance would reduce the risk of exposure to hazardous materials and accidental hazardous materials releases. Compliance with existing regulations is mandatory; therefore, construction of the project is not expected to create a hazard to construction workers, the public, or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.
- c) **No Impact.** There are schools within 0.25 mile of the project limits; however, compliance with existing regulations would limit the risk of emitting or handling hazardous materials near the schools.
- d) **Less than Significant Impact.** There were no active hazardous waste sites within the state right-of-way identified pursuant to Government Code Section 65962.5 (Cortese

List) (CalEPA 2021a, 2021b; DTSC 2021; SWRCB 2021). However, there are five hazardous materials release sites near the project corridor that have been identified as having the potential for project construction work (i.e. subsurface work) to be affected by groundwater contaminant plumes. As noted in section 2.1.1.3, during the final project design phase, Caltrans would perform a PSI to investigate hazardous materials concerns related to soil, groundwater, and building materials within the project limits and include appropriate measures for managing hazardous materials encountered during project construction in compliance with all regulatory requirements adopted to protect human health and the environment. These measures would be incorporated in the final project design.

- e) **No Impact.** The nearest airport is San Francisco International Airport (SFO), approximately one mile north of the project limits. The project is not within an identified noise level contour for the airport (City of South San Francisco 2015). Therefore, the project would not result in a safety hazard or excessive noise for people residing near or working within the project limits.
- f) **No Impact.** Construction activities would result in temporary lane closures, increased construction truck traffic, and other roadway effects on El Camino Real that could impede emergency response or evacuations. However, law enforcement, fire, and emergency services and access would be maintained during project construction, and these effects would be temporary and short-term in nature. In addition, during construction, the TMP will minimize construction-related delays and include coordination with CHP and local law enforcement agencies. Therefore, the project would not impair implementation of an emergency response or emergency evacuation plan.
- g) **No Impact.** The project is not within a State Responsibility Area or within a Very High Fire Hazard Severity Zone, and it is more than 0.75 mile from the nearest such area or zone (CAL FIRE 2021). In addition, El Camino Real in the project limits is not identified as an area subject to increased wildfire risk for the analysis years 2025, 2055, or 2085. Project construction and operation would not expose people or structures to significant risks involving wildland fires.



**HYDROLOGY AND WATER QUALITY**

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

a) **Less Than Significant Impact.** Project construction is anticipated to result in a DSA of approximately 29.5 acres. Temporary impacts to water quality may occur from the release of fluids, concrete material, construction debris, sediment, and litter beyond the perimeter of staging and active construction areas, including potential changes to localized pH and turbidity of San Mateo Creek. The project would also have the potential to encounter groundwater during the construction of cast-in-drilled-hole piles for traffic lights and other signs. Because disturbed areas in the project site would be greater than 1 acre, a SWPPP would be required. The SWPPP would address temporary water quality impacts resulting from construction activities via implementation of appropriate BMPs. In addition, since the total new and replaced impervious surface is greater than 1 acre, the project will provide storm water treatment (i.e. bioretention or biofiltration devices), which is expected to prevent any long-term impact of pollutant discharge to water bodies.

- b) **No Impact.** The project would not add new impervious area within the project limits; therefore, the project is not anticipated to decrease groundwater supplies or interfere with groundwater recharge in the Westside Basin.
- c) **No Impact.** The project would not alter the course of a stream or river and would not add new impervious areas nor remove access to existing drainages within the project limits. In addition, the project would improve roadway drainage to reduce localized roadway flooding.

Implementation of standard Caltrans practices for erosion control and appropriate BMPs from the SWPPP, as described in Section 2.1.1.2, would avoid or minimize the project's potential to result in substantial erosion or siltation, increase runoff volumes in a way that would result in flooding, exceed drainage system capacity or provide substantial polluted runoff, or impede or redirect flood flows.

- d) **No Impact.** Except for four waterways noted in Section 3.2.1.2, the majority of El Camino Real within the project limits overlap Zone X (0.2 percent annual chance of flooding), for minimal flood hazard, from Peninsula Avenue to Murchison Drive. East Santa Inez Avenue to Peninsula Avenue and Murchison Drive to Millbrae Avenue have a minimal flood hazard. The project does not include any features that would increase the risk of flooding.
- e) **No Impact.** For the reasons described in a) through c) above, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. In addition, the project is required to adhere to the Clean Water Act, the Porter-Cologne Water Quality Control Act, and the Caltrans MS4 Permit.

**LAND USE AND PLANNING**

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

- a) **No Impact.** The project would be constructed within existing state right-of-way and would not physically divide an established community.
- b) **No Impact.** The project would be generally consistent with all applicable land use plans, policies, and regulations. The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.

**MINERAL RESOURCES**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	-	-	-	X
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?	-	-	-	X

- a), b) **No Impact.** Project construction would occur within heavily disturbed soils, therefore no impacts to known mineral resources are expected to occur from project construction. In addition, according to the U.S. Geological Survey Mineral Resources On-Line Spatial Data, the project site is not in close proximity to or on a known mineral resource (USGS 2021).

**NOISE**

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	-	X	-	-
b) Generation of excessive groundborne vibration or groundborne noise levels?	-	-	-	X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	-	-	-	X

- a) **Less Than Significant with Mitigation Incorporated.** Section 3.4, Construction Impacts (Noise) discusses potential temporary construction noise impacts, project features to reduce potential temporary noise impacts, and proposed avoidance, minimization, and mitigation measures to address potential temporary noise impacts. Per 2018 Caltrans Standard Specifications Section 14-8.02, construction activities are not to exceed 86 dBA  $L_{max}$  at a distance of 50 feet from 9 p.m. to 6 a.m. In addition, California Streets and Highway Code Section 216 requires that average hourly construction noise (as measured by  $L_{eq}$ ) heard internally at school locations not exceed 52 dBA. However, all construction activities modelled would exceed these noise limits for at least one location within the project limits. Therefore, the project could have a potentially significant impact before mitigation.

Implementation of Measure NOI-1 and NOI-2 would reduce short-term construction noise impacts in these areas to **less than significant**. Therefore, the impact would be **Less than Significant with Mitigation Incorporated**.

- b) **No Impact.** The project does not contain features that would produce excess groundborne noise for nearby receptors.
- c) **No Impact.** The nearest airport is SFO, approximately one mile north of the project limits. The project is not within an identified noise level contour for the airport (City of South San Francisco 2015). Therefore, the project would not expose construction workers to excessive noise from airports.

**POPULATION AND HOUSING**

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

- a) **No Impact.** The project would not induce substantial population growth, directly (e.g. construction of new homes or businesses) or indirectly (e.g. through extension of roads or other infrastructure). The proposed improvements to El Camino Real would not induce planned growth in or around the project limits because they would not remove obstacles to development or provide new access to any undeveloped land. Therefore, the project would not induce substantial population growth, either directly or indirectly.
- b) **No Impact.** The project would not require residential or business relocation and, therefore, would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

**PUBLIC SERVICES**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	-	-	-	X
Police protection?	-	-	-	X
Schools?	-	-	-	X
Parks?	-	-	-	X
Other public facilities?	-	-	-	X

- a) **No Impact.** The project would not involve construction of new housing or other land uses that could increase the local population and demand for governmental facilities and services, such as fire protection, police protection, schools, or parks.

**RECREATION**

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	-	-	-	X
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?	-	-	-	X

- a) **No Impact.** The project would not create additional recreational demand that would increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated.
- b) **No Impact.** The project would not include recreational facilities or require the construction or expansion of recreational facilities.

**TRANSPORTATION**

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

- a) **No Impact.** The project would not change the existing circulation pattern as it does not involve changing the number or operation of lanes within the project limits and would therefore be consistent with applicable programs, plans, ordinances, and policies regarding the circulation system (including transit, roadway, bicycle, and pedestrian facilities), which are described in Sections 3.1.1.2.

- b) **No Impact.** The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). The project would not result in an increase in vehicle miles traveled as there would be no change to the number of travel lanes on El Camino Real within the project limits.
- c) **No Impact.** The project would include improvements along the same alignment as the existing facility and would not increase hazards due to a geometric design feature.
- d) **Less Than Significant Impact.** Temporary lane closures on El Camino Real would be required to construct the project. During final design, a TMP will be developed for the project to minimize construction-related delays and inconvenience for travelers within the project limits. The TMP will include distribution of press releases and other documents as necessary to notify local jurisdictions, agencies, and the public of upcoming lane closures; coordination with CHP and local law enforcement on contingency plans; and specifications for using portable changeable message signs and the CHP Construction Zone Enhanced Enforcement Program where possible to minimize delays. Law enforcement, fire, and/or emergency services and access would be maintained during project construction and operation of the lanes. The project is not expected to result in inadequate emergency access.

**TRIBAL CULTURAL RESOURCES**

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	-	-	-	X
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	-	-	-	X

- a, b) Section 3.1.6.2. provides an overview of Native American consultation conducted. The project would not affect any tribal cultural resources, as described in Section 3.1.6.3.

**UTILITIES AND SERVICE SYSTEMS**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	-	-	-	X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	-	-	-	X
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	-	-	-	X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	-	-	-	X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	-	-	-	X

- a) **No Impact.** The project would temporarily relocate some PG&E overhead electrical lines and poles during construction, as discussed in Section 3.1.4.2. Under the Build Alternative, these relocations would be replaced aboveground following construction. With the design option, overhead electrical lines and telecommunications services would be temporarily relocated during construction then placed under the roadway following construction from Barroilhet Avenue (PM 12.9) to Ray Drive/Rosedale Avenue (PM 15.2) in the City of Burlingame. These relocations may result in short-term, temporary interruptions of service. Final verification of utilities would be performed during the project's detailed design phase, and any needed relocations would be coordinated with the affected utility owner to minimize potential interruptions of service. No impacts to water service are anticipated.
- b) **No Impact.** The project does not include new development or uses that would require water supplies.
- c) **No Impact.** The project would not generate new wastewater flows or affect public utilities for wastewater treatment.
- d) e) **No Impact.** The project would not generate or require solid waste disposal in excess of state or local standards, or in excess of the capacity of local infrastructure. Construction waste that could not be recycled would be disposed at a certified facility based on the waste type and would not affect landfill capacity. The project would comply with federal, state, and local statutes and regulations related to solid waste.



**WILDFIRE**

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

a, b, c and d) **No Impact**. The project is not within a State Responsibility Area or within a Very High Fire Hazard Severity Zone, and it is more than 0.75 mile from the nearest such area or zone (CAL FIRE 2021). In addition, El Camino Real in the project limits is not identified as an area subject to increased wildfire risk for the analysis years 2025, 2055, or 2085.

**MANDATORY FINDINGS OF SIGNIFICANCE**

MANDATORY FINDINGS OF SIGNIFICANCE	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X	-	-	-
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)?	-	-	X	-
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	-	X	-	-

- a) **Significant and Unavoidable.** The project would have a significant and unavoidable impact to the Howard-Ralston Eucalyptus Tree Rows and could substantially degrade the quality of the environment through changes to the visual character of public views within the project limits due to the necessity of removing approximately 300 to 350 trees. The Howard-Ralston Eucalyptus Tree Rows are a historical resource and important example of a major period of California history. Before and after mitigation, the project would represent a significant and unavoidable impact.
- b) **Less Than Significant Impact.** The project has been evaluated for cumulative impacts as described in Section 3.7. The project would incrementally affect the visual and cultural resources, but would not, in taken with other past, present, and reasonably foreseeable projects, contribute to a cumulative impact.
- c) **Less Than Significant with Mitigation Incorporated.** As described for Noise, before mitigation, project construction could potentially cause substantial adverse effects on human beings in relation to noise potentially causing a significant impact before mitigation. With implementation of NOI-1 and NOI-2, noise impacts would be lessened during project construction resulting in a less than significant with mitigation incorporated.

## **4.4 Wildfire**

### **4.4.1 Regulatory Setting**

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the “CEQA Checklist” for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones. The 2018 updates to the CEQA Guidelines expanded this to include projects “near” these very high fire hazard severity zones.

### **4.4.2 Affected Environment**

The project limits are not within a State Responsibility Area or within a Very High Fire Hazard Severity Zone, and it is more than 0.75 miles from the nearest such area or zone (CAL FIRE 2021). In addition, El Camino Real in the project limits is not identified as an area subject to increased wildfire risk for the analysis years 2025, 2055, or 2085.

### **4.4.3 Environmental Consequences**

Neither the No Build nor the Build Alternative (either with or without inclusion of the design option) would impair an emergency response plan or emergency evacuation plan and would not exacerbate the risk of wildfire.

### **4.4.4 Avoidance, Minimization, and/or Mitigation Measures**

None required.

## 4.5 Climate Change

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

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

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

### 4.5.1 Regulatory Setting

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

#### 4.5.1.1 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 (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

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

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

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

#### **4.5.1.2 State**

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (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 [H&SC] 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.

EO 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 (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.

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

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including 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.

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

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

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

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

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

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

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

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

## 4.5.2 Environmental Setting

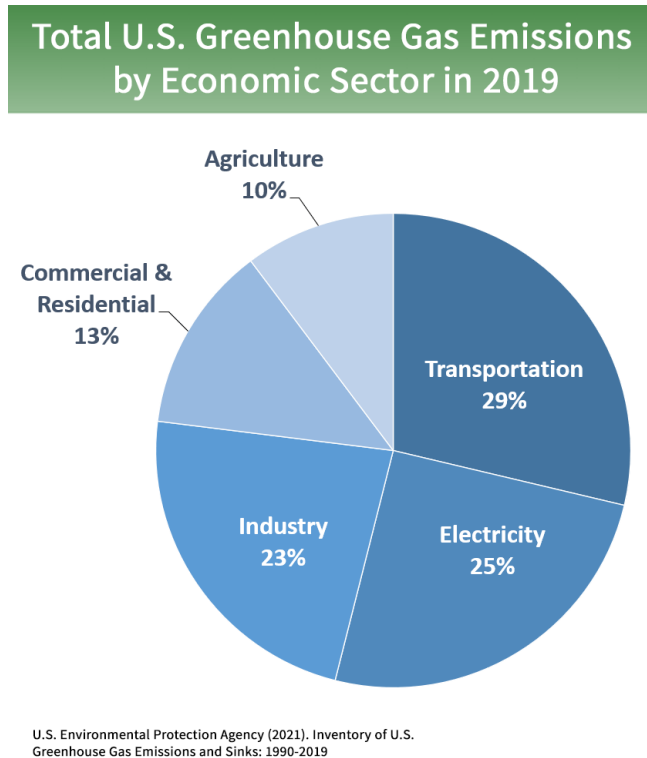
The project is along El Camino Real within the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough in San Mateo County. The project limits are surrounded by densely urbanized land uses consisting of mixed residential and commercial development. El Camino Real within the project limits is a four-lane undivided conventional highway from PM 12.3 to 15.2 and is a six-lane divided conventional highway from PM 15.2 to 15.9. It provides access to businesses and residences along the roadway. The posted speed limit is 35 miles per hour (mph). Traffic congestion in the AM and PM peak hours show some queuing along the project limits but most intersections operate at a level of service of C or better. *Plan Bay Area 2040*, the region's RTP/SCS, guides transportation and housing development within the project limits, and the cities of San Mateo, , Burlingame, and Millbrae, and the Town of Hillsborough have Climate Action Plans that address GHGs within the project limits.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

### 4.5.2.1 National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, perfluorocarbons, SF<sub>6</sub>, and nitrogen trifluoride. It also accounts for emissions of CO<sub>2</sub> that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO<sub>2</sub> (carbon sequestration). As shown on Figure 4.5-1, the 1990 2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8% from 1990 levels. Of these, 80 percent were CO<sub>2</sub>, 10 percent were CH<sub>4</sub>, and 7 percent were N<sub>2</sub>O; the balance consisted of fluorinated gases. CO<sub>2</sub> emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990, and accounted for 74.1 percent of total GHG emissions. The transportation sector accounted for 29 percent of U.S. GHG emissions in 2019; fossil fuel

combustion from transportation accounted for about 35 percent of total CO<sub>2</sub> emissions (U.S. EPA 2021) .

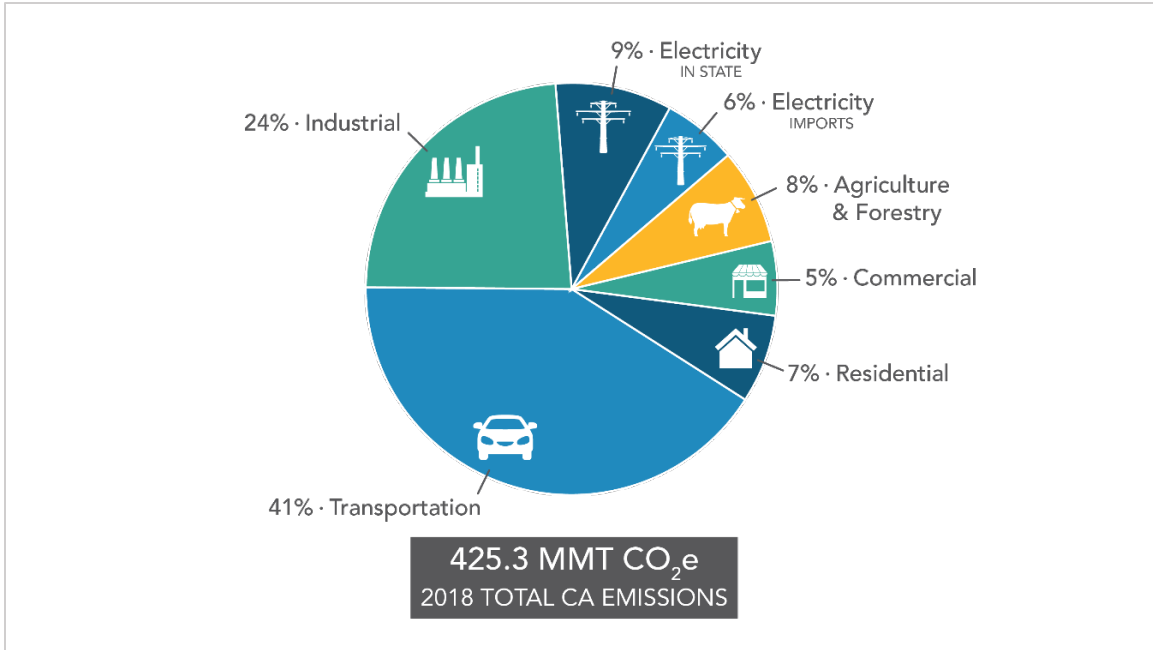


**Figure 4.5-1: U.S. 2019 Greenhouse Gas Emissions (Source: U.S. EPA 2021)**

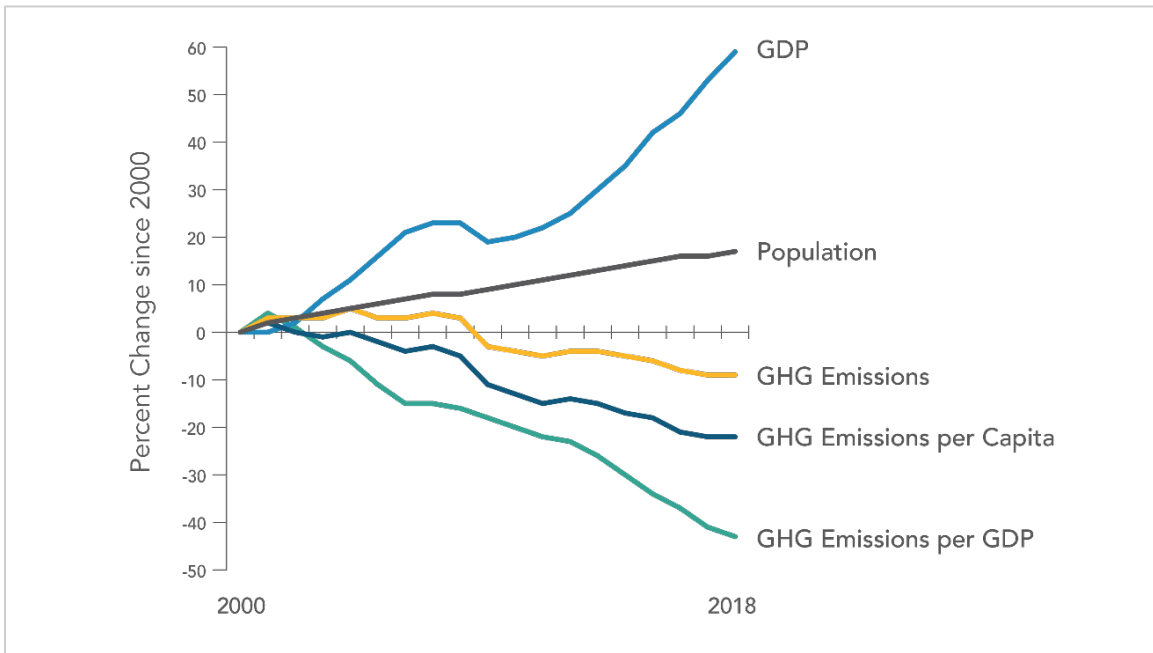
#### 4.5.2.2 State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2020 edition of the GHG emissions inventory reported emissions trends from 2000 to 2018. It found total California emissions were 425.3 MMTCO<sub>2</sub>e in 2018, 0.8 MMTCO<sub>2</sub>e higher than 2017 but 6 MMTCO<sub>2</sub>e lower than the statewide 2020 limit of 431 MMT CO<sub>2</sub>e. The transportation sector was responsible for 41 percent of total GHGs (Figure 4.5-2). Transportation emissions decreased in 2018 compared to the previous year, which is the first year over year decrease since 2013. Overall statewide GHG emissions declined from 2000 to 2018 despite growth in population and state economic output (Figure 4.5-3) (ARB 2020).





**Figure 4.5-2: California 2018 Greenhouse Gas Emissions by Economic Sector (Source: ARB 2020)**



**Figure 4.5-3. Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2020)**

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

established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. Regional and Local Plans

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in *Plan Bay Area 2040*, the RTP/SCS for the nine-county Bay Area region. The regional reduction targets for MTC/ABAG are 10 percent in 2020 and 19 percent in 2035 (ARB 2019c).

The proposed project is within the jurisdiction of *Plan Bay Area 2040*, which is the region's RTP/SCS from MTC. The Plan promotes many goals to create a more sustainable Bay Area including reducing per-capita carbon dioxide. In addition, the cities of San Mateo, Burlingame, and Millbrae, and the Town of Hillsborough have Climate Action Plans that address GHGs within the project limits. The City of Burlingame has a goal of reducing GHGs 40 percent below 2005 levels by 2030 (Burlingame 2019b). The City of San Mateo has a goal of reducing GHGs by 2,330 MTCO<sub>2e</sub> by 2030 (San Mateo 2020c). The Town of Hillsborough has a goal of reducing GHGs 2,531 MTCO<sub>2e</sub> by 2020 (Hillsborough 2010). The City of Millbrae has a goal of reducing GHGs 49 percent by 2030 (Millbrae 2020b).

The Build Alternative includes upgrades to the pedestrian infrastructure within the project limits that would promote walking. This would help decrease the Bay Area's per-capita carbon dioxide production.

### 4.5.3 Project Analysis

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

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

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

#### **4.5.3.1 Operational Emissions**

The purpose of the project is to preserve and extend the life of the roadway and improve ride quality; improve drainage efficiency; enhance pedestrian access by upgrading infrastructure and bringing it into compliance with Title II of the Americans with Disability Act; and enhance user visibility and safety. This project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on El Camino Real, no increase in vehicle miles traveled would occur as result of the Build Alternative (either with or without inclusion of the design option). While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

#### **4.5.3.2 Construction Emissions**

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence 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 construction related GHG emissions were calculated using the Road Construction Emissions Model (RCEM), version 9.0.0, provided by the Sacramento Metropolitan Air Quality Management District. The total project construction duration is 36 months. The total amount of CO<sub>2</sub> produced due to construction would be 1,343.81 tons. The total amount of CH<sub>4</sub> produced would be 0.35 tons and the total N<sub>2</sub>O produced would be 0.04 tons. Altogether, project construction would result in 1,236.01 tons of CO<sub>2</sub> equivalent (Caltrans 2020e).

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction, require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations, and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

#### **4.5.3.3 CEQA Conclusion**

While the project would result in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction BMPs and GHG-reduction measures (see Sections 2.1.1.3 and 4.5.4.2), the impact would be less than significant.

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

## 4.5.4 Greenhouse Gas Reduction Strategies

### 4.5.4.1 Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (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 farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California* (Figure 4.5-4).

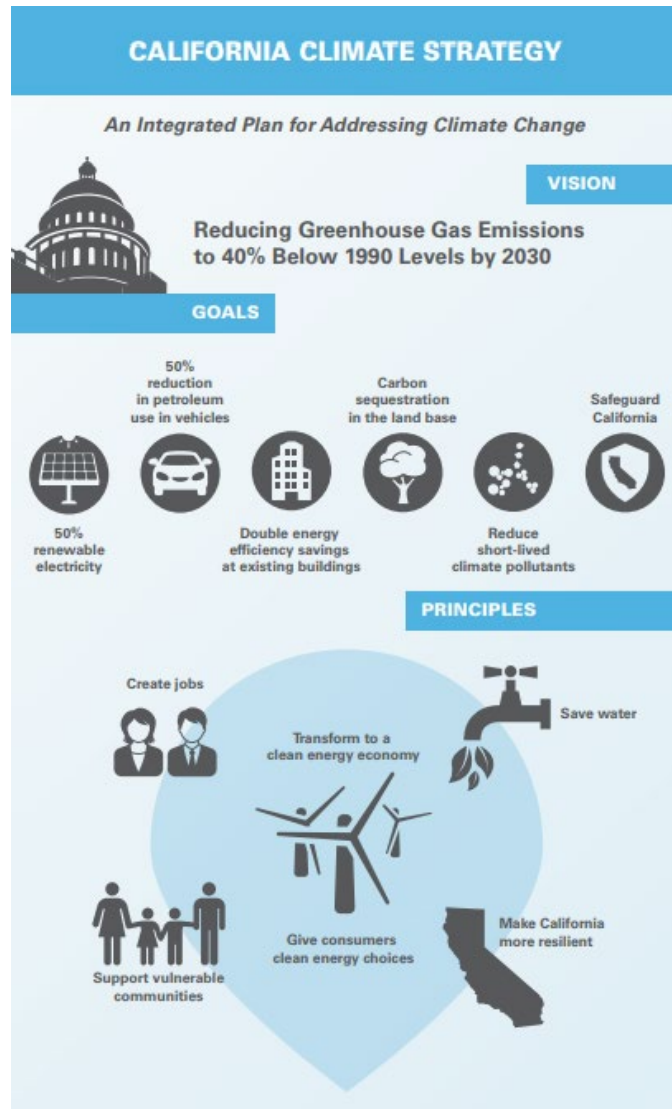


Figure 4.5-4: California Climate Strategy

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

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

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It includes instruction to state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged and vulnerable communities. Each agency is to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the State's carbon neutrality goal and build climate resilience.

#### **4.5.4.2 Caltrans Activities**

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

#### **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. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021 ).

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 Caltrans Strategic Management Plan 2020–24 includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities.

**Funding and Technical Assistance Programs**

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

**Caltrans Policy Directives and Other Initiatives**

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) 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 Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

**4.5.4.3 Project-Level GHG Reduction Strategies**

The following measures will also be implemented in the proposed project to reduce GHG emissions and potential climate change impacts from the proposed project (described in Section 2.1.1.3) would reduce GHG emissions during construction:

- The Transportation Management Plan will minimize traffic delays and reduce idling emissions.
- Caltrans 2018 Standard Specifications Section 7-1.02C, Emissions Reduction, and Section 14-9.02, Air Pollution Control will reduce emissions from construction equipment.
- The following measures will minimize GHG emissions during construction.
  - Regular vehicle and equipment maintenance to minimize emissions.
  - Recycle non-hazardous waste and excess materials, onsite where possible, to reduce transportation to offsite disposal.

In addition, VIS-2 would require replanting removed trees at a 1:1 ratio (see Appendix F). These replanted trees will help to absorb CO<sub>2</sub> and also restore tree canopy which increases shade.

During final design, the following minimization measures will be evaluated for inclusion in the project:

- Reduce construction waste through re-use or recycle construction and demolition waste.

- On-site recycling of existing project features.
- Use of long-life pavement.
- Group construction activities and lengthen lane closure durations to reduce necessary mobilization efforts.

The BAAQMD Clean Air Plan (2017) proposed a multi-pollutant approach control strategy to reduce emissions of particulate matter, TACs, ozone precursors, and greenhouse gases. The control measures are categorized based upon the economic sector framework used by the ARB. The transportation sector includes five control measures, with the first measure being the reduction of motor vehicle travel by promoting transit, bicycling, walking and ridesharing. This control measure is supported by the Build Alternative since the project would substantially upgrade pedestrian infrastructure within the project limits including sidewalks, curb ramps, APS/CPS signals, high-visibility crosswalk striping and implementation of pedestrian hybrid beacons in select locations. The other four control measures included in the transportation sector (implement pricing measures to reduce travel demand; direct new development to areas that are well served by transit, and conducive to bicycling and walking; accelerate the widespread adoption of electric vehicles; and promote the use of clean fuels and low- or zero carbon technologies in trucks and heavy-duty equipment) are not project-level and therefore do not apply to the proposed project.

#### **4.5.5 Adaptation**

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

##### **4.5.5.1 Federal Efforts**

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). *The Fourth National Climate Assessment*, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, “Transportation,” presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted

more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT 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” (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

#### 4.5.5.2 State Efforts

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

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the “combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities.”
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the “capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience”. Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the “susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt.” Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability



is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

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

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

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

EO B 30 15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

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

#### **4.5.5.3 Caltrans Adaptation Efforts**

##### **Caltrans Vulnerability Assessments**

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

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

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

#### **4.5.5.4 Project Adaptation Analysis**

The January 2018 *Caltrans Climate Change Vulnerability Assessments* for District 4 (Caltrans 2018), which covers the nine-county San Francisco Bay Area, was consulted regarding climate stressors in the project limits. The report and accompanying Climate Change Vulnerability Assessment map tool (Caltrans 2017b) identified the following climate change conditions for the project limits for the analysis years 2025, 2055, and 2085.

##### **Sea Level Rise**

The project is outside the coastal zone and not in an area subject to sea-level rise. Extreme projections for sea level rise in the San Francisco Bay are 1 to 3 feet of sea level rise by 2050, beyond the design life of the project. Adapting to Rising Tides estimates that with a 3 foot increase in sea level rise in combination with a 100-year king tide storm surge, sea levels would reach west of US 101 but would not reach El Camino Real within the project limits (AdaptingtoRisingTides.org 2021). Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

##### **Floodplains**

According to the Climate Change Vulnerability Assessment map tool, the 100-year precipitation depth for El Camino Real in the project limits is anticipated to increase by approximately 4.0 percent by 2025, another 3.9 percent by 2055, and another 5.3 percent by 2085 (Caltrans 2017b). El Camino Real within the project limits is within the FEMA-delineated floodplains, as described in Section 3.2.1.2. The Build Alternative (either with or without inclusion of the design option) does not include any new structures within the waterways that cross under or near El Camino Real. In addition, the Build Alternative (either with or without inclusion of the design option) includes upgrades to the existing drainage system to move water off of the roadway more efficiently, thereby reducing damage from localized flooding.

Climate change risk analysis involves uncertainties about the timing and intensity of potential risks. Detailed engineering analyses would be required to determine if proposed drainage facilities would accommodate climate change-related increases in rainfall intensity. Detailed

drainage design is conducted during the PS&E phase. At that time, projected precipitation changes would be considered, and adaptive measures would be implemented if needed based on guidance from Caltrans Hydraulics.

The project is not anticipated to exacerbate the effects of climate change in terms of precipitation depth.

**Wildfire**

El Camino Real in the project limits is not identified as an area subject to increased wildfire risk for the analysis years 2025, 2055, or 2085 (Caltrans 2017b, Caltrans 2018).

## Chapter 5 Comments and Coordination

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

### 5.1 Coordination Plan

23 USC 139 requires lead agencies to establish a plan and schedule for coordinating public and federal agency participation and comment during the environmental review process. The Caltrans Standard Environmental Reference, along with NEPA and CEQA provide a set of steps to coordinate public participation (see Sections 5.2 and 5.3). As shown in Table 2.1.5-1, no federal agencies are required to provide approvals for this project. Therefore, no coordination plan was circulated for this project.

### 5.2 Scoping Process

Scoping is the process by which the lead agency (Caltrans) determines the scope of issues to be addressed, examines the proposed action early, and identifies pertinent issues and feasible alternatives or mitigation measures to avoid potentially significant environmental effects. Scoping is intended to be a collaborative process between the lead agency, federal, state, and local public agencies, tribal entities, and members of the public.

In compliance with CEQA, a Notice of Preparation (NOP) for an Environmental Impact Report was filed with the State Clearinghouse on May 22, 2020. In compliance with NEPA, a Notice of Intent (NOI) to prepare an Environmental Impact Statement was published in the Federal Register on December 9, 2020. The NOP and NOI are included in Appendix C. As described below, three public meetings have been held for this project prior to public circulation of this EIR/EIS. The first meeting was a public meeting and was not a scoping meeting. The second meeting was a scoping meeting pursuant to CEQA. The third meeting was a scoping meeting pursuant to NEPA. The second and third meetings were held during the COVID-19 pandemic and were therefore virtual instead of in-person meetings.

#### 5.2.1 Educational Open House Meeting

Caltrans held an in-person educational public open house meeting on January 28, 2020, which was attended by more than 175 members of the public. This meeting included a live, gallery-style exhibit of educational materials that informed attendees of the project status and next steps. Outreach for the open house included the following: E-Blasts were sent via Burlingame Newsletter on January 16 and 23, 2020, to over 6,000 residents of the City of Burlingame and the surrounding area; 6- by 11-inch postcard mailers were sent to approximately 12,000 residents within a 5-block radius of the project limits; an email was sent to all local elected officials; and a

Caltrans Media Advisory was distributed on January 23, 2020 to the District 4 Core Media List (a total of 41 media outlets). Additionally, multiple attendees stated that they learned of the event through their neighbors on NextDoor. Attendees received a 4-page project fact sheet, exhibit map, and comment card with mail-in option.

### **5.2.2 CEQA Scoping Meeting/Period**

A CEQA scoping period was observed from May 26 to July 6, 2020, following the filing of the NOP with the State Clearinghouse. Due to the COVID-19 pandemic and associated stay-at-home orders, Caltrans requested an extension of the scoping period to 45 days. Caltrans also launched an interactive website (at [ECRscoping.com](http://ECRscoping.com)) to provide content and a video presentation, in lieu of an in-person meeting. The website gave the public the opportunity to submit comments for the entire scoping 45-day period. Caltrans sent approximately 15,000 postcard invitations to participate in the scoping process to the communities and stakeholders potentially affected by the project. Caltrans also posted notice of the scoping period on the project webpage at [www.ElCaminoRealProject.com](http://www.ElCaminoRealProject.com).

The scoping website provided a video presentation by project team members, a poster gallery, a frequently asked questions page, and an online comment submission form. The website was ADA-compliant and featured multilingual support through an embedded Google Translate application. Postcard notices to residents included Spanish and Simplified Chinese language, instructing readers to contact the Caltrans Public Information Officer to request additional translations services, as needed. Caltrans provided the opportunity to request translations for all scoping materials, as well as support for offline options, such as a DVD of the video for those without a computer or internet. There were 950 visitors to the website and 131 comments were submitted.

### **5.2.3 NEPA Scoping Meeting/Period**

A NEPA scoping period was observed from November 16, 2020 to January 8, 2021, following the publication of the Notice of Intent (NOI) in the Federal Register. Additional time was applied to the NEPA scoping period due to COVID-related delays with publishing the NOI in the Federal Register, thus extending the public comment period to 30 days after publication of the NOI. The NEPA scoping period paralleled the CEQA scoping period in substance. A website ([www.ECRalternatives.com](http://www.ECRalternatives.com)) was used to provide public information regarding the project in support of the NOI, including presentations on cultural resources and visual resources in the project area, the alternatives analysis process, and the alternatives being considered. Throughout the NOI scoping period, the public had the opportunity to submit comments on the project using an online submission form, via email, or U.S. mail. In addition, the public could post comments in an online public forum and others could “thumbs up” or “thumbs down” posted comments to indicate agreement or disagreement. The NEPA scoping period included the same notices to stakeholders and residents as described in Section 5.2.2. There were 880 visitors to the website. They were able to submit comments via a comment function and an online public forum.

### **5.2.4 Comments Received Prior to and During Scoping**

A total of 71 comments were received from attendees of the open house. Common sentiments included concern regarding roadway visibility, safety, undergrounding of utilities, flooding, and

trees in the project limits. Comments included concerns about project-related loss of both historic trees and non-historic trees. Additionally, multiple comments were received expressing the need to consider bicycle facilities when designing the project.

One-hundred thirty-one comments were received during the CEQA scoping period. Commenters expressed similar sentiments to comments received during and after the open house, including concern regarding trees, pedestrian safety, and flooding. Multiple commenters expressed concerns that the trees along El Camino Real within the project limits are an important resource to the City of Burlingame and the corridor, and that mature trees should be planted to replace trees removed.

Seventy-five comments were received via post mail, email, and on the website through the comment card function during the NEPA scoping period. In addition, 159 comments were submitted in the online public forum. Common sentiments included pedestrian, bicyclist, and motorist safety; tree replacement; utilities and undergrounding; and lane configuration on El Camino Real. Comments regarding the eucalyptus trees on El Camino Real varied, with some expressing strong support for maintaining the existing canopy. Many commenters expressed concern regarding the existing condition of the trees, tree debris, and associations with fire hazard and fallen-object hazards.

The most frequent sentiments submitted during the public meetings are summarized in Table 5.2-1. The table also includes the location within the EIR/EIS where commenters can see each topic addressed in more detail. All comments received have been reviewed by the PDT for consideration in the environmental analysis and design of the project where feasible.

**Table 5.2-1: Common Comments Prior to and During Scoping**

<b>Comment Topic/Theme</b>	<b>Summary of Comment Theme</b>	<b>EIR/EIS Section</b>
Traffic Safety	Vehicle and motorists' safety along El Camino Real are a frequent concern in many of the comments received. Traffic safety include visibility concerns, surface conditions, turning on and off El Camino Real, and the safety of a shared roadway with bicyclists.	Section 2.1
Pedestrian Safety	Pedestrian safety on the sidewalks of El Camino Real and the crosswalks is a predominant concern for many commenters. Pedestrian safety on the sidewalks include irregular sidewalk surfaces, cracks, missing pieces of the sidewalk/gaps in the sidewalk, as well as the proximity of the sidewalk (without a buffer) to the traffic along El Camino Real. Pedestrian safety using crosswalks is also of concern, due to short crosswalk countdown times, traffic turning into pedestrians while crossing, and the history of pedestrian accidents with traffic on El Camino Real.	Section 2.1
Existing Tree Preservation	Preserving all the trees along El Camino Real, or at least preserving as many as possible through creative design, was a predominant comment received. The desire for the preservation of the trees, including the historical eucalyptus trees, along El Camino Real to retain the current aesthetic of the roadway, nostalgic scenery, and historic resource.	Sections 3.1.5 and 3.1.6
Undergrounding Utilities	Undergrounding of utility lines along El Camino Real was a reoccurring desire and request in the comments; both a means to create a more pleasing visual aesthetic, as well as to allow for new trees to grow tall along El Camino Real without having to trim them for the utility lines.	Sections 2.1.1.1 and 3.1.4
Replacement trees and maintenance	Many of the comments received recognized that the old eucalyptus trees along El Camino Real have caused many of the existing problems on El Camino Real and acknowledge that some of the trees should be removed in order to correct the issues. Also, expressed were concerns that the trees to be removed should be replaced with more appropriate trees that will grow quickly to replace the lost canopy and its aesthetic feel. There were many comments on this topic stating the importance of having evergreen trees, planting more mature trees rather than saplings, and providing committed/continuous maintenance for the longevity of the replacement trees.	Sections 2.1.1.2 and 3.1.5
Multimodal Transportation Accommodation (bikes, buses, etc.)	The topic of multimodal transportation accommodation includes all comments regarding accommodation for bicyclists safety, bike lanes, designated bus lanes, bus shelters, public transportation improvements, and pedestrian improvements along El Camino Real.	Sections 2.1, 2.1.4, and 3.1.1
Flooding and Drainage	Poor drainage issues and flooding along El Camino Real was a reoccurring theme among the public comments. The issues expressed on this topic included long standing stormwater, roadway flooding; and residents along El Camino Real having to regularly use sandbags to protect their property during storm events.	Sections 2.1, 3.2.1, and 3.2.2
Project construction concern and questions	Questions and concerns regarding the project timeline and schedule were a reoccurring theme among public comments. The project concerns included construction timing, construction noise, and the cumulative impact of the El Camino Real construction with other projects in the vicinity.	Sections 2.1.1.2 and 3.4

### **5.3 Consultation and Coordination with Public Agencies, Tribal Entities, and Stakeholders**

#### **5.3.1 Federal Agencies**

Under 23 USC 139, Efficient Environmental Review Process, Caltrans as the lead agency under NEPA is required to invite all federal, state, tribal, regional and local government agencies that may have an interest in the project to be participating agencies. The PDT identified only one

federal agency with a potential interest in the project. The ACHP has the role of commenting on projects with the potential to have an adverse effect to cultural resources, under the NHPA.

Caltrans along with FHWA, SHPO, and ACHP have signed a programmatic agreement for the implementation of Section 106 of the NHPA as it pertains to the administration of the federal-aid highway program in California. This programmatic agreement, effective January 1, 2014 stipulates the process for these agencies to participate in projects. This programmatic agreement provides a process for ACHP to comment on this project through the Section 106 process. Therefore, ACHP is not a participating agency for this project. SHPO is a state agency and coordination with the SHPO is discussed in Section 5.3.3.

U.S. EPA has provided written comments pursuant to NEPA, Council on Environmental Quality regulations (40 CFR Parts 1500 – 1508) and Section 309 of the Clean Air Act. In a January 7, 2021 memorandum, U.S. EPA recommended elements to be included in the EIR/EIS. While some of the suggested elements are not required as part of this project, Section 4.5 incorporates information requested by U.S. EPA.

### **5.3.2 Tribal Entities**

The NAHC was contacted on July 25, 2019 to request a search of the Sacred Lands File for cultural resources of significance to Native Americans within or near the APE.

The NAHC responded on July 30, 2019 reporting negative search results. The NAHC provided a list of Native American parties and individuals with potential interest in the project and their contact information. Letters providing project information and requesting input were sent to each individual and organization on the list on August 1, 2019. Follow-up calls were conducted on November 6, 2019, and the following is a summary of the responses from the calls:

- Ms. Irenne Zwierlein of the Amah Mutsun Tribal Band of Mission San Juan Bautista expressed interest in providing monitoring services should any further archaeological work be conducted for this project.
- Ms. Ann Marie Sayers of the Indian Canyon Mutsun Band of Costanoan recommended that archaeological and Native American monitors be present for any ground disturbing work and would like to be kept informed of studies and scheduling.
- Mr. Andrew Galvan of the Ohlone Indian Tribe identified the project area as one of high cultural sensitivity and recommended monitoring of ground-disturbing activities.

All the above individuals were provided with information regarding a public information meeting on December 11, 2019. Those individuals on the NAHC list who have not responded were emailed information about the meeting. No other responses were received.

Tribal consultation with Caltrans is ongoing.

### **5.3.3 State Agencies**

Consultation with the SHPO was initiated on March 11, 2020, with an in-person meeting with Natalie Lindquist and Lucinda Woodward of the California Office of Historic Preservation(OHP) and the following Caltrans staff: Frances Schierenbeck, Senior



Environmental Planner, Caltrans District 4 Office of Cultural Resources Studies (OCRS); Christopher Caputo, Office Chief, OCRS; and David Price, Section 106 Coordinator, Caltrans Cultural Studies Office (CSO) - Sacramento. Caltrans sent the results of cultural resource studies to the SHPO on August 4, 2020, for concurrence on property eligibility for the NRHP; no response was received. Because 30 days for comment had passed, per stipulation VIII.C.6a of the January 2014 PA, on October 15, 2020, Caltrans sent the SHPO a Notice of Moving Forward without SHPO concurrence on its Determination of Eligibility for the SM 82 ADA and Rehabilitation Improvements Project (EA 0K810, EFIS 046000142). Consultation with the SHPO regarding the assessment of effects is ongoing.

### **5.3.4 Stakeholder Engagement**

Caltrans has conducted stakeholder outreach with the following stakeholders:

- City of Burlingame – September 24, 2019; November 20, 2019; January 9, 2020; April 27, 2020; May 19, 2020; and October 30, 2020
- City of Millbrae – January 28, 2020
- City of San Mateo – November 20, 2019
- El Camino Real Task Force – September 24, 2019
- San Mateo Unified School District – November 20, 2019
- Burlingame Citizens Environmental Council – November 20, 2019
- Burlingame High School Parents Group – November 20, 2019
- Burlingame School District PTA Council – November 20, 2019

Additionally, Caltrans conducted public participation and interested parties' outreach for project cultural resources (Section 3.1.6). Caltrans identified potential local interested parties and sent notification letters to the following organizations:

- Burlingame Historical Society (August 1, 2019)
- City of Burlingame Planning Department (August 1, 2019)
- City of Burlingame Planning Commission (September 9, 2019)
- Cultural Landscape Foundation (September 9, 2019)
- California Garden & Landscape History Society (September 9, 2019)
- Caltrans Cultural Studies Office (September 10, 2019)
- Town of Hillsborough (August 1, 2019)
- City of San Mateo Planning Department (August 1, 2019)
- Millbrae Historical Society (January 8, 2020)

- San Mateo County Historical Society (August 1, 2019)

A summary of the responses received are below:

- The Cultural Landscape Foundation would like to review the draft environmental document for the project when it becomes available.
- The California Garden & Landscape History Society responded that the organization did not have any comment on the project.
- The City of San Mateo responded that the Saint Joseph Parish at 770 N. El Camino Real located within the APE for the project is an informal community landmark.
- Jennifer Pfaff, President of the Burlingame Historical Society, initially responded in August 2019 and consultation is ongoing with the organization regarding the project. Ms. Pfaff has assisted with background research of the materials held within the Burlingame Historic Society archives.
- The Millbrae Historical Society responded with no concerns.

## **Chapter 6 List of Preparers**

### **Office of Environmental Analysis**

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### **Office of Cultural Resource Studies**

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Lindsay Busse, Associate Environmental Planner, Archaeology

Jennifer L. Blake, Associate Environmental Planner, Archaeology

Kathryn Rose, Branch Chief, Archaeology

Christopher Caputo, Office Chief

### **Office of Water Quality**

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Wilfung Martono, Senior Transportation Engineer, Stormwater Design

### **Environmental Engineering**

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Kavya Kudupudi, Transportation Engineer, Air Quality/Noise & Vibration/Energy

Christopher Katrak, Air Quality/Noise Specialist

Christopher Wilson, Senior Transportation Engineer, Hazardous Waste & Materials

Kevin Krewson, Office Chief

### **Office of Landscape Architecture**

Adrienne St. John, Associate Landscape Architect

Kimberly White, Branch Chief

Jeanne Gorham, Office Chief

### **Office of Biological Sciences & Permits**

Elizabeth Leyvas, Associate Environmental Planner, Natural Sciences

Greg Pera, Branch Chief, Biology

### **Office of Roadway Design**

Atif Abrar, Project Engineer

Marc Wong, Senior Transportation Engineer

**Office of Hydraulics**

Potin Leung, District Hydraulics Engineer

Khai Leung, Senior Hydraulics Engineer

**Geotechnical Services**

Chris Ridsen, Senior Engineering Geologist

**Office of Utilities**

Hong Wong, Area Utility Engineer

Hanna Khoury, Senior Transportation Engineer

**Office of Electrical**

Kenneth Xu, Senior Electrical Engineer

**Right of Way**

David Mars, Associate Right of Way Agent

Sunnie Stanton, Branch Chief, Right of Way Coordination

**Traffic & Office of Highway Operations**

Lance Hall, Senior Transportation Engineer, Highway Operations

Katie Yim, Senior Transportation Engineer, Traffic Safety

**Division of Transportation Planning and Local Assistance**

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Sergio Ruiz, Office Chief, Complete Streets Coordinator

**Office of Public Information**

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Rocquel Johnson, Branch Chief, Public Information Office

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Heather Miller, Architectural Historian, AECOM

Chandra Miller, Architectural Historian, AECOM

Emily Biro, Environmental Planner, AECOM

Charlotte Hummer, Environmental Planner, AECOM

Teresa O’Grady, Environmental Planner, AECOM

Wendy Copeland, Environmental Planner, AECOM

Lynn McIntyre, Senior Environmental Planner, AECOM

Alex DeGeorgey, Registered Professional Archaeologist, Alta Archaeological Consultants

Rebecca Krawiec, Stakeholder Outreach, Convey

Susie Grant, Stakeholder Outreach, Convey

## Chapter 7 Distribution List

The following agencies, organizations, and individuals received printed or electronic copies of this document. Agency names marked with an asterisk (\*) received copies through the State Clearinghouse.

### Federal Agencies

Department of the Interior  
1849 C Street, N.W.  
Washington DC 20240

Environmental Protection Agency,  
Region IX  
Federal Activities Office, CMD-2  
75 Hawthorne Street  
San Francisco, CA 94105-3901

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

### State Agencies

California Air Resources Board\*  
Attn: Richard Corey, 1001 I Street  
P.O. Box 2815  
Sacramento, CA 95812

California Department of Fish & Wildlife\*  
Region 3 Attn: Regional Manager Gregg  
Erickson, 2825 Cordelia Road, Suite 100  
Fairfield, CA 94534

California Department of General Services  
Environmental Services Section  
707 Third Street, Eighth Floor  
West Sacramento, CA 95605

California Department of Parks and  
Recreation\*  
Natural Resources Division  
P.O. Box 942896  
Sacramento, CA 94296

California Department of Resources  
Recycling and Recovery  
Waste Management Division  
1001 I Street  
P.O. Box 4025  
Sacramento, CA 95812

California Department of Toxic Substances  
Control  
1001 I Street  
Sacramento, CA 95814

California Department of Water Resources\*  
Environmental Services Office, P.O. Box  
942836, Sacramento, CA 94236

California Energy Commission  
1516 Ninth Street, MS-29  
Sacramento, CA 95814

California Highway Patrol\*  
Attn: Special Projects Section  
4999 Gleason Drive  
Dublin, CA 94568

California Public Utilities Commission\*  
Attn: Alice Stebbins  
505 Van Ness Avenue  
San Francisco, CA 94102

California Resources Agency\*  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

California State Lands Commission  
100 Howe Avenue, Suite 100 South  
Sacramento, CA 95825

California State Water Resources Control Board\*  
Division of Water Quality  
P.O. Box 100  
Sacramento, CA 95812

California Transportation Commission\*  
1120 N Street, Room 2221, MS-52  
Sacramento, CA 95814

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

State Historic Preservation Officer\*  
Office of Historic Preservation  
1725 23<sup>rd</sup> Street, Suite 100  
Sacramento, CA 95816

**Regional Agencies**

San Francisco Regional Water Quality Control Board, District 2\*  
1515 Clay Street  
Oakland, CA 94612

**Local Agencies**

Burlingame Planning Division  
501 Primrose Road  
Burlingame, CA 94010

Hillsborough Planning Division  
1600 Floribunda Ave.  
Hillsborough, CA 94010

Millbrae Planning Division  
621 Magnolia Ave  
Millbrae, CA 94030

San Mateo Planning Commission  
330 W. 20th Avenue  
San Mateo, CA 94403

**Elected Officials**

The Honorable Alex Padilla  
United States Senate  
333 Bush Street, Suite 3225  
San Francisco, CA 94104

The Honorable Dianne Feinstein  
United States Senate  
One Post Street, Suite 2450  
San Francisco, CA 94104

The Honorable Jackie Speier  
United States Congress (CA-14)  
155 Bovet Road, Suite 780  
San Mateo, CA 94402

The Honorable Kevin Mullin  
California State Assembly, District 22  
1528 S. El Camino Real, Suite 302  
San Mateo, CA 94402

The Honorable Josh Becker  
California State Senate, District 13  
1526 South El Camino Real, Suite 303  
San Mateo, CA 94402

The Honorable Dave Pine  
San Mateo County Supervisor, District 1  
Hall of Justice  
400 County Center  
Redwood City, CA 94063

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