Santa Cruz Route 1 Capital Preventative Maintenance (CAPM) Project

Pavement rehabilitation project on State Route 1
in Santa Cruz County, from post miles 17.50 to 20.20
05-SCR-1-PM 17.50-20.20
Project ID Number 0519000067
State Clearinghouse Number 2023110633

Initial Study
with Mitigated Negative Declaration

Volume 1 of 2

Prepared by the
State of California Department of Transportation

March 2024

Caltrans

General Information About This Document

Document prepared by: Claire Taggesell, Associate Environmental Planner

The Initial Study with Proposed Mitigated Negative Declaration was circulated for public review and comment for 31 days between November 27, 2023 and December 28, 2023. Comments received during this period are included in Appendix B. Elsewhere, language has been added throughout the document to indicate where a change has been made since the circulation of the draft environmental document. Minor editorial changes and clarifications have not been so indicated.

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05-SCR-1-PM 17.50-20.20
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Pavement rehabilitation project on State Route 1 in Santa Cruz County, from post mile 17.50 to post mile 20.20

INITIAL STUDY
with Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation
and
Local Agencies: The City of Santa Cruz and the Santa Cruz County Regional Transportation Commission
Cooperating Agencies: The U.S. Fish and Wildlife Service
Responsible Agency: California Transportation Commission

Jason Wilkinson
D5 Deputy District Director, Environmental Analysis
California Department of Transportation
CEQA Lead Agency

3/12/24
Date

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: 2023110633

District-County-Route-Post Mile: 05-SCR-1-PM 17.50-20.20

EA/Project Number: EA 05-1M110 and Project ID Number 0519000067

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate 8.3 lane miles of flexible Class 2 pavement using Capital Preventative Maintenance strategies. These strategies include, but are not limited to, digouts, profile grinding, cold planing 0.15 foot of pavement, and placing 0.15 foot of Rubberized Hot Mix Asphalt overlay. The project will also include upgrading or replacing 91 curb ramps, replacing or upgrading guardrails, upgrading sign panels, replacing 0.10 lane mile of Class 2 bike lanes, and enhancing complete streets elements in coordination with the City of Santa Cruz and the Santa Cruz County Regional Transportation Commission.

Determination

An Initial Study has been prepared by Caltrans District 5. On the basis of this study, it is determined that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment for the following reasons:

- During construction, if noise levels exceed 86 A-weighted decibels maximum noise level (dBA Lmax) at 50 feet from the job site from 9:00 p.m. to 6:00 a.m., corrective action will be taken to reduce noise levels below the threshold and minimize disruption due to construction noise. This measure will diminish noise levels or reduce exposure to noise for those affected. With the implementation of this measure, a less than significant impact will result.

Jason Wilkinson

Jason Wilkinson
D5 Deputy District Director, Environmental Analysis
California Department of Transportation

3/12/24

Date

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Chapter 1. Proposed Project

1.1. Introduction

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA). Caltrans, as assigned by the Federal Highway Administration, is the lead agency under the National Environmental Policy Act (NEPA). As CEQA lead, Caltrans prepared this Initial Study for the project. As the NEPA lead, Caltrans has prepared a separate Categorical Exclusion for the project.

Caltrans proposes to rehabilitate 8.3 lane miles of flexible Class 2 pavement using Capital Preventative Maintenance (CAPM) strategies. These strategies include, but are not limited to, digouts (repair of more distressed areas of pavement through partial depth replacement), profile grinding, cold planing 0.15 foot of pavement, and placing 0.15 foot of Rubberized Hot Mix Asphalt overlay. The project will also include upgrading or replacing 91 curb ramps, repairing sidewalks, replacing or upgrading guardrails, upgrading sign panels and posts, replacing 0.10 lane mile of Class 2 bike lanes, enhancing the visibility of crosswalks, delineating bike boxes, enhancing pedestrian islands, and adding two bus stop platforms in coordination with the City of Santa Cruz and the Santa Cruz County Regional Transportation Commission. The project will occur between post miles 17.50 and 20.20 on State Route 1. See Figure 1-1 for the Project Vicinity Map and Figure 1-2 for the Project Location Map.

1.2. Purpose and Need

1.2.1 Purpose

The purpose of the project is to comprehensively address roadway deficiencies on State Route 1 between post miles 17.50 and 20.20, with the goals to:

- Restore the ride quality and extend the service life of 8.3 lane miles of existing pavement by 10 years or more.
- Bring the guardrail and end treatments up to current standards.
- Improve Americans with Disabilities Act (ADA) accessibility and meet current Americans with Disabilities Act ramp standards.
- Enhance sign panel visibility, increase the longevity of signs, and meet current Federal Highway Administration standards.
- Enhance the transportation network for pedestrians, cyclists, and users of public transit by enhancing crosswalk visibility and pedestrian safety.
- Improve bus access within the project limits by adding bus stop platforms.

1.2.2 Need

The project is needed because certain assets are in poor condition and will continue to deteriorate if they are not repaired or replaced. Failure to address these deficiencies may disrupt service on the State Route 1 corridor through the project limits and will require more frequent maintenance activities. In addition, there is a need to enhance the transportation network for pedestrians, cyclists, and users of public transportation. Specific asset deficiencies that need to be addressed include the following:

- The pavement condition within the project limits is deteriorating and exhibiting unacceptable ride quality. Continued deterioration of this section of the roadway could result in it needing major roadway rehabilitation.
- Sections of guardrails and end treatments within the project limits do not meet the Manual for Assessing Safety Hardware standards for collision safety.
- Existing Americans with Disabilities Act curb ramps are outdated and do not meet current Americans with Disabilities Act standards. Spot sidewalk repairs are needed at several locations.
- Existing sign panels and posts are in poor condition and nearing the end of their service lives. The panels do not meet the current Federal Highway Administration reflectivity standards.
- The existing 0.10 mile of Class 2 bike lanes are in a state of deterioration and in need of replacement.
- Many of the crosswalks and bike boxes within the project limits do not meet current safety standards for visibility, and pedestrian islands are needed to reduce exposure to traffic.
- Additional bus stops are needed to increase the accessibility of public transit.

1.3. Project Description

1.3.1 Proposed Improvements

Mainline and Shoulder Rehabilitation

The project proposes to rehabilitate 8.3 lane miles of flexible Class 2 pavement using Capital Preventative Maintenance strategies. Capital Preventative Maintenance strategies include but are not limited to digouts, profile grinding, cold planing 0.15 foot of pavement, and placing 0.15 foot of Rubberized Hot Mix Asphalt overlay. The anticipated design life of the new pavement is 10 years. The roadway will be re-striped upon completion.

The existing dike will be removed and replaced, and shoulder backing will be placed to manage erosion and weathering at the edge of the pavement.

Guardrail Upgrades

The project will remove nonstandard guardrails and install the Midwest Guardrail System with appropriate end treatments. Embankments will be modified as necessary to reflect the changes to the Midwest Guardrail System and terminal end features.

Americans with Disabilities Act Curb Ramp and Sidewalk Improvements

A total of 91 curb ramps will be upgraded or replaced to conform to Americans with Disabilities Act standards. A total of 51 curb ramps will have truncated domes applied, and 40 curb ramps will be replaced.

Sign Panel Upgrades

The project will include 16 large sign replacements. These will consist of two posts and sign panels. The project will also include 14 small sign replacements, which will consist of one post and sign panel.

Drainage

Drainage inlets may be affected by the overlay and will need to be brought up to grade after the Rubberized Hot Mix Asphalt is poured.

Complete Streets Improvements

Proposed complete streets improvements will include replacing 0.10 lane mile of Class 2 bike lanes (from post miles 18.15 to 18.25), adding guide striping, adding signage for pedestrians and cyclists, and enhancing the visibility of 40 crosswalks at 18 intersections. The project will also create two new bus stop platforms (on the northbound and southbound sides) at the intersection of State Route 1 and Western Drive. Ten bike box delineations will also be added at six intersections, and five pedestrian islands will be enhanced at three intersections.

Bike box delineations will be at the following intersections:

- Walnut Avenue (two bike boxes)
- Laurel Street (two bike boxes)
- King Street/Union Street (one bike box)
- Fair Avenue (one bike box)
- Swift Street (two bike boxes)
- Chestnut Street/Missions Street (two bike boxes)

Pedestrian islands will be improved or created at the following intersections:

- Berkshire Avenue (one pedestrian island)

- King Street/Union Street (one pedestrian island)
- Chestnut Street (three pedestrian islands)

Crosswalks will be upgraded to have high visibility at the following intersections:

- Chestnut Street (six crosswalks)
- Highland Avenue (one crosswalk)
- Peyton Street (one crosswalk)
- Walnut Avenue (four crosswalks)
- Otis Street (one crosswalk)
- Rigg Street (two crosswalks)
- Laurel Street (three crosswalks)
- Van Ness Avenue (two crosswalks)
- Laurent Street (two crosswalks)
- Trescony Street (one crosswalk)
- Olive Street (one crosswalk)
- Baldwin Street (one crosswalk)
- Younglove Avenue (one crosswalk)
- Miramar Drive (four crosswalks)
- Swift Street (four crosswalks)
- King Street/Union Street (one crosswalk)
- Bay Street (one crosswalk)
- Western Drive (four crosswalks)

Electrical Improvements

Traffic detector loops will be replaced if they are damaged during construction.

[The following heading and three paragraphs have been added since the draft environmental document was circulated.]

1.3.2 Additional Potential Improvements

The public review and comment period for the Initial Study with Proposed Mitigated Negative Declaration ran from November 27, 2023, through December 28, 2023. A public meeting was held on December 7, 2023.

Numerous comments were received from members of the public and from the City of Santa Cruz during the public comment period. The comments were

focused on increasing safety features for pedestrians and cyclists through the Mission Street Corridor. Caltrans is looking into the feasibility of adding many of the suggested elements from a funding, design, and environmental perspective. A final decision will be made during the final design (Plans, Specifications, and Estimates) phase. No new elements will be added that would result in significant environmental impacts and/or fall outside of the previously studied Area of Potential Impacts. All additions would be documented in a CEQA Addendum and NEPA revalidation, and CEQA and NEPA conclusions would be supported by environmental memos.

In addition, the City of Santa Cruz requested that Caltrans enter into a cooperative agreement to implement some elements of the Bay Street Corridor project. Caltrans will continue collaborating with the City of Santa Cruz on implementation of the Bay Street Corridor project, which consists of implementing additional bicycle and pedestrian enhancements. Some of the Bay Street Corridor elements may be included in this project, if they are found feasible from a funding, design, and environmental perspective. A final decision will be made during the final design (Plans, Specifications, and Estimates) phase. No elements of the Bay Street Corridor project will be incorporated that would result in significant environmental impacts, fall outside of the previously studied Area of Potential Impacts, and/or fall outside of Caltrans right-of-way. All additions would be documented in a CEQA Addendum and NEPA revalidation, and CEQA and NEPA conclusions would be supported by environmental memos.

1.3.3 Construction Period

Construction is expected to last about 174 working days between contract approval in October 2026 and contract acceptance in October 2027.

Figure 1-1 Project Vicinity Map

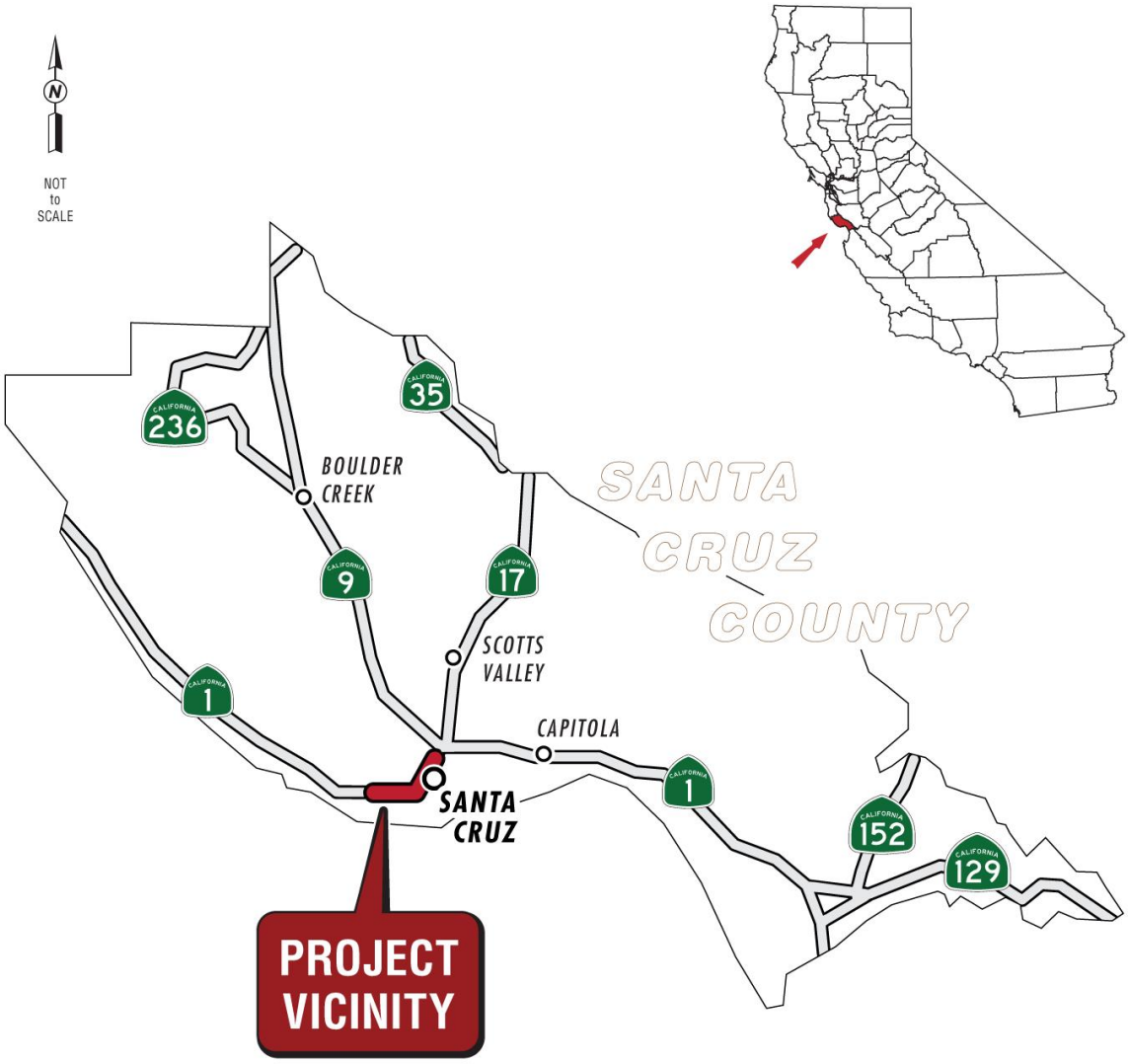
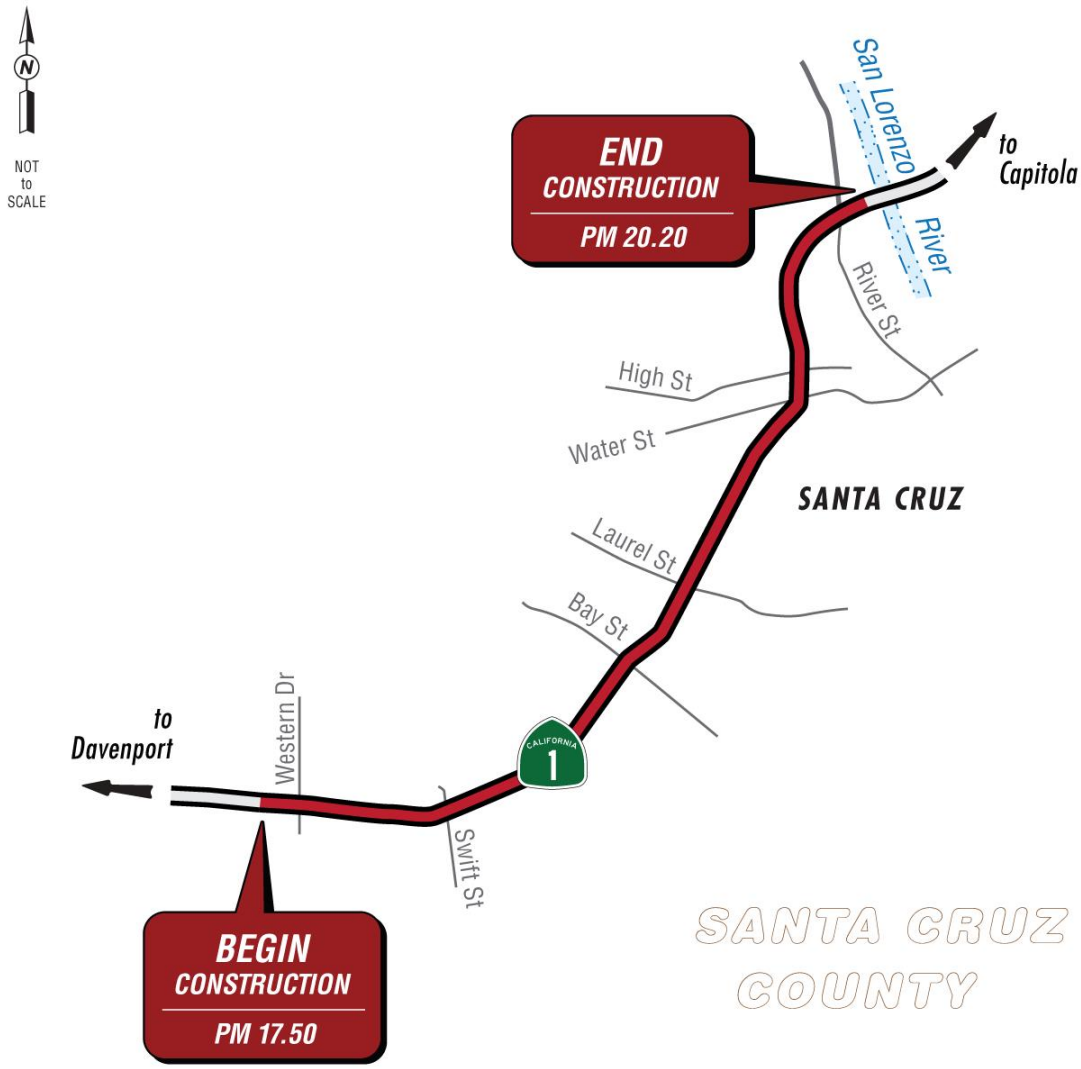


Figure 1-2 Project Location Map



1.4. Project Alternatives

Two alternatives are under consideration for the project: a Build Alternative and a No-Build Alternative.

An interdisciplinary team developed the alternatives that are under consideration. Several criteria were taken into consideration when evaluating the various alternatives for the project, including the project's purpose and need, cost, design, construction strategies, and environmental impacts.

1.4.1 Build Alternatives

Under the Build Alternative, the project will have temporary impacts from noise produced by construction equipment. The Build Alternative will address the purpose and need of the project by rehabilitating the pavement and shoulder, bringing curb ramps and guardrails to current standards, replacing sign panels, adding complete streets features, enhancing crosswalk visibility, and replacing any loop detectors that are damaged during project construction. See the Project Description section above for additional details.

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under "Standard Measures and Best Management Practices Included in All Build Alternatives."

1.4.2 No-Build (No-Action) Alternative

Under the No-Build Alternative, no work would occur on the project. Therefore, the project would not result in any temporary or permanent impacts on environmental resources. However, this alternative would not address the purpose and need of the project. With the No-Build Alternative, the roadway condition would continue to worsen, guardrails would not be upgraded to meet Manual for Assessing Safety Hardware standards for collision safety, curb ramps would not be improved to meet Americans with Disabilities Act standards, and sign panels would not be replaced. In addition, under the No-Build Alternative, complete streets features would not be added to enhance mobility for cyclists and pedestrians. Routine maintenance activities would continue.

[The following sub-section on "Identification of a Preferred Alternative" has been added since the draft environmental document was circulated.]

1.5. Identification of a Preferred Alternative

The Build Alternative was identified as the preferred project alternative. The Build Alternative was chosen because it will address the purpose and need of the project. With the Build Alternative, the roadway will be rehabilitated, project assets will be brought up to current standards, and multi-modal transportation options will be improved.

1.6. Standard Measures and Best Management Practices Included in All Build Alternatives

This project will include a list of Caltrans standard measures that are typically used on all Caltrans projects. Caltrans standard measures are considered features of the project and are evaluated as part of the project. Caltrans standard measures are not implemented to address any specific effects, impacts, or circumstances associated with the project but are instead implemented as part of the project's design to address common issues encountered on projects. The measures listed below are those related to environmental resources and are applicable to the project. These measures can be found in the Caltrans 2023 Standard Specifications document.

- 7-1 Legal Relations and Responsibility to the Public
- 10-4 Water Usage
- 10-5 Dust Control
- 10-6 Watering
- 12-1 Temporary Traffic Control
- 12-3 Temporary Traffic Control Devices
- 12-4 Maintaining Traffic
- 13-1 Water Pollution Control
- 13-2 Water Pollution Control Program
- 13-4 Job Site Management
- 13-6 Temporary Sediment Control
- 13-7 Temporary Tracking Control
- 13-10 Temporary Linear Sediment Barriers
- 14-1 General
- 14-2 Cultural Resources
- 14-6 Biological Resources
- 14-8 Noise and Vibration

- 14-9 Air Quality
- 14-10 Solid Waste Disposal and Recycling
- 14-11 Hazardous Waste and Contamination
- 14-12 Other Agency Regulatory Requirements
- 17-2 Clearing and Grubbing
- 18-1 Dust Palliatives
- 20-1 Landscape
- 20-3 Planting
- 20-4 Plant Establishment Work
- 21-2 Erosion Control Work

Additional measures will be added to the project as necessary or appropriate.

1.7. Discussion of the NEPA Categorical Exclusion

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

1.8. Permits and Approvals Needed

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

Agency	Permit/Approval	Status
City of Santa Cruz	Coastal Development Permit Exemption	Will be obtained before project construction.
U.S. Fish and Wildlife Service	Biological Opinion for the California red-legged frog	Informal consultation complete; concurrence received.

Chapter 2. CEQA Evaluation

2.1. CEQA Environmental Checklist

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

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

"No Impact" determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated July 31, 2023, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	**Less Than Significant Impact**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Aesthetics
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	**Less Than Significant Impact**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**Less Than Significant Impact**

Affected Environment

Existing Visual Environment

The project is on State Route 1 in the City of Santa Cruz. The City of Santa Cruz straddles the steep hills that mark the foot of the Santa Cruz Mountains, the alluvial plain formed by the San Lorenzo River, and the flat marine terraces of central Santa Cruz, north of the California Coastal Zone. The nearby greenbelt areas in the foothills, Monterey Bay, the San Lorenzo River, and the coastal beaches and bluffs define the urban edges of the city. The Santa Cruz Mountains, which are the backbone of the San Francisco Peninsula, are northeast of the project.

Existing Facility

From the southern project limits to the River Street intersection, State Route 1 (Cabrillo Highway) is a four-lane divided freeway. The freeway environment is somewhat typical, with urbanizing elements such as concrete median barriers, metal beam guardrails, concrete overhead bridge structures, and freeway-scale shrub and tree planting growing along the right-of-way. At River Street, State Route 1 becomes a four-lane conventional highway until it intersects with Chestnut Street, where it becomes an urban arterial with two to four lanes and is also known as Mission Street.

The City of Santa Cruz has developed several planning documents, including the Mission Street Urban Design Plan 2022. This document divides Mission Street (State Route 1) into three distinct zones, discussed briefly below as they pertain to the proposed project setting.

The Mission Hill Zone spans from Chestnut Street to Laurel Street. In this portion of the project limits, the visual setting is largely characterized by mixed-use, commercial development. Many businesses are located in houses

once used as single-family residences. Historic-style streetlights stand along sidewalks and, in conjunction with the colorful older architecture, create a downtown feel. The City of Santa Cruz is both a college and coastal tourist destination, which is reflected in its architecture and aesthetics.

The Westside Zone encompasses the area between Laurel Street and Swift Street. Defined as a mid-corridor area, this segment supports mostly retail and service uses. Aesthetically, it lacks the architectural consistency and character of the Mission Hill Zone and has evolved to be more automobile oriented. Gas stations and other standard commercial structures are predominant, with some residential uses scattered throughout the section.

The Natural Bridges Zone extends from Swift Street to Shaffer Road. This zone defines the western boundary of the City of Santa Cruz. Only a small portion of the project falls within this planning zone. It is defined by wide right-of-way and mature vegetation, giving the roadway a parkway character. State Route 1 serves as an entry to Wilder Ranch State Park.

State Route 1 is not a state-designated scenic route within the project limits, and there are no designated scenic vista points associated with the project. State Route 1, however, is eligible for designation as a State Scenic Highway within Santa Cruz County.

Planning Policies and Guidelines

Planning policies, documents, and guidelines are indicators of the general level of community sensitivity regarding the aesthetic character of the region and the project area. These documents also indicate the aesthetic importance of the area. Several policies contained within the Caltrans Director's Policy, the City of Santa Cruz 2030 General Plan, and the Santa Cruz Mission Street Urban Design Plan 2022 were used as guidelines for this project.

Environmental Consequences

Scenic Vistas

Scenic vistas in the project vicinity include open space and distant views of the Santa Cruz Mountains to the north and east. The proposed improvements will cause a minimal, if any, effect on views of scenic vistas in the area. The visibility of the distant hills will remain the same and will continue to contribute to the scenic vista.

Visual Character

The asphalt resurfacing portion of the project will not significantly change or degrade public views or visual quality. Alterations to the streetscape, including transit stops, widened pedestrian islands, high-visibility crosswalks, increased paving, and other elements, could influence the visual character of the City of Santa Cruz. Although the project may result in a more unified streetscape, depending on the specific design details and layouts, it may also

result in a more engineered appearance to the pedestrian environment. Community input will be gathered to ensure continuity with the adopted City of Santa Cruz 2030 General Plan and Mission Street Urban Design Plan. Design decisions, streetscape element selection, and aesthetic treatments can reduce the potential for an overbuilt or engineered appearance.

[This paragraph has been added since the draft environmental document was circulated.] In addition, in response to a public comment received during the draft environmental document circulation, the project team is looking into the possibility of planting trees as part of the project. Caltrans is coordinating with the City of Santa Cruz to determine if a maintenance agreement could be established for the maintenance of tree plantings. During the project final design (Plans, Specifications and Estimates) phase, the feasibility of planting additional trees will be explored. Limited available space in the Caltrans right-of-way and the availability of irrigation constrains potential planting locations.

Light, Glare, and Daytime or Nighttime Views

The project does not propose new lighting. Existing signs will be upgraded to a more reflective sheeting, which may result in slightly more glare for night drivers; however, that will not impact daytime or nighttime views of the area or be inconsistent with the highway environment.

Summary of Visual Effects

Implementation of the project will result in visual changes, as seen from public viewpoints, such as State Route 1 roadways and sidewalks. Vehicular viewers will have low sensitivity to visual changes resulting from the project due to the short periods of time they view the project site and their focus on driving. Viewers associated with nearby businesses will have moderately high sensitivity to visual changes resulting from the project because they have semi-permanent views from their respective facilities. However, these viewers are likely not focused on views of the roadways. Recreationists, such as cyclists, walkers, runners, and joggers traveling along State Route 1, will also be moderately sensitive to visual changes. While they are likely to regard the outdoor environment as a holistic visual experience, they are often only transient viewers, seeing the project area for a short time as they pass through. Also, consideration and implementation of the City's planning documents, including the Mission Street Urban Design Plan 2022, will reduce visual discord and assist the City in improving the character and quality of the streetscape.

Although some of the visual changes will be noticeable, they will not be unexpected elements in the urbanized environment. Widening pedestrian refuge islands, modifying curb cuts, adding bus stops, adding high-visibility crosswalks, and similar features are common along street thoroughfares.

Although most of the project elements will not be uncharacteristic for the setting, viewer sensitivity may be heightened because of the number of pedestrians in the area and the proximity to residences and retail businesses.

Planning policies, documents, and guidelines also indicate a heightened viewer sensitivity. Because of this increased sensitivity, the avoidance and minimization measures noted in the next section will be included in the project.

Avoidance and Minimization Measures

With the implementation of the following avoidance and minimization measures, the project will be consistent with the aesthetic and visual resource protection goals along State Route 1 (Mission Street), and potential visual impacts will be reduced:

- Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be used.
- Street tree removal is not currently planned as part of this project but, if it is added, then replacement planting must be considered. If street tree planting is added to the project scope, the locations shall be determined and approved by a District 5 Landscape Architect, considering safety, horticultural appropriateness, and maintainability.
- Site furnishings, including but not limited to bus shelters, bike boxes, and bike facilities, shall be determined and approved by a District 5 Landscape Architect.
- The aesthetic treatment of curb cuts, bulb-outs, high-visibility crosswalks, and pedestrian refuge islands shall be determined and approved by a District 5 Landscape Architect.
- Community involvement will be requested in the development of the aesthetic treatments, to be further developed and approved by a District 5 Landscape Architect in conjunction with design.
- Following construction, regrade and re-contour all new construction staging areas and other temporary uses as necessary to match the surrounding pre-project topography.

2.1.2 Agriculture and Forest Resources

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

measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

The project will not require permanent acquisition of farmland and will not require temporary construction easements on farmland. The project is not located in or near forest resources. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	**No Impact**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	**No Impact**
c) Conflict with existing zoning, 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))?	**No Impact**
d) Result in the loss of forest land or conversion of forest land to non-forest use?	**No Impact**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	**No Impact**

2.1.3 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.

Considering the information in the Air Technical Memorandum dated March 8, 2023, the following significance determinations have been made for air quality:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	**No Impact**
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	**Less Than Significant Impact**
c) Expose sensitive receptors to substantial pollutant concentrations?	**Less Than Significant Impact**
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**Less Than Significant Impact**

Affected Environment

The project is in the North Central Coast Air Basin, which consists of Monterey, Santa Cruz, and San Benito counties. The Monterey Bay Air Resources District regulates air quality in the North Central Coast Air Basin. The North Central Coast Air Basin is considered in attainment for all federal ambient air quality standards and non-attainment for state ambient air quality standards for airborne particulate less than 10 microns in diameter (PM10).

The Federal Highway Administration first issued air quality conformity guidelines in 1993, which have been amended throughout the years. Since the project is in attainment with all federal ambient air quality standards, conformity requirements do not apply to this project.

Environmental Consequences

Construction

As with almost all construction projects, there will be a temporary increase in air emissions and fugitive dust during the construction period. Construction activities, such as grinding, excavation, material transport, and subsequent fill operations, can generate fugitive dust that may temporarily affect local air quality. However, because minor earthwork is expected to be required for this project, minimal dust generation is expected.

To minimize dust emissions from the project, Standard Specifications Section 14-9.02, Air Pollution Control, will be implemented. Section 14-9.02 states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract. Also, the project-level Stormwater Pollution Prevention Plan will include water pollution control measures that also serve

as standard dust emission minimization measures (such as covering soil stockpiles, watering haul roads, watering excavation and grading areas, and so on). By incorporating appropriate engineering design and stormwater Best Management Practices during construction, minimal short-term air quality impacts are expected.

Due to the use of standard construction dust and emission minimization practices and procedures, it is expected that project emissions of particulate matter (dust) and equipment emissions will be well within the daily thresholds of the Monterey Bay Air Resources District.

Operation

Since no additional lanes or capacity are being added to the highway, there will be no increase in long-term air emissions due to the project.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study Minimal Impact dated August 29, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	**Less Than Significant Impact**
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?	**Less Than Significant Impact**
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?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	**Less Than Significant Impact**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**Less Than Significant Impact**
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?	**No Impact**

Affected Environment

Environmental Setting

The project lies along State Route 1 through the City of Santa Cruz. The project footprint begins at post mile 17.50, near River Street, and ends at post mile 20.20, near Western Drive. The project's Biological Study Area encompasses the Caltrans right-of-way along State Route 1 and private property to the west of the right-of-way.

The land within the Biological Study Area consists of the paved roadway (State Route 1), ruderal (weedy) vegetation, and urban development with ornamental plant species right next to the roadway. The western 0.5 mile consists of mostly ruderal habitat with some native vegetation, coastal redwood trees, and various pine tree species.

The Biological Study Area sits by the developed areas of the City of Santa Cruz, north of the California Pacific Ocean coastline. The elevation of the proposed work location is about 75 feet above sea level.

Proposed work areas are dominated by ruderal, invasive, redwood forest mix, and anthropogenic habitats. The project includes limited natural plant communities in areas interspersed with disturbed soil and urbanized areas.

The regional climate is generally mild. The average maximum and minimum temperatures are 68.5 and 45.7 degrees Fahrenheit, respectively. Little or no precipitation commonly falls during the summer months, with most moisture coming from heavy fog. Moderate precipitation, in the form of rainfall, occurs in the winter. The average annual rainfall in the City of Santa Cruz is about 30.66 inches.

Vegetation

Ruderal/Invasive

Ruderal or disturbed areas are dominated by non-native weedy and/or invasive species tolerant of disturbed conditions (e.g., compacted soils, roadsides subjected to vehicle disturbances, etc.). Representative species include red brome, slim oat, ripgut brome, and various other weedy species and annual grasses.

Several exotic invasive plant species, as identified by the California Invasive Plant Council (Cal-IPC), were observed in the Biological Study Area. Fourteen of these species are rated “limited,” 12 are rated “moderate,” and four are rated “high.” Ratings represent the level of each species’ negative ecological impact in California.

Upland Redwood Forest Mix

The upland redwood forest is a plant community predominately occurring in the outer coast ranges from southwestern Oregon to Sonoma County in California, with the highest abundance in southern Marin County and from San Mateo County through Santa Cruz County in northern California. This community mainly consists of coast redwood.

The upland redwood forest found in the Biological Study Area is mixed and fringed, occurring only within the westernmost half mile of the Biological Study Area and sporadically on the eastern half mile of the Biological Study Area. Upland redwood forest commonly occurs within areas where summer fog occurs along the Pacific Coast, between southwestern Oregon and San Luis Obispo County in California. This community is in greater abundance in southern Marin County and from southern San Mateo County through Santa Cruz. The community typically occupies well-drained soils with a shrubby understory. The upland redwood forest mix community within the Biological Study Area is considered mixed due to native trees occurring with other species, such as the pine species creating a windrow along the edges of State Route 1. Dominant plant species present within the project area include the coast redwood and California blackberry.

Developed/Ornamental

The urbanized Santa Cruz segments occur between River Street (post mile 17.6) and Swift Street (post mile 19.7). This segment- consists of residential and commercial buildings with ornamental vegetation planted in unpaved areas. This habitat is considered to be disturbed and has minimal potential to support habitat for sensitive species.

Ephemeral Drainage

An ephemeral drainage occurs about 875 feet west of Swift Street near post mile 19.85. This habitat makes up about 0.05 acre of the Biological Study

Area and has minimal potential to support habitat for sensitive species due to its ruderal nature.

Regional Species and Habitats of Concern

Table 2.1 lists special-status plant and animal species with the potential to occur within the project limits and with habitat present within the Biological Study Area. The data was gathered from the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

In Table 2.1, "Habitat Present" means general habitat is present in the Biological Study Area, and the species may be present. "Critical Habitat Designated" means the Biological Study Area occurs within a federally designated critical habitat unit. "Present" means the species was detected as present in the Biological Study Area, or the species is inferred to be present in the Biological Study Area. "Habitat Present" means general habitat is present in the Biological Study Area, and the species may be present.

Table 2.1 Listed, Proposed Plant and Animal Species, and Critical Habitat Potentially Occurring or Known To Occur in the Project Area

Common Name/ Scientific Name	Federal Status/California Native Plant Society Status	General Habitat Description	Habitat Present/ Absent	Rationale
Plants— Monterey pine	1B.1	The Monterey pine is a perennial evergreen tree that occurs in closed-cone coniferous forests and cismontane woodlands. Three primary stands are native to California (at Ano Nuevo, Cambria, and Monterey Peninsula). The Monterey pine can be found on dry bluffs and slopes. Information regarding the flowering period is not available. The Monterey pine ranges from 82 to 607 feet.	Present	Trees present within the Biological Study Area are planted as windrows and will not be impacted by project activities because the project is outside the species' natural elevation range. Tree avoidance measures are recommended.

Common Name/ Scientific Name	Federal Status/California Native Plant Society Status	General Habitat Description	Habitat Present/ Absent	Rationale
Amphibians— California red-legged frog	Federally Threatened/ California Species of Special Concern	The California red-legged frog is endemic to California and northern Baja California**.** The frog is typically found in or near water, but can also be found in numerous other places, such as woods next to streams, in sturdy underwater supports like cattails, and in damp places far from water, including cool and moist bushes and thickets. Also, they can be present in surface water as deep as 2.3 feet to at least early June. Breeding habitat for the species is in permanent or ephemeral water sources, optimally in aquatic habitats with little or no flow.	Critical Habitat Designated	A small portion of the project is within critical habitat and within the dispersal range of California Natural Diversity Database occurrences. No breeding or nonbreeding habitat occurs in the Biological Study Area. The Federal Endangered Species Act effects determination is that the project may affect, but is not likely to adversely affect, the species or its critical habitat. Avoidance and minimization measures are recommended. Informal consultation for a Biological Opinion has been completed.
Birds—Marbled murrelet	Federally Endangered/State Endangered	The marbled murrelet is predominantly found in the Pacific Northwest, with small populations and migratory stops in or offshore of the old-growth coniferous forests of Monterey County and the Central and Southern California coast. The marbled murrelet is the only California alcid species to nest inland. They typically nest in the upper branches of redwood or Douglas fir forests, as high as 150 feet. They build their nests with lichens and mosses and winter at sea.	Habitat Present (Marginal)	Marginal nesting habitat for the marbled murrelet occurs in the Biological Study Area. The species was not seen during surveys. General nesting avoidance and minimization measures are recommended. The Federal Endangered Species Act effects determination is that the project will have no effect on the species. The California Endangered Species Act determination is that the project will have no take of the species.

Common Name/ Scientific Name	Federal Status/California Native Plant Society Status	General Habitat Description	Habitat Present/ Absent	Rationale
Birds—Other nesting birds	Protected by the Federal Migratory Bird Treaty Act/California Department of Fish and Game Section 3503.	Various habitats (nesting)	Habitat Present	Trees and shrubs in the Biological Study Area provide potential nesting habitat for various bird species. No nesting birds were seen in the Biological Study Area during surveys, but there is potential for future nesting. Avoidance and minimization measures are recommended.

The California red-legged frog is a federally threatened species and a state species of special concern. A small portion of the project sits within California red-legged frog critical habitat and within the dispersal range of California Natural Diversity Database occurrences. No California red-legged frog breeding or nonbreeding habitat occurs in the Biological Study Area.

Also, no physical or biological features for California red-legged frogs exist within the Biological Study Area to provide suitable aquatic breeding or aquatic nonbreeding habitat. Marginal habitat for dispersal exists within the Biological Study Area and consists of the paved roadway, ruderal and mixed pine forest habitat with patches of bare ground, and one ephemeral drainage. The nearest record of a California red-legged frog is about 1,700 feet southwest of the project area within one artificial pool, about 200 feet west of Shaffer Road. The pool encompasses about 0.05 acre, with one willow providing cover, and is surrounded by emergent vegetation. The artificial pool is connected to seasonal wetlands. Three juveniles were seen in 1997, and one adult and one juvenile were seen in 2008. The pool has documented non-native predatory species present, such as bullfrogs, and is not considered a breeding site. The nearest aquatic feature is an unnamed ephemeral drainage within the Biological Study Area near post mile 19.85, with no records of California red-legged frog observations.

Federal Executive Order 13112, Introduction of Noxious Weeds

Executive Order 13112 directs federal agencies to combat the introduction or spread of invasive plant species in the U.S. In response to this executive order, the Federal Highway Administration is requiring an analysis of the risk for any federally funded action to cause or promote the introduction or spread of invasive plant species. The California Invasive Plant Council maintains a list that categorizes the severity of the invasive species. Plants with a rating of “high” are considered the most invasive wildland pest plants.

Plants rated “moderate” and “limited” are less invasive, spread less rapidly, and cause less disruption.

Environmental Consequences

Jurisdictional Waters and Wetlands

Project activities will avoid the ephemeral drainage that occurs within the Biological Study Area. The project will have no impacts on wetlands, waters of the U.S., or jurisdictional waters of the State of California; therefore, the project is in compliance with Federal Executive Order 11990, Sections 401 and 404 of the Clean Water Act, and Section 1602 of the State of California Fish and Game Code.

Federal Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act protects native North American migratory birds, nests, and eggs. The California Fish and Game Code Sections 3503, 3513, and 3800 also protect migratory birds. Tree removal and trimming are not expected for this project. Ruderal vegetation will be disturbed to accommodate the two bus stop locations. To protect any nesting activity that may be occurring in nearby areas, the avoidance and minimization measures listed farther below will be implemented.

Habitats and Natural Communities of Special Concern

Federally designated critical habitat for the California red-legged frog exists within the project footprint. The nearest aquatic feature, Moore Creek, is approximately 750 feet west of the project area. No physical or biological features for California red-legged frogs exist within the Biological Study Area to provide suitable aquatic breeding or aquatic nonbreeding habitat, but they may still provide poor to marginal dispersal habitat. This project is not anticipated to significantly impact California red-legged frogs or their critical habitat. Work at the western end of the project will involve repaving and replacing existing shoulder backing. Avoidance and minimization measures are listed below.

Special-Status Plant Species

Large portions of the project area contain ruderal or disturbed habitat that is mostly unsuitable for the special-status plant species identified in the literature search. No state or federally listed plant species were identified as having the potential to occur in the project area, and none were found during surveys.

Special-Status Animal Species

The Biological Study Area is within designated critical habitat for the California red-legged frog.

The habitat within the Biological Study Area is unlikely to support individuals, and project activities in this area, such as repaving and replacing existing shoulder backing, are unlikely to affect the species. Protocol surveys were not

conducted. No individuals were seen during reconnaissance surveys. However, given the close proximity of the Biological Study Area to occurrences, this project may affect but is not likely to adversely affect the California red-legged frog or its critical habitat.

Post miles 19.68 to 20.20 contain dispersal habitat from Moore Creek. The project qualifies for the Federal Endangered Species Act incidental take coverage under the U.S. Fish and Wildlife Service Programmatic Biological Opinion (81440-2010-F-0382). Informal consultation was completed for the use of the Programmatic Biological Opinion. Applicable measures from the Programmatic Biological Opinion that will be implemented from post miles 19.68 to 20.20 have been included in the list of avoidance and minimization measures below.

Avoidance and Minimization Measures

1. To ensure the ephemeral drainage will not be impacted during construction, an Environmentally Sensitive Area will be established. The Environmentally Sensitive Area will be delineated on project plans to prevent any personnel, equipment, or vehicles from entering the Environmentally Sensitive Area.

2. Within seven days before the initiation of site disturbance and/or construction, a qualified biologist should conduct a pre-activity (i.e., preconstruction) survey for nesting birds.

3. Active bird nests will not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act and California Fish and Game Code will not be killed, destroyed, injured, or harassed at any time (harassment includes noise from construction activities). If an active bird nest is found in or near a location that will be disturbed, Caltrans will determine an appropriate buffer based on the habits and needs of the species. An Environmentally Sensitive Area will be established, and the nest area will be avoided until the nest is vacated and the juveniles have fledged.

4. To ensure trees will not be impacted during construction, an Environmentally Sensitive Area will be established. The Environmentally Sensitive Area will be delineated on project plans to prevent any personnel, equipment, or vehicles from entering the Environmentally Sensitive Area.

The following measures will be implemented from post mile 19.68 to post mile 20.20:

5. A biologist with experience in identifying all life stages of the California red-legged frog and its critical habitat (75 Federal Register 12816) will survey the project site no more than 48 hours before the start of work activities. If any life stage of the California red-legged frog is detected, the U.S. Fish and Wildlife Service will be notified before the start of construction. If Caltrans and the

U.S. Fish and Wildlife Service determine that adverse effects on the California red-legged frog or its critical habitat cannot be avoided, the project will not start until Caltrans completes the appropriate level of consultation with the U.S. Fish and Wildlife Service.

6. Work activities will take place during the dry season, between April 1 and November 1, when water levels are typically at their lowest and California red-legged frogs are likely to be more detectable. Should activities need to be conducted outside of this period, Caltrans may conduct or authorize such activities after obtaining written approval from the U.S. Fish and Wildlife Service.

7. Before work begins on any proposed project, a biologist with experience in the ecology of the California red-legged frog, as well as the identification of all its life stages, will conduct a training session for all construction personnel, which will include a description of the California red-legged frog, its critical habitat, and specific measures that are being implemented to avoid adverse effects on the subspecies during the project.

8. If any life stage of the California red-legged frog is detected in the project area during construction, work will stop immediately, and the resident engineer, authorized biologist, or biological monitor will notify the Ventura Fish and Wildlife Office via telephone or electronic mail. If Caltrans and the U.S. Fish and Wildlife Service determine that adverse effects on California red-legged frogs cannot be avoided, construction activities will remain suspended until Caltrans and the U.S. Fish and Wildlife Service complete the appropriate level of consultation.

9. During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

10. Before the start of work, Caltrans will ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and the appropriate measures to implement should a spill occur.

11. All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from aquatic or riparian habitat and not in a location from which a spill would drain directly toward aquatic habitat. The monitor will ensure contamination of aquatic or riparian habitat does not occur during such operations by implementing the spill response plan described in measure 10.

12. Plants used in re-vegetation will consist of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent practicable. This measure will be implemented in all

areas disturbed by project activities unless Caltrans and the U.S. Fish and Wildlife Service determine that it is not feasible or practical.

13. Habitat contours will be returned to their original configuration at the end of project activities in all areas that have been temporarily disturbed by project activities unless Caltrans and the U.S. Fish and Wildlife Service determine that it is not feasible or modification of original contours would benefit the California red-legged frog.

14. The number of access routes, the size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goals. Environmentally Sensitive Areas will be delineated to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact on habitat for the California red-legged frog; this goal includes locating access routes and construction areas outside of aquatic habitat and riparian areas to the maximum extent practicable.

15. To control sedimentation during and after project implementation, Caltrans will implement Best Management Practices outlined in any authorizations or permits issued under the authority of the Clean Water Act that it receives for the specific project. If Best Management Practices are ineffective, Caltrans will attempt to remedy the situation immediately, in coordination with the U.S. Fish and Wildlife Service.

16. If a work site is to be temporarily dewatered by pumping, the intake will be screened with wire mesh not larger than 0.2 inch to prevent any California red-legged frogs, which were not initially detected, from entering the pump system. If California red-legged frogs are detected during dewatering and adverse effects on California red-legged frogs cannot be avoided, construction activities will remain suspended until Caltrans and the U.S. Fish and Wildlife Service complete the appropriate level of consultation.

17. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the creek bed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon project completion.

18. Unless approved by the U.S. Fish and Wildlife Service, water will not be impounded in a manner that may attract California red-legged frogs.

19. A qualified biologist will permanently remove any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, from the project area, to the maximum extent possible. The biologist will be responsible for ensuring his or her activities comply with the California Fish and Game Code.

20. To ensure that diseases are not conveyed between work sites by the U.S. Fish and Wildlife Service-approved biologist, the enclosed fieldwork code of

practice developed by the Declining Amphibian Populations Task Force will be followed at all times.

21. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

22. When practicable, invasive exotic plants in the project site shall be removed and properly disposed of. All invasive vegetation removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. If the soil from weedy areas must be removed offsite, the top 6 inches of soil containing the seed layer in areas with weedy species shall be disposed of at a landfill.

23. If necessary, wash stations onsite shall be established for construction equipment under the guidance of Caltrans to avoid and/or minimize the spread of invasive plants and/or seeds within the construction area.

2.1.5 Cultural Resources

Considering the information in the Historical Resources Evaluation Report, dated June 2023, the Archaeological Survey Report, dated August 2023, and the Historic Properties Survey Report, dated August 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	**Less Than Significant Impact**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	**Less Than Significant Impact**
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	**Less Than Significant Impact**

Affected Environment

Area of Potential Effects

The Area of Potential Effects was established as the entire area where project activities may directly or indirectly affect cultural resources. The project area extends through a developed area of Santa Cruz, where State Route 1 is known locally as Mission Street. Due to the proximity of multiple historic-period built-environment resources in this residential and commercial area, several nearby parcels were included in the Architectural Area of Potential Effects. This includes locations where sidewalk work will occur near historic-

period resources and/or where small slivers of right-of-way acquisitions or temporary construction easements may be required. The Archaeological Area of Potential Effects includes all areas of ground disturbance, project activities, and staging areas and is coterminous with (occupies the same space as) the Area of Direct Impact.

Project Study Area Historic Resources

Parcels included in the Architectural Study Area (Study Area) are those in which there is a potential for direct or indirect effects on a property because property acquisition is proposed or work may affect nearby parcels. The 15 historic-era built environment properties in the Study Area include six single-family residences built between 1889 and 1948, two multifamily residence buildings built in 1906 and 1939, and seven commercial buildings built between 1925 and 1972. All 15 parcels were evaluated, and six of them were determined to be historical resources under the California Environmental Quality Act.

There are six historical resources in the project area, including four properties eligible for inclusion in the National Register of Historic Places and California Register of Historical Resources: 315 Mission Street, 1020 Mission Street, 1604 Mission Street, and 104 King Street. One property, 331 Mission Street, is not considered eligible for inclusion under either registry. The Santa Cruz and Felton Railroad is assumed to be eligible for inclusion in the National Register of Historic Places and the California Register of Historical Resources for the purposes of the project. These findings are explained in more detail below.

A total of 15 properties in the Study Area were evaluated in the Historic Properties Survey Report. The study concluded that four of the 15 properties are eligible for listing in the National Register of Historic Places or the California Register of Historical Resources. The residence at 315 Mission Street was listed in the National Register of Historic Places in 1976 as a contributor to the Mission Hill Area Historic District under Criterion C for its architectural merit. The Historic Properties Survey Report concluded that the property is also individually eligible for listing in the National Register of Historic Places/California Register of Historical Resources at the local level under Criteria A and C for its importance in the early development of Santa Cruz and its architectural merit. It retains integrity for its period of significance, 1904, the year it was built.

The Study Area also includes two resources that were previously determined eligible for listing in the National Register of Historic Places: 104 King Street and 1020 Mission Street. The present State Historic Preservation Officer concurred with this finding. The present study confirms these properties' eligibility status. The property at 104 King Street was previously determined eligible for listing in the National Register of Historic Places under Criterion C at the local level of significance as "a very fine example of a combination of the Stick and Queen Anne styles" with "a

remarkable degree of integrity" in 1989. This study confirms that it remains eligible for listing in the National Register of Historic Places and is also eligible for listing in the California Register of Historical Resources under Criteria C and 3 for its architectural merit. It retains integrity for its period of significance, 1889, the year it was built.

The property at 1020 Mission Street was previously determined eligible for listing in the National Register of Historic Places under Criterion C at the local level of significance as "a fine example of its type and period" and received State Historic Preservation Officer concurrence in 1989. This study confirms that it remains eligible for listing in the National Register of Historic Places and is also eligible for listing in the California Register of Historical Resources under Criteria C and 3 for its architectural merit. It retains integrity for its period of significance, 1907, the year it was built. The contributing elements include the residence, garage, and stone retaining wall.

The property at 1604 Mission Street was previously determined not to be eligible for listing in the National Register of Historic Places, a finding that received State Historic Preservation Office concurrence in 1989. This Historic Properties Survey Report revisited the previous evaluation and, with additional information and analysis, has concluded that the property, a former grocery store, is locally significant under Criteria A/1 for its association with Chinese American entrepreneurship and with Lam Sing, an individual of historical importance in brokering relationships between Chinese immigrants and the larger Santa Cruz community. It retains integrity for its period of significance, 1950 to 1979, the time frame in which Lam Sing was associated with the property.

Also, the Santa Cruz and Felton Railroad, which intersects the Study Area at approximately post mile 17.65, is assumed to be eligible for the purposes of this undertaking only due to its large resource size and limited potential for effects, pursuant to Stipulation VIII.C.4 of the Section 106 Programmatic Agreement. This assumption of eligibility was approved by the Caltrans Cultural Studies Office on May 2, 2023.

None of the remaining evaluated properties meet the National Register of Historic Places/California Register of Historical Resources criteria for eligibility. The site at 331 Mission Street is listed in a local register. Therefore, it is considered a historical resource for the purposes of the California Environmental Quality Act despite not being eligible for inclusion in the National Register of Historic Places/California Register of Historical Resources. Other than the parcel at 315 Mission Street, there are no other properties in the Study Area located within a known historic district, nor are any other potential historic districts located within the Study Area.

Environmental Consequences

Archaeology

An archaeological search of Caltrans records, which includes California Historical Resources Information System data from the Northwest Information Center from as recent as February 2023, related to the project area, was conducted in July 2023. The project area has been studied numerous times over the last 50 years by Caltrans and other professional Cultural Resource Management groups. In October 2022, a pedestrian and windshield survey of the Area of Potential Impact was completed. The disturbance areas that extend outside the Caltrans right-of-way were visited and confirmed to be paved with no soil visibility. No prehistoric or historic-period archaeological resources have been recorded within or next to the project limits. The potential for currently unidentified intact archaeological deposits to be uncovered is considered low because the project area extends through one of the denser urban areas of Santa Cruz that has witnessed multiple episodes of development and redevelopment over the last century. Also, the project area is located within and just outside the existing highway corridor, which has been previously disturbed by multiple episodes of highway construction and residential development. The two closest known archaeological sites are located well outside the current project footprint and will not be impacted by project-related activities.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be stopped in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if project limits are extended beyond the present survey limits. A less than significant impact will result.

Architectural History

The project is not anticipated to have a significant impact on any of the historic properties within the project limits. The potential for project impacts, including the potential for impacts from vibration produced during construction, was further evaluated in the Finding of Effect in consultation with the State Historic Preservation Officer. [The following sentences regarding the architectural history finding have been updated since the draft environmental document was circulated.] On August 15, 2023, Caltrans submitted a Historic Property Survey Report, Historical Resources Evaluation Report, and Archaeological Survey Report to the State Historic Preservation Officer. Caltrans received concurrence from the State Historic Preservation Officer on September 21, 2023 for the determinations of eligibility for the National Register of Historic Places. Caltrans determined that a Finding of No Adverse Effect with Standard Conditions - Environmentally Sensitive Area is appropriate for this undertaking. On November 29, 2023, Caltrans submitted the Environmentally Sensitive Area Action Plan to the Caltrans Cultural Studies Office, and on December 15, 2023, the Cultural Studies Office concurred that it has no objection to this finding. With this finding, the

Environmentally Sensitive Area Action Plan delineates Environmentally Sensitive Areas to be placed in the field, adjacent to two of the historic buildings. This is to ensure protection of historical resources during construction. None of the other historic buildings require protective fencing. A less than significant impact is anticipated.

Avoidance and Minimization Measures

[Cultural avoidance and minimization measures numbers 2 through 8 have been updated since the draft environmental document was circulated. Measures from the Environmentally Sensitive Area Action Plan have been added.] For the Finding of No Adverse Effect with Standard Conditions, the following measure will be implemented:

1. To ensure protection of historical resources within the project area, Environmentally Sensitive Areas will be identified on plan sets and marked in the field using fencing or flagging.

2. Ensure the Environmentally Sensitive Areas Action Plan is included in Volume 2 of the final environmental document (available by request), Environmental Commitment Record, and the Resident Engineer Pending File.

3. Review the Plans, Specifications, and Estimates package to ensure that the Environmentally Sensitive Areas are included and clearly described and illustrated. Ensure that Standard Special Provisions for the Environmentally Sensitive Areas are included in the Plans, Specifications, and Estimates package.

4. All responsible parties will ensure that Environmentally Sensitive Areas are discussed during the pre-construction meeting. The importance of Environmentally Sensitive Areas will be discussed with construction personnel, and it will be stressed that no construction activity (including storage or staging of equipment or materials) should occur within the Environmentally Sensitive Areas and that workers must remain outside of the Environmentally Sensitive Areas at all times.

5. The Resident Engineer will notify the Caltrans Architectural Historian at least two weeks in advance of the beginning of construction to ensure that the Architectural Historian will be available for a field review and monitoring of the Environmentally Sensitive Area locations and fence installation.

6. All responsible parties will perform a field review of the Environmentally Sensitive Area locations at least one calendar week prior to construction activities.

7. At least one calendar week prior to initiating any work, the Contractor will install temporary Environmentally Sensitive Area fencing or other visual delineation in designated locations (as shown on the map in the Environmentally Sensitive Areas Action Plan) in coordination with the Environmental Construction Liaison, Resident Engineer, and Architectural

Historian. The Environmental Construction Liaison will conduct weekly inspections to ensure the integrity of the Environmentally Sensitive Areas.

8. The Environmental Construction Liaison will inform the Architectural Historian when construction is complete. The contractor will remove temporary fencing after construction concludes.

2.1.6 Energy

Project construction will require the use of energy resources. Project construction is necessary to restore assets in poor condition and meet current standards. During operation, the project will require minimal use of electricity. Though energy will be required to construct the project, the use of energy will not be wasteful, inefficient, or unnecessary. Therefore, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	**No Impact**
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	**No Impact**

2.1.7 Geology and Soils

A paleontological identification report was completed on December 30, 2022, and a Geologic Hazards Report was completed on August 13, 2023. Considering the geologic and soil traits in the project area, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	**Less Than Significant Impact**

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
ii) Strong seismic ground shaking?	**Less Than Significant Impact**
iii) Seismic-related ground failure, including liquefaction?	**Less Than Significant Impact**
iv) Landslides?	**No Impact**
b) Result in substantial soil erosion or the loss of topsoil?	**Less Than Significant Impact**
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	**Less Than Significant Impact**
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	**Less Than Significant Impact**
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	**No Impact**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**No Impact**

Affected Environment

The California Geological Survey records indicate all faults within the project limits are neither within an Alquist Priolo Earthquake Fault Zone nor within 1,000 feet of any mapped fault that is from the Holocene period (up to 11,000 years old) or younger. The U.S. Geological Survey's online Interactive Fault Map places the inferred trace of the Ben Lomond fault crossing the project limits between post miles 18.9 and 19.0. The map categorizes the onshore fault as "Late Quaternary" (less than 130,000 years). Therefore, due to the age of the fault, the project will not be considered susceptible to surface fault rupture hazards per Caltrans standards.

The entire project limits on State Route 1 are between the San Andreas and San Gregorio fault zones. The San Andreas fault system is active, and the San Gregorio fault system is potentially active. This is according to archived documentation on the California Geologic Survey's Alquist-Priolo Site Investigation Reports online database and the U.S. Geologic Survey's online Quaternary Fault and Fold Database of the U.S. The risk of strong seismic

ground shaking on State Route 1 will be due to any major events occurring on the San Andreas fault zone, about 10 miles northwest of the project limits.

The Hazards and Geophysical map application from Santa Cruz County's Geographic Information System Department webpage identified areas of "Very High" and "High" potential for liquefaction from post miles 17.50 to 17.90. The remaining project limits (post miles 17.93 to 20.20) are mapped as having "Low" potential. The "Very High" and "High" areas correspond to commonly liquifiable sediments that concur with published geologic mapping.

The U.S. Department of Agriculture's Web Soil Survey data indicates that 88 percent of the soils mapped within the project limits are rated for moderate soil erosion (K Factors (soil erodibility factors)) of 0.28 to 0.43). Twelve percent of the soils (the western 0.3 mile of the project) have a low soil erosion rating (K Factor of 0.1).

According to a review of geologic maps available on the California Geological Survey's database and Santa Cruz County's Hazard and Geophysical map application, the project limits between post miles 17.50 and 17.90 have a potential "Very High" to "High" liquefaction rating. A higher potential for lateral spreading, subsidence, and collapse corresponds to the same area.

Environmental Consequences

This Capital Preventative Maintenance project is mostly a roadway resurfacing project that will also rehabilitate or add signs, add complete streets elements, and bring drainage inlets back up to grade. The project is in an area that could experience soil instability or the effects of earthquakes. However, the project itself will not increase the risks associated with these geologic and soil conditions.

This Capital Preventative Maintenance project will not result in the rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides. Due to the minor nature of the project, it is not anticipated to increase the risk of these occurrences, and the project will not increase the safety risk during any of these events. The project will have a less than significant impact in these areas.

The project will include Best Management Practices for reducing erosion during construction. During operation, the culverts brought up to grade by the project will help to effectively convey water during storm events and reduce erosion. A less than significant impact will occur.

The project will not increase risks related to the liquefaction of soil. Though the project may, in part, occur on soils that are prone to liquefaction, it will not increase the likelihood of a liquefaction event or increase safety risks in the event of liquefaction. The main feature of the project is re-paving, which will occur in the existing roadway prism. Other project features are minor in nature and will not affect liquefaction potential.

The project limits on State Route 1 are mostly supported by artificial fill per Caltrans Standard Specifications. Unified Soil Classification data from the U.S. Department of Agriculture's soil survey database also shows the project limits are on soils with no or relatively low expansive clay content. Risk to life or property is not anticipated. A less than significant impact will occur as a result of soil expansion.

The project will not directly or indirectly cause potential substantial adverse effects due to geologic or soil conditions. A less than significant impact will occur. No avoidance, minimization, and/or mitigation measures are necessary.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Greenhouse Gas Technical Memorandum dated March 8, 2023, and the Climate Change Technical Report dated August 1, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	**Less Than Significant Impact**
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	**No Impact**

Affected Environment

The U.S. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state.

The Association of Monterey Bay Area Governments is the metropolitan planning organization for the region. The Association of Monterey Bay Area Governments is responsible for developing the 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy, which aims to maintain and improve the transportation system to meet the diverse needs of the region through 2040. The Santa Cruz County Regional Transportation Commission proactively addresses transportation needs in Santa Cruz by obtaining and distributing funding and publishing the Regional Transportation Plan.

Environmental Consequences

The purpose of the project is to improve existing assets that are in poor condition. The project will not increase the vehicle capacity of the roadway. This type of project is not expected to alter operational greenhouse gas

emissions. Because the project will not increase the number of travel lanes on State Route 1, no increase in vehicle miles traveled will occur as a result of project implementation.

Some greenhouse gas emissions will be generated during the construction period. Construction greenhouse gas emissions will result from material processing and transportation, onsite construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In general, the use of long-life pavement, improved traffic management plans, and changes in materials can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities. The primary scope of the project is to rehabilitate and extend the service life of the pavement on the roadway. The scope of the project also includes improvements to existing curb ramps and signs, as well as complete streets and electrical improvements.

Construction Climate Change emissions were estimated using the Caltrans Construction Emissions Tool (CAL-CET), using default settings for a Traffic Safety and Operation project. The construction phase is approximately 174 working days, and the estimated average carbon dioxide emissions are 260 tons per year. Note that these estimates are based on assumptions made during the environmental planning phase of the project and are considered “ballpark” figures of energy usage.

All construction contracts include Caltrans Standard Specifications, which are meant to minimize the project’s greenhouse gas emissions. The following will be included in the construction contract and implemented during construction: Sections 7-1.02A and 7-1.02C-Emissions Reduction, Section 14-9.02-Air Pollution Control, Section 14-10-Solid Waste Disposal and Recycling, Standard Specifications Section 12-Temporary Traffic Control, and Standard Specifications Section 21-2.02K-Compost. Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions.

One visual avoidance and minimization measure to be implemented as part of this project requires the preservation of as much existing vegetation as possible. A biology measure requires revegetation of all areas disturbed by the project. The revegetation requirements will be detailed in a landscape plan. It is expected that vegetation preservation and revegetation efforts to restore vegetation removed during the construction process will help offset construction-related greenhouse gas emissions. See the avoidance and minimization measures listed under the Aesthetics and Biological Resources sections for the full measure language.

In addition, a traffic control plan and construction staging plan will be developed to guide traffic and maximize traffic efficiency while considering safety and construction needs. Caltrans Standard Specifications Section 12-Temporary Traffic Control will guide the implementation of the traffic control plan.

Furthermore, to minimize the project's greenhouse gas emissions during construction, the avoidance and minimization measures listed below will be implemented.

While the project will result in greenhouse gas emissions during construction, it is anticipated that the project will not result in any increase in operational greenhouse gas emissions. The project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With the implementation of construction greenhouse gas reduction measures, the project's greenhouse gas emissions will not be notable, and a less than significant impact will occur.

Avoidance and Minimization Measures

The following measures will be implemented to minimize the project's greenhouse gas emissions during construction:

1. Where feasible, schedule truck trips outside of peak morning and evening commute hours. Traffic operations shall specify this in the lane closure charts.

2. Where feasible, use alternative fuels, such as renewable diesel, for construction equipment. If the use of alternative fuels is not possible, substitute gasoline-powered equipment for diesel-powered equipment. Comply with Section 3-517-Equipment of the 2023 Caltrans Construction Manual.

3. Where feasible, use solar-powered construction equipment.

4. Supplement existing construction environmental training with information on methods to reduce greenhouse gas emissions related to construction. This information will be shared using a handout. The information in the handout should include, but will not be limited to, the following:

a. For improved fuel efficiency from construction equipment, maintain equipment in proper tune and working condition, use the right-sized equipment for the job, and use equipment with new technologies.

b. Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

c. Reduce construction waste. For example, reuse or recycle construction and demolition waste. Maximize the use of recycled materials during project construction to the extent feasible. See Caltrans Standard Specifications Section 14-10-Solid Waste Disposal and Recycling.

d. Use on-road heavy-duty trucks that meet the California Air Resources Board's 2007 or cleaner certification standard for on-road heavy-duty diesel engines and comply with the State On-Road Regulation. See Caltrans Standard Specifications Section 7-1.02C-Emissions Reduction and comply with the 2023 Caltrans Construction Manual Section 7-1.04A(1)-Air Quality.

5. If any signs to be replaced are currently illuminated by lighting, use new sign panels made with ultra-reflective sign materials that are illuminated by headlights to reduce the energy used by electric lighting where feasible.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Initial Site Assessment that was prepared for hazardous waste, dated March 23, 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	**Less Than Significant Impact**
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?	**Less Than Significant Impact**
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	**Less Than Significant Impact**
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?	**No Impact**
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**Less Than Significant Impact**
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	**Less Than Significant Impact**

Affected Environment

The project is on State Route 1 through the Mission Street Corridor in Santa Cruz. State Route 1 serves as a major arterial, evacuation route, and route used by emergency responders. Numerous schools are in the vicinity of the project site.

The project is in an Unzoned Local Responsibility Area, according to the California Department of Forestry and Fire Protection's (CalFire's) Fire Hazard Severity Zone mapping tool. However, portions of the project limits fall within the city's designated Wildland Urban Interface Fire Area.

To provide information for the hazardous waste study, known as the Initial Site Assessment, the project description and hazardous waste databases were reviewed. There are hazardous waste sites and businesses commonly associated with hazardous waste generation in the project vicinity, but none will have the potential to impact this type of project. Following is a discussion regarding typical hazardous materials and wastes that are routinely encountered during highway construction projects.

Aerially Deposited Lead

Aerially deposited lead-contaminated soil along roadways is managed under the 2016 Aerially Deposited Lead Agreement between Caltrans and the California Department of Toxic Substances Control. Significant concentrations of aerially deposited lead are not anticipated within the project limits. An aerially deposited lead report performed within the project limits (titled "Site Investigation Report SR-1/SR-9 Intersection Improvement Project, Santa Cruz, California, dated August 2017") indicated that lead concentrations in exposed soil along the traveled way were below 80 milligrams per kilogram (mg/kg) below regulatory limits. There will be no special handling requirements for excavated and/or disturbed soil regarding aerially deposited lead.

Treated Wood Waste

Treated wood waste is commonly found in guardrails and signposts along Caltrans' right-of-way. There is potential to encounter treated wood waste when guardrails or signposts are replaced.

Yellow Thermoplastic or Traffic Stripe

Yellow thermoplastic and traffic stripes containing elevated concentrations of lead were commonly used on highways between 1997 and 2006. Caltrans records indicate that older, hazardous yellow thermoplastic and traffic stripe have already been removed within the project limits and replaced with materials containing lower, nonhazardous lead concentrations.

Environmental Consequences

The completed project will improve highway reliability and will not interfere with emergency response or emergency evacuation plans. During project construction, any traffic controls necessary will be implemented in accordance with the traffic control plan to not significantly impede fire or other emergency evacuation or emergency response traffic. Emergency responders will be made aware of any traffic disruptions, delays, or detours in advance.

The project will not increase the risk of loss, injury, or death due to wildland fires. The completed project will improve highway reliability. During project construction, any traffic controls necessary will be implemented to not significantly impede fire evacuation or response traffic. Emergency responders will be made aware of any traffic disruptions, delays, or detours in advance.

Though there are schools within 0.25 mile of the project limits, all hazardous waste will be handled according to appropriate standard specifications. The release of hazardous materials is not anticipated.

With the implementation of Caltrans Standard Special Provisions for the proper handling, management, and disposal of hazardous wastes and materials routinely generated by highway construction projects, a significant impact due to hazardous waste will not occur.

Avoidance and Minimization Measures

1. As a health and safety precaution, Standard Special Provisions Section 7-1.02k(6)(j)(iii) will be implemented during construction to ensure proper handling, management, and disposal (if required) of nonhazardous, unregulated aerially deposited lead-contaminated soil. This provision requires a Lead Compliance Plan to be prepared and implemented by the contractor.

2. If treated wood waste will be replaced as part of any guardrail reconstruction or signpost replacements, then Caltrans Standard Special Provisions Section 14-11.14 for the management and disposal of the treated wood waste will be implemented.

3. If stripe or thermoplastic must be removed as part of the project, appropriate Standard Special Provisions for management and disposal will be selected and implemented based on the removal method. In addition, the Standard Special Provision will require a Lead Compliance Plan to be developed and implemented by the construction contractor.

2.1.10 Hydrology and Water Quality

Considering the information in the Water Quality Technical Memorandum dated March 8, 2023, and the Location Hydraulic Study dated May 19, 2023, the following significance determinations have been made:

Question—Would the project:	**CEQA Significance Determinations for Hydrology and Water Quality**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	**Less Than Significant Impact**
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	**No Impact**
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 onsite or offsite;	**No Impact**
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	**No Impact**
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	**No Impact**
(iv) impede or redirect flood flows?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	**No Impact**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	**No Impact**

Affected Environment

The San Lorenzo River and Moore Creek cross State Route 1 at post mile 17.4 and 20.3, respectively. The project lies outside the extent of the base (100-year) floodplain except at post mile 17.50, where the project encroaches on a floodplain. The encroachment is minor and not significant under 23 Code of Federal Regulations 650, Subpart A, and will not raise base flood elevations.

The receiving water bodies in the vicinity of the project limits are the San Lorenzo River and Moore Creek. The project is within the Santa Cruz Hydrologic Area (subarea 304.12) in the Big Basin Unit.

A review of the project's location with respect to nearby receiving waters indicates that the San Lorenzo River and Moore Creek include impairments listed on the 2014/2016 Clean Water Act Section 303(d) list. On the 303(d) list, water bodies are impaired for benthic community effects, Chlordane, Chloride, Enterococcus, Polychlorinated biphenyls, Sodium, pH, Temperature, Toxicity, Turbidity, Escherichia Coli, Oxygen (dissolved), and Specific Conductivity.

The San Lorenzo River and Moore Creek have several beneficial uses, as listed in Table 2.2 below.

Table 2.2 San Lorenzo River and Moore Creek Beneficial Water Uses

Abbreviation	Beneficial Use
AGR	Agricultural Supply
BIOL	Biological Habitats of Special Significance
IND	Industrial Service Supply
COMM	Commercial and Sport Fishing
GWR	Groundwater Recharge
MUN	Municipal and Domestic Supply
RARE	Rare, Threatened, or Endangered Species
REC1	Water Contact Recreation
REC2	Non-Contact Water Recreation
WARM	Warm Freshwater Habitat
WILD	Wildlife Habitat
COLD	Cold Freshwater Habitat
MIGR	Migration of Aquatic Organisms
SPWN	Spawning, Reproduction, and/or Early Development
EST	Estuarine Habitat
FRSH	Freshwater Replenishment
PROC	Industrial Process Supply

There are no drinking water reservoirs or recharge facilities within the project limits. In addition, there are no treatment Best Management Practices within the project limits or groundwater units within the project vicinity.

The project will disturb approximately 5.8 acres of soil and result in no new net impervious surface area.

Environmental Consequences

The project does not have the potential to directly discharge stormwater within the project limits to the above-identified receiving water bodies because they are outside the project limits. This project also does not involve substantial excavation or earthwork activities that could impact the receiving water bodies. By incorporating appropriate engineering design and robust stormwater Best Management Practices during construction, minimal short-term water quality impacts are anticipated. This is considered a less than significant impact. The project will not result in significant long-term impacts on water quality. During the construction phase, the project will include a Stormwater Pollution Prevention Plan prepared by the contractor to address short-term construction impacts on water quality.

2.1.11 Land Use and Planning

Project activities will occur mostly on the existing Caltrans right-of-way. A temporary easement will be required to construct Americans with Disabilities Act-compliant curb ramps. An encroachment permit from the City of Santa Cruz will be needed to complete the curb ramp work. However, the use of construction easements will not alter existing land use or planning in the region.

Project activities will not divide any existing communities and are not anticipated to conflict with any existing land use plan, policy, or regulations in the region.

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	**No Impact**
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?	**Less Than Significant Impact**

The project is in the coastal zone, under the jurisdiction of the City of Santa Cruz, from approximately post mile 20.10 to post mile 20.20. The portion of the project within the coastal zone is subject to the policies contained in the 1992 General Plan/Local Coastal Program. Within the coastal zone, the project will include shoulder backing replacement and repaving of the roadway. The project will comply with all applicable coastal policies and is anticipated to qualify for a coastal development permit exemption. A less than significant impact will result.

2.1.12 Mineral Resources

Project activities will involve work on highway features that are within or immediately next to the Caltrans right-of-way along State Route 1. The project will not be involved in the removal or extraction of mineral resources.

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
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?	**No Impact**
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?	**No Impact**

2.1.13 Noise

Considering the information in the Noise Technical Memorandum dated March 8, 2023, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
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?	**Less Than Significant Impact With Mitigation Incorporated**
b) Generation of excessive groundborne vibration or groundborne noise levels?	**Less Than Significant Impact**
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?	**No Impact**

Affected Environment

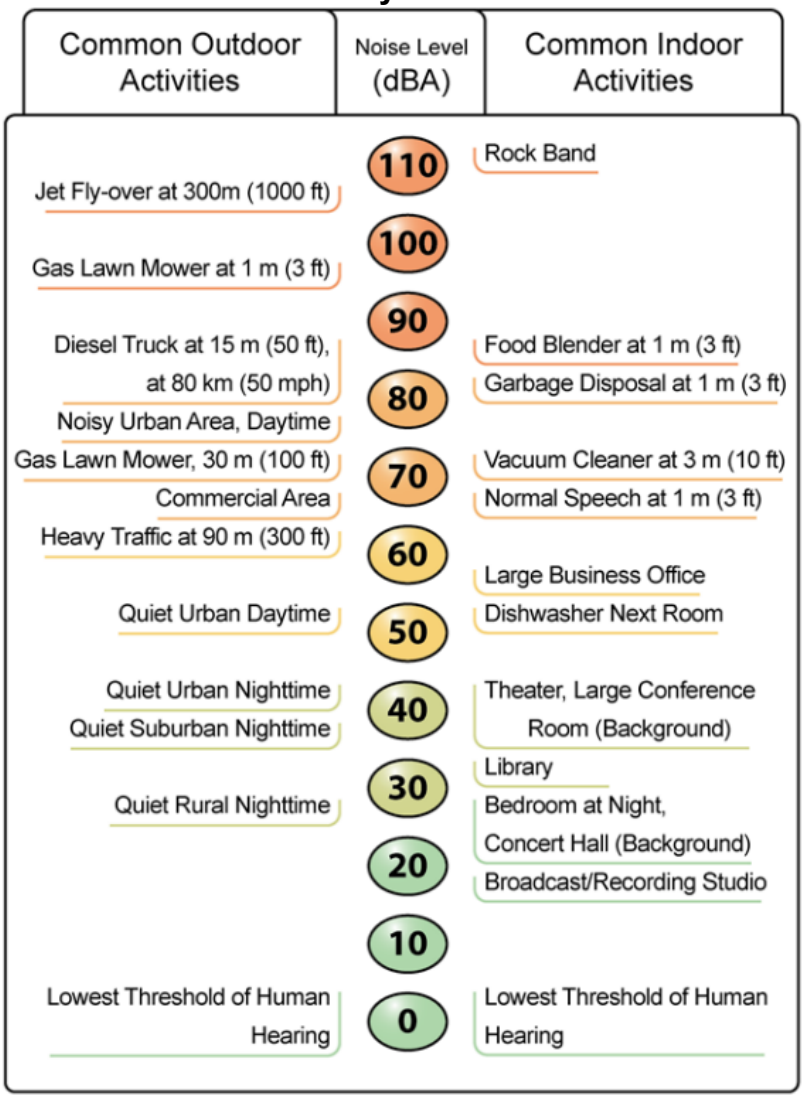
Noise Fundamentals

Noise is measured in decibels, which is a logarithmic measure of sound amplitude. Highway traffic noise is expressed in terms of the hourly, A-weighted decibel. A decibel is a unit that relates the sound pressure of noise to the faintest sound the young human ear can hear. The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (pitch) to correspond to the way the human ear hears these frequencies.

An increase of 9 to 10 dB is generally perceived as a doubling of noise. In addition, when the source noise is doubled, there is a resulting 3 dB increase, which is typically the smallest change in noise that the human ear can detect without specifically listening for the change.

Noise levels associated with common indoor and outdoor activities are shown in Figure 2-1.

Figure 2-1 Noise Produced by Common Activities



Both distance and objects between the noise source and receptor can help reduce noise. Various factors affect the rate of sound attenuation, including whether a noise source is mobile or stationary, the material the ground is made from, and elevation.

Vibration Fundamentals

Vibration is produced by many types of commonly used construction equipment. Vibration may annoy humans and, in some cases, damage buildings. This damage could be structural damage, such as cracking of floor slabs, foundations, columns, beams, or walls, or cosmetic architectural damage, such as cracked plaster, stucco, or tile. Ground vibration also has the potential to disrupt the operation of vibration-sensitive research and advanced technology equipment.

The duration and amplitude of vibration generated by construction and maintenance equipment varies widely depending on the type of equipment. For example, the vibration from blasting has a high amplitude and short duration, whereas the vibration from grading is lower in amplitude but longer in duration. The 2020 Caltrans Transportation and Construction Vibration Guidance Manual contains potential measures to reduce vibration produced by various types of construction equipment.

Project Setting

The project spans 2.7 miles through the City of Santa Cruz. The land flanking on either side of the roadway is completely developed with single-family homes, multifamily housing, and commercial properties. It is estimated that there are well over 100 residential sensitive receptors with property lines next to the state right-of-way. A review of the immediate project area did not reveal any hospitals, convalescent homes, or other facilities that house sensitive receptors overnight. During the night, residents living near the construction site may be subject to noise and vibration. The effect of construction noise on residents is discussed below under Environmental Consequences.

Furthermore, the project site is near historic buildings, some of which are eligible for inclusion in the National Register of Historic Places. The vibration produced by project construction activities is not anticipated to have a significant effect on historic buildings. This will be further evaluated in the Finding of Effect.

Environmental Consequences

Construction

Inevitably, local noise levels near project construction activities will experience a short-term increase. The amount of construction noise will vary with the particular activities and the types and models of equipment being used. Caltrans policy states that normal construction equipment should not emit noise levels greater than 86 A-weighted decibels (dBA) at 50 feet from the source.

Construction equipment that may be used for this project and the related noise levels at 50 feet are listed in Table 2.3.

Table 2.3 Construction Equipment Potentially Used for This Project and Associated Noise Level at 50 Feet

Construction Equipment	Noise Level at 50 Feet A-Weighted Decibels (dBA)
Backhoe	78
Bar Bender	Not Applicable
Chain Saw	84
Clam Shovel	87
Compactor (Ground)	83
Compressor (Air)	78
Concrete Mixer Truck	79
Concrete Pump Truck	81
Concrete Saw	90
Cold Planer	90
Dump Truck	76
Excavator	81
Flat Bed Truck	74
Front End Loader	79
Generator (less than or equal to 25 Kilovolt-amps (≤25 kVA))	73
Generator (greater than or equal to 25 Kilovolt-amps (≥25 kVA))	81
Gradall	83
Grader	Not Applicable
Jackhammer	89
Mounted Impact Hammer (Hoe Ram)	90
Paver	77
Pickup Truck	75
Pneumatic Tools	85
Pumps	81
Roller Compactor (Asphalt)	80
Vacuum Street Sweeper	82
Vibratory Concrete Mixer	80
Welder/Torch	74

Source: Federal Transit Administration, 2006.

Since it is known that 0.15 foot of cold planing work is included, it can be inferred that the loudest piece of equipment will be expected to produce a noise level of approximately 90 A-weighted decibels (dBA) at 50 feet, above the 86 A-weighted decibels (dBA) standard nighttime threshold.

The project will require nighttime work due to daytime traffic conditions. Cold planing and paving are the main operations to be completed during the night. Construction of other project elements is anticipated to be completed during the day to the extent feasible; however, there are significant limitations to this due to the traffic levels through the corridor. It will be determined later in the project planning process if curb ramp construction can be completed during the day.

Nightwork can adversely impact local residents' normal sleep activities. However, potential impacts at any given sensitive receptor location are

expected to be short term, intermittent, and conducted in accordance with Caltrans Standard Specifications. The baseline local noise levels are also significantly influenced by local traffic noise. In addition, Caltrans Standard Specifications Section 4-8.02 requires the contractor to control and monitor noise resulting from work activities and not exceed 86 A-weighted decibels maximum noise level (dBA Lmax) at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. The contractor will be responsible for submitting a Noise Control Plan, which will outline how noise will be kept below this threshold to the extent feasible.

Adverse noise impacts from construction are anticipated due to cold planing, paving operations, and possibly sidewalk repairs and curb ramp replacements if this work cannot be completed during the day. However, since construction will be temporary and intermittent, conducted in accordance with Caltrans Standard Specifications, and because local noise levels are significantly influenced by local traffic noise, the potential impact will be minimized to the extent feasible. To minimize impacts on residents' normal nighttime sleep activities, it is recommended that, whenever possible, construction work be done during the day. When nighttime construction is necessary, the noisiest construction activities should be done as early in the evening as possible. Caltrans Standard Specifications Section 14-8.02 requires the contractor to control and monitor noise resulting from work activities and not to exceed 86 A-weighted decibels maximum noise (dBA Lmax) at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. See below for noise avoidance, minimization, and mitigation measures.

Operation

Since no additional capacity or lanes are being added to the highway, there will be no difference in long-term noise impacts due to the project.

Avoidance, Minimization, and Mitigation Measures

The following measures will be implemented to minimize disturbance due to noise:

Avoidance and Minimization Measures

1. Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two weeks in advance. Notice will be published in local news media and will include the dates and duration of the proposed construction activity. The District 5 Public Information Office posts notice of the proposed construction and potential community impacts after receiving notice from the resident engineer.

2. The contractor shall develop a Noise Control Plan and submit it to District noise staff for review. District noise staff will be responsible for obtaining a nonstandard special provision addressing the necessary requirements of the

Noise Control Plan. The bullets below generally describe the noise-reducing measures the Noise Control Plan will include.

a. Shield loud pieces of stationary construction equipment with sound barriers if complaints are received.

b. Locate portable generators, air compressors, et cetera, as far away from sensitive noise receptors as feasible.

c. Limit the grouping of major pieces of equipment operating in one area to the greatest extent feasible.

d. Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

e. Consult District noise staff if complaints are received during the construction process.

f. The contractor shall conduct construction noise monitoring as prescribed in his or her Noise Control Plan.

g. Whenever possible, conduct construction work during the day.

h. When nighttime construction is necessary, the noisiest construction activities should be done as early in the evening as possible.

3. The bullets below generally describe the vibration-reducing measures the Noise Control Plan will include.

a. Operate earthmoving equipment as far away from vibration-sensitive sites as possible. Locate equipment on the construction lot as far away from noise-sensitive sites as possible.

b. Phase demolition, earthmoving, and ground-impacting operations so as not to occur in the same time period.

c. Route truck traffic away from residential streets, if possible. Select streets with the fewest homes if no alternatives are available.

d. Select demolition methods not involving impact, where possible.

e. Avoid the use of vibratory rollers and packers near sensitive areas.

f. Construct noise barriers around equipment when feasible.

4. In addition, the Noise Control Plan must include information about the monitoring of construction activities and information about how noise will be monitored and controlled. The bullet points below generally outline what must be included.

a. The interval at which noise monitoring will be performed and triggers that will require additional monitoring.

b. A list of the locations and construction activities to be monitored.

c. Description of the construction activities and anticipated noise levels at these locations.

d. Operating sound levels of construction equipment at specified distances and locations.

e. Sound control measures to maintain noise levels within specified limits.

f. Corrective actions if specified sound levels are exceeded.

g. A list of sound level meters and calibrators with current calibration certifications.

h. The names, qualifications, and resumes of the person who prepared the Noise Control Plan and the personnel who will perform noise monitoring.

5. The Noise Control Plan must be prepared by a qualified person who meets one of the following requirements:

a. Board Certified by the Institute of Noise Control Engineering of the USA with two years of noise control experience.

b. Registered civil engineer with three years of full-time noise control experience.

c. A bachelor’s degree or a higher degree from an Accreditation Board for Engineering and Technology-accredited institution of higher education in a relevant field of engineering, environmental science, or earth science and five years of full-time noise control experience. A bachelor’s degree or higher degree from an Accreditation Board for Engineering and Technology-accredited institution of higher education and 10 years of full-time noise control experience.

6. Noise monitoring shall be conducted by a person with at least two years of experience in conducting field noise measurements. Submit the qualifications of each of the individuals who will be performing the noise monitoring.

7. The sound level meter must meet quality standards, which will be determined by the noise engineer and outlined in the Noise Control Plan.

8. Each time noise monitoring is completed, a report of the findings shall be submitted to Caltrans for review.

Mitigation Measures

9. If during construction, noise levels are found to exceed 86 A-weighted decibels maximum noise (dBA Lmax) at 50 feet from the job site from 9:00 p.m. to 6:00 a.m., corrective action to reduce noise levels below the threshold and minimize disruption due to construction noise shall be taken. Corrective action may include, but would not be limited to:

a. Shielding construction equipment with temporary sound barriers or sound blankets.

b. Offering noise-cancelling headphones to residences within 500 feet of the construction.

c. Altering the grouping, location, or time of use of construction equipment.

2.1.14 Population and Housing

The project will not be involved in altering the existing capacity or alignment of State Route 1. Therefore, the project is not anticipated to conflict with any existing population or housing status in the region.

Question—Would the project:	CEQA Significance Determinations for Population and Housing
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)?	**No Impact**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	**No Impact**

2.1.15 Public Services

Project activities will be limited to the existing alignment of State Route 1. The project will not impact any planned or existing governmental facilities. The project will maintain public access on State Route 1 during project

construction, and access to any existing governmental facilities in proximity of project work locations will be maintained.

Question:	CEQA Significance Determinations for 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: Fire protection?	**No Impact**
Police protection?	**No Impact**
Schools?	**No Impact**
Parks?	**No Impact**
Other public facilities?	**No Impact**

2.1.16 Recreation

The project will improve the existing roadway and travel for pedestrians and cyclists. The project will not include recreational facilities or require the construction or expansion of recreational facilities. The project will not increase the use of parks or recreational facilities.

Question—Would the project:	CEQA Significance Determinations for Recreation
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?	**No Impact**
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	**No Impact**

2.1.17 Transportation

The project will not alter the existing alignment or capacity of State Route 1 and is not anticipated to conflict with any existing or planned transportation-related programs or facilities in the region. The project will not alter existing vehicle miles traveled on State Route 1. Emergency access on State Route 1 will be maintained during project construction and will not be altered once the project is completed.

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

Affected Environment

The project runs about 2.65 miles along State Route 1 through the City of Santa Cruz. This portion of State Route 1 is a four-lane major highway through the city, with a posted speed limit of 25 to 40 miles per hour throughout the project limits. The highway serves as a major local thoroughfare and emergency access route.

Environmental Consequences

CEQA Guidelines Section 15064.3, subdivision (b), outlines criteria for determining a project's impact on vehicle miles traveled. The project will not contribute to increased vehicle miles traveled during operation because it will not increase capacity. During construction, vehicle trips necessary to complete the construction will occur. These vehicle trips will be generated in the short term and only as necessary to complete the project repairs and upgrades.

Regarding emergency access, the completed project will improve highway reliability by rehabilitating the pavement. Traffic delays are anticipated during construction due to temporary closures, ramp closures, and/or one-way traffic control. However, traffic stops and detours will be executed in accordance with

the traffic control plan. Emergency services will be notified of potential disruptions, delays, or detours in advance to minimize impacts on emergency access.

2.1.18 Tribal Cultural Resources

Considering the information in the Historical Resources Evaluation Report, dated June 2023, the Archaeological Survey Report, dated August 2023, and the Historic Properties Survey Report, dated August 2023, the following significance determinations have been made:

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:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
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	**Less Than Significant Impact**
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.	**Less Than Significant Impact**

See the archaeology discussion under the Cultural Resources heading above.

The potential for currently unidentified intact archaeological deposits to be uncovered is considered low because the project area has witnessed multiple episodes of development and redevelopment over the last century. Also, the project area has been previously disturbed by multiple episodes of highway construction and residential development. The two closest known archaeological sites are well outside the current project footprint and will not be impacted by project-related activities.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be stopped in that area until a qualified

archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if project limits are extended beyond the present survey limits. A less than significant impact will result.

2.1.19 Utilities and Service Systems

Based on an evaluation of the utilities and service systems within the project area, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	**Less Than Significant Impact**
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	**No Impact**
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?	**No Impact**
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?	**Less Than Significant Impact**
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	**No Impact**

Affected Environment

The project will replace and rehabilitate the pavement and highway features on State Route 1 through the City of Santa Cruz. Santa Cruz is a moderately populated city with above- and below-ground utilities owned and operated by various providers. The City conveys surface water to end users using a network of underground pipelines. The Santa Cruz Wastewater Treatment

Facility treats the city's wastewater. Trash and recycling produced within the city limits are disposed of at the City of Santa Cruz Resource Recovery Facility and Recycling Center.

Environmental Consequences

Neither project construction nor operation will significantly increase demand for water or wastewater supply or demand. The project will also not alter the functions or demand for electrical, natural gas, or telecommunications facilities in the region.

The project is not anticipated to generate excessive amounts of solid waste that will overwhelm the capacities of existing waste management facilities. The project will recycle any recyclable waste materials generated from project construction. Waste materials generated by project construction will be collected and disposed of properly to meet all state and federal requirements.

The project will have a less than significant impact due to utility relocations. The project may require the relocation of some utility lines and maintenance hole covers. The utility relocations will not have a significant impact on the environment.

The project will not generate solid waste during operation. During construction, some solid waste will be generated, but not in excess of infrastructure capacity or state or local standards. To the extent that it is safe and feasible, construction materials will be reused or recycled. In addition, waste materials generated by project construction will be collected and disposed of properly.

2.1.20 Wildfire

According to CalFire's Fire Hazard Severity Zone mapping tool, the project lies within an Unzoned Local Responsibility Area. The project area is not designated as a Very High Fire Hazard Severity Zone, so there will be no impact related to wildfires.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	**No Impact**
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?	**No Impact**

Question—Would the project:	CEQA Significance Determinations for Wildfire
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	**No Impact**
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?	**No Impact**

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	**Less Than Significant Impact**
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.)	**No Impact**
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**Less Than Significant Impact With Mitigation Incorporated**

Affected Environment

Caltrans proposes to rehabilitate 8.3 lane miles of flexible Class 2 pavement using Capital Preventative Maintenance strategies. These strategies include, but are not limited to, digouts, profile grinding, cold planing 0.15 foot of pavement, and placing 0.15 foot of Rubberized Hot Mix Asphalt overlay. The project will also upgrade numerous assets within Caltrans' right-of-way and within the project limits. The project passes through the Mission Street Corridor in Santa Cruz.

Environmental Consequences

Natural and Historical Resources

Biological Resources

The project will minimally affect biological resources. Few protected plant and animal species, or their habitats, are present within the Biological Study Area.

Monterey pine trees are present; however, they are outside their native range, and the project will not affect the species. In addition, tree protection measures will be implemented. Nesting birds and marbled murrelets have habitat present within the Biological Study Area. Avoidance and minimization measures will be implemented during construction, and no impact is anticipated. A small portion of the project is within the California red-legged frog critical habitat and within the dispersal range of documented occurrences. No breeding or nonbreeding habitat occurs in the Biological Study Area. Avoidance and minimization measures, including a work window, will be implemented. The Federal Endangered Species Act effects determination is that the project may affect, but is not likely to adversely affect, the California red-legged frog or its critical habitat. Informal consultation with the U.S. Fish and Wildlife Service has been completed for the use of the Programmatic Biological Opinion.

Cultural Resources

The project is unlikely to affect archaeological resources. No prehistoric or historic-period archaeological resources have been recorded within or next to the project limits. The potential for currently unidentified intact archaeological deposits to be uncovered is considered low because the highway and project area have witnessed multiple episodes of development and redevelopment over the last century. If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be stopped in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if project limits are extended beyond the present survey limits. A less than significant impact will result.

The project is not anticipated to affect historic architectural resources. Fifteen properties in the Study Area were evaluated. Four of the 15 properties are eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, including three resources that were

previously determined eligible and one resource that was determined eligible as a result of studies conducted for the current project. One additional property that was determined not to be eligible for inclusion in the National Register of Historic Places or California Register of Historical Resources was determined to be a historical resource under the California Environmental Quality Act because it is listed in the local Santa Cruz Historic Building Survey. The State Historic Preservation Officer concurred with this determination. The present study confirms these properties' eligibility status. Also, the Santa Cruz and Felton Railroad, which intersects the Study Area at approximately post mile 17.65, is assumed to be eligible for the purposes of this undertaking only due to its large resource size and limited potential for effects. This assumption of eligibility was approved by the Caltrans Cultural Studies Office.

[The following sentences regarding the architectural history finding have been updated since the draft environmental document was circulated.] Caltrans received concurrence from the State Historic Preservation Officer for the determinations of eligibility for the National Register of Historic Places. Caltrans determined that a Finding of No Adverse Effect with Standard Conditions - Environmentally Sensitive Area is appropriate for this undertaking. Caltrans submitted the Environmentally Sensitive Areas Action Plan to the Caltrans Cultural Studies Office, and the Cultural Studies Office concurred that it has no objection to this finding. With this finding, the Environmentally Sensitive Areas Action Plan delineates Environmentally Sensitive Areas to be placed in the field, adjacent to two of the historic buildings. This is to ensure protection of historical resources during construction. None of the other historic buildings require protective fencing. A less than significant impact is anticipated.

Human Environment

Aesthetics

The proposed improvements will cause minimal, if any, effect on views of scenic vista points in the area. The visibility of the distant Santa Cruz Mountains will remain the same and will continue to contribute to the scenic vista.

The asphalt resurfacing portion of the project will not significantly change or degrade public views or visual quality, though the project may result in a more engineered appearance for the pedestrian environment. Community input will be gathered to ensure continuity with the adopted City of Santa Cruz 2030 General Plan and Mission Street Urban Design Plan. Design decisions, streetscape element selection, and aesthetic treatments can reduce the potential for an overbuilt or engineered appearance. Substantial community involvement is recommended regarding the aesthetics of the entire project and to maintain consistency with the City's planning documents.

Existing signs will be upgraded to more reflective sheeting. This may result in slightly more glare for night drivers; however, it will not significantly impact daytime or nighttime views of the area or be inconsistent with the highway environment.

Implementation of the project will result in visual changes as seen from public viewpoints, such as the State Route 1 roadway and sidewalks. Viewer sensitivity varies from low to moderate, depending on whether a person is traveling in a vehicle, doing recreational activities, or visiting a local business. Street trees and landscape planting could be considered to soften the effects of urbanizing the corridor. Also, consideration and implementation of the City's planning documents, including the Mission Street Urban Design Plan 2022, could reduce visual discord and assist the City in improving the character and quality of the streetscape.

Although some visual changes will be noticeable, they will not be unexpected elements in the urbanized environment. At several locations, widening pedestrian refuge islands, modifying curb cuts, adding bus stops, adding high-visibility crosswalks, and similar features are common along street thoroughfares.

Implementation of avoidance and minimization measures will ensure that a less than significant impact will result.

Air Quality

There will be a temporary increase in air emissions and fugitive dust during the construction period, which will have a temporary impact on local air quality. However, it is anticipated that there will be minor earthwork required for this project, so minimal dust generation will be expected.

To minimize dust emissions from the project, Caltrans Standard Specifications Section 14-9.02-Air Pollution Control will be implemented. Section 14-9.02 states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract. Also, the project-level Stormwater Pollution Prevention Plan will include water pollution control measures that also serve as standard dust emission minimization measures. A less than significant impact will result.

Geology and Soils

The project is subject to the geologic and soil conditions within the project limits. The project is crossed by the Ben Lomond fault. Due to the age of the fault, the project will not be considered susceptible to surface fault rupture hazards per Caltrans standards.

The risk of strong seismic ground shaking on State Route 1 will be due to any major events occurring on the San Andreas fault zone, which is about 10

miles northwest of the project limits. However, the project will rehabilitate the roadway and not contribute to this risk.

The Hazards and Geophysical map application from Santa Cruz County's Geographic Information System Department webpage identified a portion of the project limits as areas of "Very High" and "High" potential for liquefaction. Most of the project limits are within an area with a "Low" potential for liquefaction. This Capital Preventative Maintenance project will not increase the risk of liquefaction.

The U.S. Department of Agriculture's Web Soil Survey data indicates that 88 percent of the soils mapped within the project limits are rated for moderate soil erosion, and 12 percent of the soils have a low soil erosion rating. The project will include Best Management Practices for reducing erosion during construction. During operation, the culverts rehabilitated by the project will help to effectively convey water during storm events and reduce erosion.

Upon review of geologic maps available on the California Geological Survey's database and Santa Cruz County's Hazard and Geophysical map application, the project limits between post miles 17.50 and 17.90 have a potential "Very High" to "High" liquefaction rating. A higher potential for lateral spreading, subsidence, and collapse corresponds to the same area. Considering the nature of the project activities, the project will not increase risks related to the liquefaction of soil.

The project limits on State Route 1 are mostly supported by artificial fill per Caltrans Standard Specifications. Unified Soil Classification data from the U.S. Department of Agriculture's soil survey database also shows the project limits are on soils with no or relatively low expansive clay content.

The project will not directly or indirectly cause potential substantial adverse effects due to geologic or soil conditions. A less than significant impact will occur.

Greenhouse Gas Emissions

Because the project will not increase the number of travel lanes or otherwise increase capacity on State Route 1, it is not expected to alter operational greenhouse gas emissions. However, some greenhouse gas emissions will be generated during the construction period.

All construction contracts include Caltrans Standard Specifications, which are meant to minimize the project's greenhouse gas emissions. In addition, visual and biological measures will require vegetation preservation and revegetation. This will help offset construction emissions. In addition, a traffic control plan and construction staging plan will be developed to guide traffic and maximize traffic efficiency while considering safety and construction needs.

Furthermore, to minimize the project's greenhouse gas emissions during construction, avoidance and minimization measures listed in the Greenhouse Gas Emissions section will be implemented.

The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Hazardous Waste

The project will include Caltrans Standard Special Provisions for hazardous waste testing and monitoring to protect the general public from hazards that could arise from the project's construction activities. The project will not result in adverse effects due to the generation of hazards or exposure of the general public to hazardous waste. Therefore, the project is not anticipated to result in considerable impacts on the general public due to hazardous waste.

Water Quality

The project does not have the potential to directly discharge stormwater within the project limits to the above-identified receiving water bodies because they are outside the project limits. This project also does not involve substantial excavation or earthwork activities that could impact the receiving water bodies. By incorporating appropriate engineering design and robust stormwater Best Management Practices during construction, minimal short-term water quality impacts are anticipated. This will be considered a less than significant impact. The project will not result in significant long-term impacts on water quality. During the construction phase, the project will include a Stormwater Pollution Prevention Plan prepared by the contractor to address short-term construction impacts on water quality.

Noise

As explained in further detail in the Noise section of this document, the noise levels in the vicinity of project construction activities will experience a short-term increase due to construction activities. The amount of construction noise will vary with the particular activities and the types and models of equipment used by the contractor. Caltrans policy states that normal construction equipment should not emit noise levels greater than 86 A-weighted decibels (dBA) at 50 feet from the source. However, the loudest piece of equipment will be expected to produce a noise level of approximately 90 A-weighted decibels (dBA) at 50 feet, above the 86 A-weighted decibels (dBA) standard nighttime threshold.

Caltrans Standard Specifications Section 14-8.02 requires the contractor to control and monitor noise resulting from work activities and not to exceed the 86 A-weighted decibels maximum noise level (dBA Lmax) at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. The contractor will be responsible for submitting a Noise Control Plan, which will outline how noise will be kept below this threshold to the extent feasible. With the implementation of

avoidance, minimization, and mitigation measures outlined in the Noise section and in the sub-section below, a less than significant impact will result.

Transportation

During construction, vehicle trips necessary to complete construction will occur. These vehicle trips will be generated in the short term and only as necessary to complete the project repairs and upgrades. A less than significant impact on vehicle miles traveled will result.

Regarding emergency access, the completed project will improve highway reliability by rehabilitating the pavement. There will be traffic delays during construction due to temporary closures, ramp closures, and/or one-way traffic control. However, traffic stops and detours will be executed in accordance with the traffic control plan. Emergency services will be notified of potential disruptions, delays, or detours in advance to minimize impacts to emergency access. A less than significant impact will result.

Avoidance, Minimization, and/ or Mitigation Measures

See the corresponding sections in the earlier pages of this document for a list of avoidance, minimization, and/ or mitigation measures for each issue area.

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY — GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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September 2022

NON-DISCRIMINATION POLICY STATEMENT

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

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

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

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Appendix B Comment Letters and Responses

[This appendix has been added since the draft environmental document was circulated.]

This appendix contains the comments received during the public circulation and comment period from November 27, 2023 to December 28, 2023, retyped for Americans with Disabilities Act accessibility. The comments from comment letters, comment cards, and emails are stated verbatim as submitted, with acronyms, abbreviations, and any original grammatical or typographical errors included. A Caltrans response follows each comment presented. Copies of the original comment letters and documents can be found in Volume 2 of this document.

Master Responses

Master Response 1- Crosswalks

Caltrans received numerous comments requesting crosswalks be added at various intersections. In response to these comments, Caltrans is proposing to install new crosswalks at multiple locations along the Mission Street Corridor. The crosswalks will be considered, and a decision on implementation will ultimately depend on a traffic safety and operations evaluation to occur in the final design (Plans, Specifications, and Estimates) phase.

Comment Responses

Comment from Debbie Bulger for Mission: Pedestrian, Letter

Comment 1:

Mission Street is not only a state highway, it is also the Main Street of Westside Santa Cruz. This important Business District must be made safer for pedestrians. In addition there are many residential houses on Mission Street including multi-family housing units. All of these businesses and residences create multiple turning movements as motor vehicles continually turn across sidewalks into approximately 50 driveways, not to mention the numerous side streets and intersecting arterials.

Mission Street is very dangerous for pedestrians. In the last 10 years 10 people have been killed by traffic collisions and dozens others injured on Highway 1 within the boundaries of the CAPM project. This maintenance project is an opportunity to increase the safety of this busy arterial street in this business and residential district.

Response to comment 1: Caltrans recognizes the importance of improving the pedestrian environment through the Mission Street Corridor. The project includes numerous pedestrian improvements. These improvements include enhancing crosswalk visibility, upgrading and replacing curb ramps, adding pedestrian islands, and adding two additional bus stop platforms. Caltrans is exploring additional pedestrian safety improvement options, such as curb bulb-outs for the curbs that are being removed and replaced to meet Americans with Disabilities Act requirements. Any additional project features would be added during the final design (Plans, Specifications, and Estimates) phase.

Comment 2:

Mark all four crosswalks of the Bay/Mission intersection. Currently only three legs of the Bay/Mission intersection are marked, and pedestrian crossing is prohibited on the fourth leg which leads to the Metro bus stop. This bus stop is a major destination for UCSC students and others catching a bus to campus. The current crossing prohibition forces bus riders to cross up to

three legs of this busy intersection when their destination is just across the street. The reality is that many young college students dash across the intersection directly to the bus stop, especially when they see the bus coming. Alternatively, a pedestrian scramble at Mission/Bay could stop all motor vehicles (including right turns on red) to allow pedestrians to cross to any destination efficiently.

Response to comment 2: Caltrans is coordinating with the City of Santa Cruz (the City) on the design for the Bay Street/Mission Street intersection. The City has requested that Caltrans enter into a cooperative agreement with the City to implement proposed improvements at this intersection. Some of the City's suggested improvements at this intersection may be incorporated into this project during the final design (Plans, Specifications, and Estimates) phase. Because the configuration of the intersection will likely be changed, the signal timings will be evaluated and adjusted accordingly. Please also reach out to the City of Santa Cruz for comments and concerns about the Bay Street/Mission Street intersection. The City is not currently proposing to add a pedestrian crossing on the fourth side of the intersection. The intersection design will be finalized during the project's upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 3:

Assess and likely increase the illuminance for the street lights to above minimum standards. The quality of the lighting on Mission Street is variable and in many cases insufficient for safety in crossing after dark. Poor street lighting was undoubtably a factor in several fatalities occurring on this busy street. In 2022, Mission: Pedestrian sent night-time photos of the Mission/King intersection to Caltrans after a pedestrian was killed there after dark. Subsequently Caltrans changed the streetlight type and increased the brightness of that intersection. The entire street within the confines of the project should be professionally assessed for lighting type and output and updated for safer walking after dark.

Response to comment 3: Caltrans is exploring opportunities to increase the illuminance for streetlights along the Mission Street Corridor. Lighting improvements may be added during the project's upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 4:

Install leading pedestrian intervals at all signalized intersections on Mission Street. LPIs increase safety for pedestrians crossing the street by increasing their visibility and reducing conflicts between motor vehicles and pedestrians with minimal delay for drivers.

Response to comment 4: For the traffic signals along Mission Street within the project limits that belong to Caltrans, the majority of traffic signals have active Leading Pedestrian Intervals (LPIs). Caltrans is exploring opportunities to install and activate Leading Pedestrian Intervals on the remainder of the traffic signals. A decision will be made during the project's upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 5:

Install backplates with retroreflective borders at ALL stoplight-controlled and pedestrian hybrid beacon intersections on Mission Street. This low-cost treatment can result in a 15% reduction in total crashes. Currently such borders are in place at Chestnut and Mission.

Response to comment 5: Caltrans is looking into implementing backplates with retroreflective borders through the project limits. A decision will be made during the project's upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 6:

Construct curb extensions at the Fair Street intersection. Currently crossing Fair Street is extremely dangerous for pedestrians because northbound drivers make left turns from Mission to Fair at high speed between gaps in southbound traffic. They do not watch for the presence of pedestrians since they are focusing on the oncoming southbound motor vehicle traffic. There have been numerous close calls between crossing peds and motor vehicles at this intersection. Curb extensions would shorten the crossing distance on Fair and thus decrease the traffic exposure for pedestrians. Another option would be to install a median island on Fair.

Response to comment 6: Curb extensions are planned at the Fair Street intersection. Caltrans will revise and refine the design of these extensions in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 7:

Construct modern roundabouts at several intersections including Mission/Almar/Younglove, Mission/Chestnut/Union, and Mission/Western. A roundabout at Mission/Western would slow vehicles as they entered the business district/urban area.

Response to comment 7: Constructing roundabouts is not within the scope or purpose and need of this project. If a sufficient need for roundabouts is found in the future, a different project would study them.

Comment 8:

Install a Pedestrian Hybrid Beacon at Mission and Shaffer Rd. Currently pedestrians dash across Hwy 1 in order to access the Moore Creek Open Space. Another option is to install a barrier-protected walking path along the northbound side from Western Dr. to the entrance of the Moore Creek Open Space.

Response to comment 8: The project limits do not extend to the Mission Street/Shaffer Road intersection. A future project would be needed to construct improvements in that area.

Comment from Jeff Ratner, Email 1

Comment 1:

These plans are fine as far as they go, but they certainly do not go nearly far enough to alleviate the main issue on that section, which is the enormous traffic volume attempting to traverse the Santa Cruz west side. Highways are supposed to be just that: fast thoroughfares to expedite traffic through a certain region without much interference from local traffic. Mission Street Santa Cruz (Hwy 1) is nearly the opposite of what a genuine highway should be, being choked with not only through traffic but local traffic.

Response to comment 1: State Route 1 through Santa Cruz is not an access-restricted freeway, but a main street requiring accommodation of all users. Therefore, we must accommodate all types of users through this corridor. Aside from personal vehicles, people walk, bike, and take public transit. Use of alternative forms of transportation is encouraged.

Comment 2:

In my opinion, what is really needed, in addition to these small proposed measures, is a viaduct, a 4 lane overpass along the entire length of Mission St. (Hwy 1) from Western Drive to at least Water Street or perhaps as far as River Street with a controlled entrance/exit only at each end. This would expedite through traffic and be a real solution to this ongoing, vexing issue. Local traffic would continue using the surface streets.

Response to comment 2: See response to comment 1, above. In addition, increasing capacity is beyond the scope and purpose and need of this project, which is focused on re-paving the existing roadway and improving alternative transportation options in the Mission Street Corridor. The project limits are also confined to post mile 17.50 to post mile 20.20 on State Route 1, roughly from Western Drive to the intersection of State Route 1 and State Route 9. The limits are based on the project purpose and need and funding availability.

In addition, Senate Bill 743 came into effect on July 1, 2020. Under Senate Bill 743, capacity-increasing projects are discouraged in the state of California. Vehicle miles traveled (VMT) is the new California Environmental Quality Act traffic threshold, in place of Level of Service (LOS) (colloquially known as traffic). With this new law in effect, the focus is now on increasing access to alternative transportation options, including walking, cycling, and taking public transportation. This project will improve walking, cycling, and public transportation options within the project limits and may help encourage people to use these alternative transportation options over using a personal vehicle. As more people shift to these alternative transportation modes, traffic in the corridor may decrease over time.

Comment from Jeff Ratner, Comment Card

Comment 1:

Re: The Mission St. project in the mid county on Soquel Dr. a main E.W corridor, the county has implemented flashing crosswalk signals. A ped presses a button then the signal lights; this is very visible. Can it be implemented on Mission St?

Response to comment 1: In previous projects, there were pedestrian-actuated overhead flashing beacons installed at crosswalks near South King Street, Berkshire Avenue, and Olive Street along the Mission Street Corridor. Caltrans is considering adding more crosswalks, some of which would have flashing crosswalk signals. Any additional pedestrian actuated-overhead flashing beacons would be incorporated into the project plans during the project's upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 2:

Better to move 500-2000 cars thru the county, than having them idle on a congested freeway producing unnecessary pollution.

Response to comment 2: See responses to comments 1 and 2 from the comment letter above.

Comment from Jeff Ratner, Email 2

Comment 1:

I have personal experience of foot traffic issues as I not only drive, but sometimes walk and also ride a bike on the street 5 or 6 nights per week.

One proposal is for pedestrian/bike overpasses along Mission St. (HWY 1) at key intersections not already controlled by stop lights. Some possible point are near the Safeway on Mission St. (either on Almar or Fair); the nearest avenue to Santa Cruz High School; Water Street. I see many of these

overpasses in the south Bay area (San Jose) and they certainly would make crossing HWY 1 safer.

Response to comment 1: Pedestrian and bike overpasses are beyond the scope of this project, which is constrained by funding and space limitations. However, the proposed improvements will enhance pedestrian and bicycle access and safety.

Comment 2:

My 2nd idea, and far cheaper and easier to implement than overhead crosswalks, is for flashing lights, both overhead and at the side of the road or even embedded in the roadway, at major crossing points, such as those mentioned above, again provided there are no stop lights there already. There would be a button that pedestrians push that start overhead flashing lights, actually two flashing lights, one in each traffic direction. We have these here in Santa Cruz county on Soquel Drive, which was HWY 1 before the freeway was built in 1947, and still a major thoroughfare. They are presently located in the Soquel and Aptos areas on Soquel Drive and I believe that SCZ county plans to install more. They are highly visible and effective.

Response to comment 2: Caltrans is exploring opportunities to add pedestrian-actuated rectangular rapid flashing beacons or overhead flashing lights to some crosswalks where there is a sufficient need. The decision to add any will be finalized in the upcoming project final design (Plans, Specifications, and Estimates) phase.

Comment from Deborah Benham, Email

Comment 1:

PLEASE install leading pedestrian intervals at all signalized intersections on Mission Street. LPIs increase safety for pedestrians and lessen conflicts between autos and pedestrians. The City of Scotts Valley has done this on the Mt Hermon corridor and it is working;

Response to comment 1: For the traffic signals along Mission Street within the project limits that belong to Caltrans, the majority of traffic signals have active Leading Pedestrian Intervals (LPIs). Caltrans is exploring opportunities to install and activate Leading Pedestrian Intervals on the remainder of traffic signals.

Comment 2:

Construct modern roundabouts at several intersections including Mission/Almar/Younglove, Mission/Chestnut/Union, and Mission/Western. I've had the experience of turning right at Mission and Western when I had the green light and WHAT a mess! Those coming in the opposite direction, making a left hand turn, well...they just go ahead and turn, disregarding who

has the right of way. A roundabout would be incredibly helpful and lessen collisions.

Response to comment 2: Installing roundabouts is beyond the scope and purpose and need of this project. If a sufficient need for roundabouts is found in the future, a different project would study them.

Comment from Nadene Thorne, Email

Comment 1:

My one question is what the plans are for bicyclists on Mission Street? No bike lanes presently, although rarely a rider will attempt to ride in the right lane. Otherwise they may stay on the sidewalk. Or - will bikes be allowed on Mission at all? Presently, it's very dangerous for riders.

As a note, King Street allows riders to use the whole auto lane, but it's also congested with a lot of parking, speed bumps, etc.

Response to comment 1: The project will restripe a portion of a Class 2 bike lane from the intersection of Chestnut Street and Mission Street to the intersection of Union Street and Mission Street. Also, bike boxes will be added at the intersections listed in Section 1.3. Project Description. Caltrans is investigating the possibility of implementing raised bike lanes within specific locations along the Mission Street Corridor, as was requested in another public comment. Caltrans is also working with the City of Santa Cruz to implement some of the Mission Street/Bay Street intersection improvements. Bike improvements may be included at this intersection. A final decision regarding any additional bike improvements will be made in the final design (Plans, Specifications, and Estimates) phase.

Comment from Robert Orrizzi, Email

Comment 1:

Please take this opportunity to implement various speed reduction methods. Effective traffic calming measures need to be regulated on this highly traveled roadway.

Response to comment 1: Caltrans is exploring speed reduction methods such as curb bulb-outs for the curbs being removed and replaced to meet Americans with Disabilities Act requirements and changing signal timings to better regulate vehicle speeds. Any additions will be finalized in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 2:

Realize that construction vibration levels may well affect water hookups to the 100 residences and businesses on this stretch of Highway 1. Please consider a compensation plan for all that may be affected.

Response to comment 2: The vibration produced by construction is not anticipated to be severe enough to cause structural damage to buildings or their associated water hookups. Considering this determination, compensation is not planned at this time.

Comment 3:

Continue working with our City Public Works Staff as well as Santa Cruz Police Department for the safest possible end product.

Response to comment 3: Caltrans will continue to work with the City of Santa Cruz Public Works Department and the Santa Cruz Police Department.

Comment from Dan Nowacki, Email

Comment 1:

Overall, my main concerns on Mission St within the project area are excessive vehicle speed and safety for all users, especially people walking and biking. The large majority of the project area is signed at 25 MPH but in practice vehicle speeds are much higher. We have a once-in-a-decade opportunity to make this project more than just a “business as usual” repaving program to improve safety for all.

Response to comment 1: Caltrans is exploring speed reduction methods such as curb bulb-outs for the curbs being removed and replaced to meet Americans with Disabilities Act requirements and changing signal timings to better regulate vehicle speeds. These potential design changes will be further explored and finalized in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 2:

Pedestrian Islands and Medians

I am strongly in support of the creation and maintenance of pedestrian islands at crosswalks within the project area. I hope all of the islands (at Berkshire, King/Union, and Chestnut) remain in the plan and are implemented.

Response to comment 2: Thank you for your support of the proposed pedestrian improvements included in the project.

Comment 3:

Have medians, similar to what already exists on Mission between Swift and King (western intersection), been considered at other locations within the project area? These could be implemented at wider spots along Mission, for example near Trescony and Walnut. A narrowing of the roadway via medians in places where it is excessively wide could help slow vehicle speeds.

Response to comment 3: Thank you for the suggestion. Caltrans is exploring opportunities to place concrete medians and/or additional median striping at wider locations along Mission to reduce vehicle speeds. A final decision regarding concrete medians and median striping will be made during the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 4:

Crosswalk length

Many of the crosswalks across Mission are excessively long, taking diagonal instead of perpendicular paths, leading to longer crossing times for vulnerable users. Curb bump-outs or other strategies could be implemented to shorten crossings. Some candidate locations are:

- west side of intersection at Swift. The western crosswalk could be shortened by bump-outs at the NW and SW corners of this intersection, which currently seem designed to maximize turning vehicle speeds
- east side of intersection at Almar/Younglove. The sharp angle of this crosswalk leads to excessively long crossing times. A perpendicular crosswalk across Missio could be achieved by a curb bump-out at the SE corner, or pushing the car stop line back (toward the NE)
- intersection at Van Ness. A bump-out at the SW corner would enable a more perpendicular crossing across Mission

Response to comment 4: Thank you for highlighting candidate locations for curb bulb-outs. Caltrans is exploring adding curb bulb-outs when replacing curb ramps to meet Americans with Disabilities Act requirements. A final decision regarding adding curb bulb-outs will be made during the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 5:

Intersection turning speeds

Several intersections seem to be designed to maximize vehicle speeds coming onto/off of Mission (which is signed 25 MPH but in practice vehicles go much faster). Traffic could be calmed by making some of these corners a bit tighter, again using bump-outs or other measures. For example:

- At Mission/King/Union, the turn onto WB King can result in high speeds. Similarly, the turn onto NB Highland from Mission. Slight reconfigurations (again, via bumpouts or other approaches) could slow high speeds.
- At Laurent, the road gets quite wide (in front of Sutter Urgent Care), and the curb/sidewalk could potentially be made wider there.
- At Almar/Younglove, the tip of the triangle formed by Almar and Younglove could be extended north, toward Mission, which would reduce car speed by making the turns tighter and improve safety for pedestrians crossing Almar or Younglove.

Response to comment 5: Thank you for highlighting candidate locations for turning speed reduction improvements. As suggested, Caltrans is exploring adding curb bulb-outs when replacing curb ramps to meet Americans with Disabilities Act requirements, including at Mission/Highland, Mission/King/Union, and Laurent/Mission. Caltrans will explore placing concrete medians and/or additional median striping at wider locations along Mission to reduce vehicle speeds. The suggested improvement to Mission/Almar/Younglove would require an intersection realignment, which is outside of the project scope. A final decision regarding the improvements requested at these locations will be made during the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 6:

Sidewalks

There is no mention of sidewalk improvements in this project. In many places along Mission the sidewalks are narrow and dangerous-feeling for pedestrians. Improvements to sidewalks should be considered.

Response to comment 6: Sidewalk widening is beyond the scope of this project and would fall outside of the Caltrans right-of-way. Please contact the City of Santa Cruz for sidewalk improvements such as widening.

Comment from Jessica Evans, Comment Cards

Comment 1:

Please consider using the NACTO Design guidelines to design safer intersections, as found in “Don’t give up at the intersection” document. Please DO NOT design intersections that require through-going cyclists to merge left across right turning vehicle lanes. Use alternative designs that are safer for cyclists.

Response to comment 1: Thank you for the recommendation. Caltrans will look into modifying the current slip lanes in the upcoming final design (Plans, Specifications, and Estimates) phase, and will be mindful of cyclist safety when designing intersection striping.

Comment 2:

Please address speeding in school zones in ways that do not rely on enforcement. Make design changes to change driver behavior.

Response to comment 2: Caltrans is exploring speed reduction methods, such as curb bulb-outs, for the curbs being removed and replaced to meet Americans with Disabilities Act requirements. Caltrans is also looking into changing signal timings to better regulate vehicle speeds and exploring placing concrete medians and/or additional median striping at wider locations along Mission to reduce vehicle speeds. Any design changes would be finalized during the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 3:

This plan needs more traffic calming design elements, specifically designed to change driver behavior to reduce drive speeding, such as barriered, protected bike lanes or other street design elements. Please do not rely on enforcement.

Response to comment 3: Caltrans is exploring speed reduction methods, such as curb bulb-outs for the curbs being removed and replaced to meet Americans with Disabilities Act requirements. In addition, Caltrans is exploring signal timings changes to better regulate vehicle speeds and placing concrete medians and/or additional median striping at wider locations along Mission to reduce vehicle speeds.

Comment 4:

Please use street design elements to cause drivers to slow down between Walnut and Bay. Drivers go way too fast on this stretch and it's extremely difficult to cross safely even with the blinking pedestrian lights.

Response to comment 4: Caltrans is exploring different speed reduction methods to implement on the Mission Street Corridor. Thank you for highlighting specific sections that pedestrians currently have difficulty traversing due to high vehicle speeds. A decision will be made regarding adding speed reduction elements in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 5:

Please review the tools in the "Urban Street Design Guide", published by NACTO and other street design guides by NACTO. Understand that 25MPH school zone areas require design elements to shift driver behavior and this document is a resource to better understand what kind of design elements are effective. The "Transit Street Design Guide" is especially useful for Mission Street.

Response to comment 5: Thank you for the comment and recommendation. Caltrans is exploring speed reduction methods to implement within the Mission Street Corridor. A decision will be made regarding adding speed reduction elements in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 6:

We need speed control in between the King intersection and the Walnut intersection. Please use design elements to cause drivers to slow down. They drive especially fast in this element. This has a school as well.

Response to comment 6: Caltrans is exploring different speed reduction methods to implement on the Mission Street Corridor. Thank you for highlighting specific sections that pedestrians currently have difficulty traversing due to high vehicle speeds. A decision will be made regarding adding speed reduction elements in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment from Andrea Kopp, Bike Santa Cruz County Representative, Comment Card

Comment 1:

Speed Bumps, rumble bumps, protected bike lane. Critical intersections: Western, Younglove, Bay, Laurel, Walnut.

Response to comment 1: Caltrans is exploring the potential for adding speed bumps, rumble bumps and raised crosswalks on Mission Street. Caltrans will be following the City of Santa Cruz's Active Transportation Plan for bicycle-related improvements. A decision will be made regarding adding these elements in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 2:

Curbouts-layout 6 (right turn on Highland)

Layout 9- Curbouts for right turns.

Layout 11- Curbouts on right turns

Response to comment 2: Thank you for highlighting candidate locations for bulb-outs. Design will explore pushing out curbs that are designated for removal and replacement to meet Americans with Disabilities Act requirements. A final decision regarding whether to add bulb-outs and their locations will be made in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 3:

Re-design Bay St- coordinate with city transportation.

Response to comment 3: The City of Santa Cruz has a project planned to redesign the Bay Street/Mission Street intersection. Caltrans may enter into a cooperative agreement with the City to implement these improvements.

Comment 4:

25MPH Speed Limit

Response to comment 4: Design recognizes the need to reign in vehicular speeds throughout project and is exploring speed reduction methods. These methods may include installing curb bulb-outs for the curbs being removed and replaced to meet Americans with Disabilities Act requirements, changing signal timings to better regulate vehicle speeds, and placing concrete medians and/or additional median striping at wider locations along Mission to reduce vehicle speeds to the signed 25-mile-per-hour speed limit. A final decision regarding speed reduction methods will be made in the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 5:

Physical barriers- limits to Chestnut.

Response to comment 5: Design is exploring options to enhance pedestrian safety, such as widening and improving pedestrian islands at the Chestnut Street/Mission Street intersection. A final decision on these potential project additions will be made during the project's final design (Plans, Specifications, and Estimates) phase.

Comment 6:

Trees!

Response to comment 6: The project is not removing trees, and therefore no trees were originally proposed as part of the project scope. Caltrans is coordinating with the City of Santa Cruz to determine if a maintenance agreement could be established for the maintenance of tree plantings. During the project's final design (Plans, Specifications, and Estimates) phase, the feasibility of planting additional trees will be explored. Limited available space in the Caltrans right-of-way and the availability of irrigation would constrain potential planting locations.

Comment from Jae Riddle, Comment Card

Comment 1:

HWY9/HWY 1 Intersection: SB Bike Lane. Stop line and signal activator's location feels exposed to bicyclists.

Response to comment 1: The southbound State Route 9 Bike Lane is from the recently completed Santa Cruz Route 1 and 9 Intersection Improvement project (05-465800). There are no further improvements currently planned in this project.

Comment 2:

South leg of Fair Street could be tightened. High ped activity and high vehicle turning movements.

Response to comment 2: The project plans to construct two bulb-outs at Fair Avenue to reduce vehicle turning speeds and enhance pedestrian crossing safety.

Comment from John Hall, Comment Card

Comment 1:

On environmental grounds, traffic feeding into Mission Street from King Street is a highly significant problem. Weekday afternoons, traffic often backs up all the way to High Street as far as Laurel/High or even Moore Street. Backups created excessive car idling and CO2 emissions. Caltrans needs to coordinate on environmental grounds with the City of Santa Cruz to facilitate for better traffic flow. This project presents an opportunity to do more than CAPM and complete streets! In this project Caltrans should be working to improve traffic flow for environmental reasons.

Response to comment 1: Increasing capacity is beyond the scope and purpose and need of this project, which is focused on re-paving the existing roadway and improving alternative transportation options in the Mission Street Corridor.

In addition, Senate Bill 743 came into effect on July 1, 2020. Under Senate Bill 743, capacity-increasing projects are discouraged in the state of California. This law is founded on the idea that increasing capacity encourages more drivers to be on the road. Vehicle miles traveled (VMT) is the new California Environmental Quality Act traffic threshold, in place of Level of Service (LOS) (colloquially known as traffic). This law was passed in part in an effort to reduce greenhouse gas emissions.

With this new law in effect, the focus is now on increasing access to alternative transportation options, including walking, cycling, and taking public transportation. This project will improve walking, cycling, and public transportation options within the project limits and may help encourage people to use these alternative transportation options over using a personal vehicle. As more people shift to these alternative transportation modes, traffic in the corridor may decrease over time.

Comment from Matt Starkey, Transportation Manager at the City of Santa Cruz, Email

Comment 1:

The City of Santa Cruz is excited to have Caltrans beginning work on the CAPM project along Mission Street. Our team attended has participated in stakeholder meetings, attended the public meeting, and reviewed the project documents in development of the attached comment letter. We look forward to working with Caltrans on the issues we've identified to improve the CAPM project and help the City implement our Bay Corridor project.

Response to comment 1: Thank you for your support, we look forward to continuing our collaboration on this project.

Comment from Matt Starkey, Transportation Manager at the City of Santa Cruz, Emailed Letter 1

Comment 1:

The City of Santa Cruz shares the vision and dedication that Caltrans has to Complete Streets and partner coordination. Unfortunately, Mission Street is a barrier to the active transportation network in Santa Cruz. The roadway bisects residential neighborhoods from the downtown, shopping centers, and school, detracting from active transportation connectivity and safety. This CAPM project presents an opportunity to cost-effectively correct some of those issues, as the City routinely does in our pavement rehabilitation work.

Response to comment 1: Caltrans recognizes that there is opportunity to improve active transportation options on Mission Street. Caltrans is exploring the potential to add numerous pedestrian and bike improvements to the project, which were suggested by members of the public and the City. The feasibility of adding these elements will be further explored, and a final decision will be made during the upcoming final design (Plans, Specifications, and Estimates) phase of the project.

Comment 2:

To enhance our active transportation network, the City of Santa Cruz has a funded project to improve Bay Street/Drive between West Cliff Drive and High

Street, which intersects with the Santa Cruz Route 1 CAPM project at the Bay Street and Mission Street intersection. The City of Santa Cruz envisions the Bay Corridor as a Complete Street that connects West Cliff Drive to the University of California, Santa Cruz. Within the project area, this project connects existing multiuse paths, parks and open space, Bay View Elementary School, affordable senior housing, multifamily housing, and high frequency transit lines. The project will implement elements of the 2017 Active Transportation Plan (ATP).

Portions of the improvements are in Caltrans right-of-way at Bay Street and Mission Street. City and Caltrans staff began preliminary coordination in April 2023 to discuss the City's concept design and execution of a cooperative agreement. The City believes that Caltrans policy supports its inclusion in the CAPM project and has attached a memorandum that further describes the projects and documents the request.

Response to comment 2: Caltrans is working with the City of Santa Cruz to begin development of a Cooperative Agreement to formalize the collaboration between Caltrans and the City of Santa Cruz with respect to the Bay Street Corridor project. The Cooperative Agreement will serve as the first step in aligning the two projects in a formal capacity. Once formalized, coordination between the two projects will continue through the final design (Plans, Specifications, and Estimates) phase and construction phase. Additional functional unit approvals and design coordination will be required.

Comment 3:

Requested Additions to the Initial Study with Proposed Mitigated Negative Declaration

Document:

1. Project Description: in the subsection "Complete Streets Elements" (page 3), please add the following sentence:
    - The project would also coordinate with the City of Santa Cruz to implement the Bay Corridor project to add a two-way bike facility along Bay Street and associated traffic signal modifications, and pedestrian improvements.

Response to comment 3: Caltrans added reference to the ongoing coordination with the City of Santa Cruz under the Project Description section in the final environmental document. The potential for a Cooperative Agreement to implement portions of the Bay Street Corridor project has been added to the discussion in the document. Caltrans will be collaborating with the City of Santa Cruz on implementation of some of the Bay Corridor project elements. The Bay Corridor project currently proposes implementing

additional bicycle and pedestrian enhancements that extend outside the state highway right-of-way. Caltrans is unable to add project elements that are outside of the previously studied project area and/or elements that would have a significant environmental impact. However, some elements may be able to be incorporated into this project during the final design (Plans, Specifications, and Estimates) phase.

Comment 4:

2. Section 2.1.17 of the Santa Cruz Route 1 CAPM CEQA Evaluation reflects that the project would not alter the existing alignment or capacity of State Route 1 and does not alter VMT. The City of Santa Cruz requests that Caltrans incorporates the design elements of the proposed Bay/Mission intersection improvements within this environmental review. As these improvements are intended to facilitate biking, walking, and transit use, they also do not expand capacity or alter VMT in this project area.

Response to comment 4: This Capital Preventative Maintenance project is not adding new vehicle capacity to State Route 1 and is not altering vehicle miles traveled (VMT) in the corridor. Additional bicycle and pedestrian enhancements that would be within the Area of Potential Impacts studied in the environmental studies (in addition to those already included) will continue to be evaluated in the final design (Plans, Specifications, and Estimates) phase, and after the Cooperative Agreement is executed between the City of Santa Cruz and Caltrans.

Comment 5:

3. Mission at Van Ness: This crossing location has collision history and was documented as a top collision location in the City's Local Roadway Safety Plan. The City requests to add a curbed pedestrian median refuge island at this location to improve safety.

Response to comment 5: Caltrans is exploring additional traffic-calming measures to implement on the Mission Street Corridor. From preliminary investigation, there are space constraints at this intersection that would prevent a curbed pedestrian median refuge island from being possible. Caltrans will revisit this location at the final design (Plans, Specifications, and Estimates) phase, after survey data is acquired.

Comment 6:

4. Mission at Laurent, adjacent to 1401 Mission Street: this intersection is adjacent to a medical facility and pharmacy. The existing geometry includes a sweeping intersection. The City requests to add a bulb-out at this location to tighten the radius and reduce the crossing distance.

Response to comment 6: Caltrans is exploring adding bulb-outs to curb ramps that are planned to be removed and replaced for Americans with Disabilities Act compliance. A final decision will be made in the final design (Plans, Specifications, and Estimates) phase.

Comment 7:

5. Mission at Olive: this is an uncontrolled crossing location with collision history with a recently installed HAWK. The City requests to add a curbed pedestrian median refuge island in place of the painted median at this location to improve safety.

Response to comment 7: Caltrans is exploring additional traffic-calming measures to implement on the Mission Street Corridor. Caltrans also will evaluate if a curbed pedestrian median refuge island is feasible at this location. Caltrans will revisit this location and make a final decision at the final design (Plans, Specifications, and Estimates) phase, after survey data is acquired.

Comment 8:

6. Mission at Berkshire: this is an uncontrolled crossing location with collision history that recently added a HAWK. The City requests to add a curbed pedestrian median refuge island at this location to improve safety.

Response to Comment 8: Caltrans is exploring additional traffic-calming measures to implement on the Mission Street Corridor. Caltrans is currently planning to add a curbed pedestrian median refuge island at this location to enhance safety.

Comment 9:

7. Mission at Younglove and Almar: this location connects a grocery store, a medical clinic, and highly used transit stops. The City requests curbed refuge islands should be added to improve the crossing.

Response to comment 9: Caltrans is exploring additional traffic-calming measures to implement on the Mission Street Corridor. Caltrans will revisit this location and the potential for adding a curbed refuge island there at the final design (Plans, Specifications, and Estimates) phase, after survey data is acquired.

Comment 10:

8. Mission at Bay: The City's Local Roadway Safety Plan identified this location as a top collision location, including two bicycle crashes. The plan suggests reviewing lane assignments, geometry, lighting, and

signal timing as potential improvements. The right turn from Mission Street to Bay Street towards King Street is constrained at this intersection. And improved right turn geometry, that mitigates for speed (e.g. truck apron), would improve access for both transit vehicles and large trucks and could remove the constrained separated bike lane width as currently proposed. The project should further consider how the Bay Corridor project is included in the CAPM work.

Response to comment 10: Caltrans is working with the City of Santa Cruz on the inclusion of a portion of the Bay Corridor project at the Bay Street/Mission Street intersection. The feasibility of incorporating elements of the Bay Street Corridor project will be determined in part by design feasibility, right-of-way constraints, and the limits of the Area of Potential Impacts that was studied in the environmental document. Design changes or additions will be finalized during the final design (Plans, Specifications, and Estimates) phase of the project.

Comment 11:

9. Mission at Fair: This location proposes a bike box and new curb ramps. The city requests that a left-turn lane from Mission to Fair and “KEEP CLEAR” markings be evaluated for inclusion in the striping plan. The city supports the curb ramps, but asks that Caltrans use bulb-outs to reduce the pedestrian crossing distance. Caltrans should re-evaluate the guidance on bike box installation, as they are not currently permitted at stop-controlled intersections.

Response to comment 11: Caltrans is investigating the potential for a left-turn lane and appropriate markings from Mission Street to Fair Street. Caltrans will explore expanding curb ramp radii into bulb-outs at locations where curb ramps will be replaced to meet Americans with Disabilities Act standards. Caltrans will reevaluate the streets selected for bike box restriping. A final decision will be made during the upcoming final design (Plans, Specifications, and Estimates) phase.

Comment 12:

10. Project-wide accessibility: The City requests that Caltrans review and incorporate accessibility features consistent with the California Manual on Uniform Traffic Control Devices (CAMUTCD) and Public Right-of-Way Accessibility Guidelines (PROWAG) to the maximum extent possible. Along the corridor multiple issues exist today:
    - Roadway superelevation exceeds slope requirements for pedestrian crossings.
    - Curb ramps are often combined, when they should be separated by crosswalk (PROWAG R203.6.1.1)

- Pedestrian push buttons don't meet placement requirements (CAMUTD, PROWAG).
- Driveways do not provide an adequate path of travel.

Response to comment 12: The scope and purpose and need of this project, as well as the Caltrans right-of-way limits, do not allow for this project to address private driveways. Caltrans is designing the curb ramps to meet Americans with Disabilities Act requirements and will keep Americans with Disabilities Act pedestrian push buttons requirements in mind for the curbs the project will remove and replace. For the removal and replacement of curb ramps, Caltrans will explore the possibility of separating curb ramps. Curb ramps will be designed as is feasible given the right-of-way limits and other physical constraints. Roadway superelevation changes are beyond the scope and purpose and need of this project. Caltrans is planning to cold plane and repave the same depth of rubberized hot mix asphalt. Any design updates would be finalized during the final design (Plans, Specifications, and Estimates) phase.

Comment 13:

11. Speed control from Chestnut to Swift: The City requests that measures to reduce speed, like medians, bulb-outs, neck-downs, reduced travel lane width, or signal progression, are implemented in this project. These features are cost-effective to add during pavement rehabilitation and could enforce the 25 mile-per-hour speed limit that's often exceeded.

Response to comment 13: Caltrans is exploring additional traffic-calming measures to implement on the Mission Street Corridor. Caltrans will revisit this location and make a final decision during the final design (Plans, Specifications, and Estimates) phase, after survey data is acquired.

Comment 14:

12. Bike Box Treatments: The City supports the installation of bike boxes where bike lanes, "No Turn on Red" signs, green paint, and pedestrian countdown timers are present in conformance with CAMUTCD.

Response to comment 14: Caltrans is planning on restriping bike boxes that may be removed when completing the capital maintenance. In addition, Caltrans is planning on striping additional bike boxes on qualified intersections within the project limit. When Caltrans stripes a bike box, it will be in conformance with the California Manual for Uniform Traffic Control Devices.

Comment 15:

13. Coordination with Santa Cruz Metropolitan Transit District: The city encourages improved transit facilities along Mission Street.

Response to comment 15: Coordination with the Santa Cruz Metropolitan Transit District will continue as the project pursues its final design (Plans, Specifications, and Estimates) and construction phases of work. Caltrans has considered the Transit District's interest and needs, and the project currently includes the foundations for two new bus stops at State Route 1 and Western Drive.

Comment from Matt Starkey, Transportation Manager at the City of Santa Cruz, Emailed Letter 2

Comment 1:

The City of Santa Cruz would like to develop a Cooperative Agreement with Caltrans to facilitate project funding, coordination, and implementation of the City's Bay Corridor and Caltrans CAPM Mission Street projects. The City of Santa Cruz shares Caltrans vision and dedication to Complete Streets and partner coordination and believes these two projects are best implemented with close collaboration. This memorandum summarizes important elements of the Bay Corridor and documents the Caltrans policies that support its consideration in the CAPM project.

Response to comment 1: Caltrans is working with City of Santa Cruz to begin development of a Cooperative Agreement to formalize the collaboration between Caltrans and the City of Santa Cruz with respect to the Bay Street Corridor project. The Cooperative Agreement will serve as the first step in aligning the two projects in a formal capacity. Once formalized, coordination between the two projects will continue through the final design (Plans, Specifications, and Estimates) phase and construction, as additional Functional Unit approvals and Design coordination will be required. The design elements included in this comment letter will serve as a foundation for the interagency collaboration and will be considered to the maximum extent feasible within the budget and schedule of the Capital Preventative Maintenance project.

Comment 2:

Bay Street at Mission Street Improvements

To meet the schedule of the CAPM project, the City has developed an initial concept for the crossing at the intersection of Mission Street and Bay Street. Schematic plans are attached to this memo and include the following features:

Response to comment 2: Thank you for developing suggestions for additional improvements that could be implemented at the intersection of Mission Street and Bay Street. As the Cooperative Agreement is pursued with the City, implementation of each of these elements will be considered.

Comment 3:

1. Separated Bike Lane: The City proposes a two-way separated bike lane on the south side of Bay Street, adjacent to Bay View Elementary. To fit all elements within the available right of way, and not reduce travel lanes, this is proposed to be sidewalk level.

Response to comment 3: This location is outside of the Area of Potential Impacts that was studied in the project's environmental studies. At this stage, Caltrans is unable to incorporate work outside of the Area of Potential Impacts into this project.

Comment 4:

2. Signal Phasing Modification: The City proposes to time-separate the southern pedestrian and bicycle crossings by adding a phase that pairs the movements with the northbound Bay Street (towards UCSC) through movement. That will require the installation of bicycle signals.

Response to comment 4: Adding a phase to time-separate the southern pedestrian and bicycle crossings may be possible. This will be further explored once a Cooperative Agreement is reached, and a final decision will be made in the final design (Plans, Specifications, and Estimates) phase. Installing bicycle signals is beyond the scope of this project.

Comment 5:

3. Right Turn on Red Restrictions: The city proposes no right turn on red black-out sign when the southern bicycle or pedestrian crossings are called to mitigate obstructed sight lines. Prohibiting right-turn on red overall at all intersection approaches is also supported to improve pedestrian safety, particularly during leading pedestrian intervals.

Response to comment 5: Caltrans will further explore the possibility of prohibiting right-turn-on-reds during the final design (Plans, Specifications, and Estimates) phase, after a Cooperative Agreement is reached.

Comment 6:

4. Pedestrian Facilities: To accommodate the separated bike lanes, the pedestrian crossing across Mission Street needs to be moved south slightly. However, this creates the space needed to build separate ramps for each crossing, an improvement to those with limited vision. Additionally, the short section of bike lane in the northeast corner of Bay Street can be reallocated to the sidewalk as the bike facility is consolidated to the southern side of the roadway.

Response to comment 6: Caltrans will continue to work with the City of Santa Cruz to coordinate the delivery of this project with the City's proposed Bay Street Corridor project.

Comment 7:

5. Transit Stops: At Bayview Elementary, the city proposes a pull-out transit island, that allows buses to pull out of the travel lane and separates conflicts from the separated bike lane. For buses headed towards UCSC, they will stop in the lane on Bay either nearside of farside of the Mission Street intersection. Coordination with Santa Cruz Metro is underway.

Response to comment 7: This location is outside of the Area of Potential Impacts that was studied in the project's environmental studies. At this stage, Caltrans is unable to incorporate work outside of the Area of Potential Impacts into this project.

Comment 8:

6. Utility Relocation: The City will work through its franchise agreements to attempt to relocate the communication boxes shown in conflict with the relocated sidewalk. If that relocation isn't feasible, the city will adjust the sidewalk design to wrap around the boxes.

Response to comment 8: The majority of the proposed sidewalk is outside of the Area of Potential Impacts that was studied in the project's environmental studies. Caltrans is unable to incorporate work outside of the Area of Potential Impacts into this project.

Comment 9:

7. School Coordination: The City has already begun coordination with School District and has approval to work within their right-of-way to construct the facilities.

Response to comment 9: Thank you for this information.

Comment 10:

Coordination to Date

The City of Santa Cruz and Caltrans staff started coordinating in April 2023 and have had multiple preliminary meetings to discuss project elements and schedules. The City of Santa Cruz is interested in formalizing this process into a cooperative agreement to align on design, implementation, funding, and long-term maintenance.

Ability to Include Bay Corridor in CAPM:

As the CAPM project is currently in the PAED phase, we reference the **Highway Design Manual Index 82.5 Effective Date for Implementing Revisions to Design Standards**[1]. The manual states that:

For all projects where the PS&E has not been finalized, the new or revised design standards shall be incorporated unless this would impose a significant delay in the project schedule or a significant increase in the project engineering or construction costs.

The ability to change the plans is documented in the Highway Design Manual and the policies that should be incorporated into the CAPM, in support of the Bay Corridor project, are enumerated below.

Policy Support

The Bay Corridor Project supports a range of State policy, including Caltrans Directors Policies DP-36 and DP-37, the Traffic Calming Guidance memorandum issued by Caltrans on January 28, 2022[2] and Design Information Bulletin 89-02[3]. As noted above, for projects that where PS&E has not been finalized, new or revised design standards shall be incorporated unless documented why this cannot happen. Key elements of each are outlined below:

DP-36: This policy directive commits Caltrans to a vision to eliminate fatalities and serious injuries on California's roadways by 2050 using a Safe Systems approach. One of the objectives of a Safe System approach is safer roads. According to the United States Department of Transportation[4] Safe System website, elements that fall under "Safer Roads" include proven safety countermeasures that reduce roadway fatalities and severe injuries. Specific to this project, these include crosswalk visibility enhancements and bicycle lanes (separated bicycle lanes can reduce crashes up to 49 percent on certain four land roads).

DP-37: This project is aligned with Caltrans Directors Policy DP-37 that "**all transportation projects funded or overseen by Caltrans will provide comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit or passenger rail unless an exception is documented and approved.**[5]" The City concurs with this policy and supports the vision that "Caltrans will maximize the use of design flexibility to provide context-sensitive solutions and networks for travelers of all ages and abilities". In an urban area adjacent to an elementary school, on a route additionally serving a middle and high school, high quality transit routes that offer 15 minute or better frequency, and a main street corridor, this location should prioritize safe, connected access for users who are walking, biking, and taking transit in addition to those in vehicles. Notably, the City of

Santa Cruz looks forward to working with our partners at District 5 to implement “world class” design best practices in this project as called for in this policy.

Traffic Calming Guidance: Caltrans memo on Traffic Calming Guidance (1/28/22) discusses ways for identifying the need for traffic calming. Among these are a review of the locations adjacent land uses. In the case of the Bay/Mission intersection, these adjacent land uses include an elementary school, high quality transit stops, and retail. Additionally, a medical clinic, park, and community garden are all located within ¼ mile of this location. This location is a prime example of a candidate to utilize traffic calming elements to support people who walk, bike, and use transit to have safe, accessible, and connected systems along and across the state highway system. For the proposed location, there are elements proposed in the Bay Corridor plan that are supported by the Traffic Calming Guidance memo, including the section related to colored pavements markings.

Design Information Bulletin 89-02: As part of the Bay Corridor proposed improvements, the city plans to install protected bikeways the entire length of Bay. This would include the intersection of Bay with Route 1/Mission Street. DIB 89-02 provides extensive information on design, and includes the direction that “separated bikeway should always be considered for multilane roadways, which are desired to be part of the bikeway network, where vehicle speeds are greater than 30 mph, next to parking lanes, or where vehicles volumes are greater than 6,000 ADT (FHWA Bikeway Selection Guide, DIB 89-02 page 4)[6].” As the volumes on both Mission and Bay exceed 6,000 ADT, planning for the inclusion of protected bikeways should be part of the design.

The city looks forward to working with Caltrans to develop a Cooperative Agreement and delivering an impactful project for our community.

Response to comment 10: Caltrans appreciates the ongoing collaboration and coordination. Caltrans appreciates the summary of the coordination completed to date and summary of relevant Caltrans policies and guidance regarding Complete Streets implementation. Caltrans is moving forward with the Santa Cruz Route 1 CAPM project, using the relevant Highway Design Manual and Caltrans Design policies. Caltrans looks forward to continuing to coordinate on the two projects as the Cooperative Agreement is developed and Final Design work begins.

Comment from Jonathan Goren, Emailed Letter

Comment 1:

My concern is that this mitigated negative declaration does not adequately address Caltrans’ safe systems approach, public concerns, and the state, county, and city’s climate goals.

Response to comment 1: Thank you for your interest in this project and for your suggestions on how the project may be improved. Safety remains as Caltrans' number one priority and has been carefully considered in the development of this project. This project is also in compliance with all applicable climate regulations. The project team is considering the public's concerns and will implement suggested improvements as feasible.

Comment 2:

Additionally, how is Caltrans measuring the success of this complete streets project? Caltrans claimed that this is a complete streets project at the December 7, 2023 community meeting. I have seen no mention of any measuring.

Response to comment 2: This project is primarily a capital maintenance project with complete streets elements improvements included in an additional effort to improve the corridor for pedestrians and cyclists. There are no specific modes of measurement planned for attempting to quantify the success of these improvements. Collision data will continue to be collected through the Mission Street Corridor.

Comment 3:

Furthermore, neither a safety audit or mobility audit has been conducted and vehicle speeds have not been addressed.

Response to comment 3: With the issuance of Design Informational Bulletin 94, the Complete Streets Contextual Design Guidelines, Caltrans is exploring additional traffic-calming measures listed within the bulletin to address vehicle speeds within the project limits where warranted. Any design additions would be finalized during the upcoming design (Plans, Specifications, and Estimates) phase.

Comment 4:

What is the current and desired speed frequency distribution graph for this project? How does this impact traffic participant behavior, the level of safety, and level of service of the Mission St corridor for all traffic participants?

Response to comment 4: A desired speed frequency distribution graph was not developed for this project. Caltrans is exploring additional traffic-calming measures to address vehicle speeds within the project limits. This will be further explored, and a final decision will be made during the final design (Plans, Specifications, and Estimates) phase.

Comment 5:

Vehicle speeds on Highway 1 through urban areas (and school safety zones) in Santa Cruz often exceed 40-50+ mph. This is dangerous. Caltrans claimed this is an enforcement issue; it is not, the problem lies in the design. It is proven that design has a direct correlation on user behavior, including vehicle speed.

Caltrans District 5 must apply and be approved for a Nonstandard Design Feature to reduce vehicle speeds and implement additional pedestrian and cyclist safety measures - the evidence to do so is overwhelming.

From 2012 to 2021 there were 376 total collisions within the project area, leading to 4 casualties and 290 injuries. This includes 38 vehicle vs bike and 35 vehicle to ped collisions. Pedestrians and cyclists experienced a disproportionate amount of casualties and injuries: 3 casualties and 79 injuries. Caltrans only counts and publishes vehicle traffic, so I can not do a thorough analysis. All modes must be counted and published. Furthermore, Caltrans does not count cross traffic, again limiting my data analysis.

While there is ample collision data, it fails to show the full conditions on the road. There has been no count or analysis of vehicle speeds within the corridor. This is particularly concerning, considering that leading vision zero/safe systems nations know that speed is one of the most important factors in a collision. According to the National Traffic Safety Board, when a car going 20 mph strikes a pedestrian, there is a 5% chance of a pedestrian fatality. At 30mph there is a 45% chance of fatality and at 40mph there is a 85% chance of fatality. As vehicle speeds on Mission St often exceed 40-50+ mph, this needs to be addressed. The best way to limit casualties and fatalities is to proactively address speed, something that Caltrans does not do. Mission St is a multimodal corridor and speed must be addressed.

Response to comment 5: With the issuance of Design Informational Bulletin 94, the Complete Streets Contextual Design Guidelines, Caltrans is exploring additional traffic-calming measures listed within the bulletin to address vehicle speeds within the project limits. Any design additions would be finalized during the upcoming design (Plans, Specifications, and Estimates) phase.

Comment 6:

The changes that Caltrans are proposing are haphazard and negligent. Paint does not protect cyclists or pedestrians against vehicles. Caltrans claims that painting bike boxes at the Chestnut St intersection will improve safety. This fails to acknowledge the slip lane (extremely dangerous for peds and bikes) and that paint does not protect cyclists against vehicles. Crosswalks are also not being installed to international standards. Diagonal ramps are still being used, there are unnecessary conflicts between crosswalks and vehicles, lack of pedestrian refuge islands, and proven traffic calming measures are not being constructed.

This just touches the tip of the iceberg. By implementing careless and neglectful safety measures, Caltrans fails to incentivize peds, transit users, and bikes to use the street while actively making the street more dangerous.

Response to comment 6: With the issuance of Design Informational Bulletin 94, the Complete Streets Contextual Design Guidelines, Caltrans is exploring additional traffic-calming measures listed within the bulletin to address vehicle speeds within the project limits where warranted. Caltrans will also look into Chestnut Street/Missions Street intersection slip lanes and diagonal ramps within the project limits. Design changes will be considered and finalized during the final design (Plans, Specifications, and Estimates) phase.

Comment 7:

To make all road users comfortable, Caltrans must shrink lane widths. Research proves that shrinking lane widths do not decrease vehicle throughput and decrease collisions. For example, the National Association of City Transportation Officials recommend that “lanes greater than 11 feet should not be used [in urban areas] as they may cause unintended speeding and assume valuable right of way at the expense of other modes.” Ample research proves that shrinking lane widths increases safety for all road users and does not impact vehicle throughput.

Response to comment 7: With the issuance of Design Informational Bulletin 94, the Complete Streets Contextual Design Guidelines, Caltrans is exploring additional traffic-calming measures listed within the bulletin (such as shrinking lane widths) to address vehicle speeds within the project limits where warranted.

Comment 8:

Secondly, Caltrans is failing to follow their own guidelines and engage with the public. Mission St is currently a hostile road (to all users) that separates the city. Fortunately for Caltrans, they have published guidelines. Main Street, California, and Traffic Calming Guide highlight steps the department can take to promote livable streets. I would like to point out again that when the public asked about vehicle speeds on Mission St, Caltrans claimed it was an “enforcement issue.” This response ignores the multitude of research that design directly correlates with vehicle speed. If this is truly a complete streets project as Caltrans claims, enforcement lies with design.

Response to comment 8: This project is primarily a capital maintenance project with complete streets elements improvements included. Caltrans added the complete streets elements in an effort to improve conditions for pedestrians and cyclists. Additional improvements that have been suggested by the City and members of the public (including those aimed at reducing driver speed) will be further considered in the upcoming design (Plans, Specifications, and Estimates) phase of the project.

Comment 9:

Finally, by not addressing public concerns, Caltrans is failing to follow the state, county, and city's climate goals. I have already established the design Caltrans is implementing is negligent and puts the most vulnerable road users at extreme risk. In turn, this limits those who would want to walk, bike, or take transit. SB 32 (Pavley, 2016) and AB 32 (Nunez, 2006) require California to reduce its greenhouse gas (GHG) emissions. The County of Santa Cruz's Climate Action and Americans with Disabilities Action and Adaptation Plan and the City of Santa Cruz's Climate Action Program also require a reduction in GHG emissions.

Specifically, transportation and mobile services accounted for 69% of the city's GHG emissions in 2019. Three specific goals in the city's Climate Action Program to tackle this are to "Implement programs for active transportation (walking and biking) that achieve 23% of bicycle mode share by 2030 and 30% by 2035, Implement programs for public transportation that achieve 8% of public transportation mode share by 2030 and 12% by 2035, [and] implement programs and policies to discourage driving single-occupancy passenger vehicles." By failing to implement safe street designs in accordance with international best practices, Caltrans is actively preventing the city from achieving its climate goals because those who might have wanted to bike, walk, or take transit are discouraged because the street is unwelcoming and dangerous.

Response to comment 9: The project is primarily a capital maintenance project. The complete streets improvements were added to the project during the Project Approval and Environmental Document phase, as Caltrans' focus has shifted more toward encouraging alternative modes of transportation, in line with the state's goals. Caltrans has received several suggestions of additional complete streets improvements. Many of these suggestions will be further considered in the final design (Plans, Specifications, and Estimates) phase. After consideration of funding, design, and environmental constraints, a decision will be made regarding which elements can be added to the project.

Comment 10:

Below I am going to list safety problems for every intersection. The following is assumed at every intersection:

- User safety is prioritized over vehicle speed.
- Crosswalks have dual perpendicular ramps. Absolutely no diagonal ramps.
- Crosswalks are "recessed" so that vehicles have a turning pocket that does not interfere with pedestrians.
- Every crosswalk defined by California Vehicle Code 275 is marked.
- Crosswalks at unsignalized intersections that cross Highway 1 have a pedestrian refuge island.

- Signalized intersections have transit and cyclist signal prioritization, and pedestrian lead times.
- No right turn on red at all signalized intersections.
- Pedestrian bulb outs on all cross streets.

Response to comment 10: Thank you for your interest in this project and for your suggestions on how the project may be improved. Safety is Caltrans' number one priority. Caltrans aims to make the Mission Street Corridor safe and usable for pedestrians, cyclists, public transit riders, and drivers alike.

Caltrans is planning on restriping the existing crosswalks and any new crosswalks following Standard Plan A24F, unless otherwise agreed upon with the City of Santa Cruz. Caltrans has pedestrian island improvements planned for this project and is looking into additional locations along the Mission Street Corridor, such as at unsignalized intersections where pedestrian islands can be implemented. For the traffic signals along Mission Street within the project limits that belong to Caltrans, the majority of traffic signals have active Leading Pedestrian Intervals. Caltrans is exploring opportunities to install and activate Leading Pedestrian Intervals on the rest of the traffic signals. Caltrans is reviewing the signal cycles for the traffic signals within the project limits for opportunities to install and activate transit and cyclist signal prioritization. Per Caltrans policy, no-right-turn-on-red restrictions can be implemented only if U-turns are allowed at the signalized intersection. Caltrans is looking at which intersections within the project limits are eligible for the no-right-turn-on-red restriction. Caltrans is also exploring adding curb bulb-outs, implementing dual perpendicular ramps, and installing recessed crosswalks when replacing curb ramps to meet Americans with Disabilities Act requirements. After consideration of the funding, design, and environmental constraints, a decision will be made regarding which elements can be added to the project during the final design (Plans, Specifications, and Estimates) phase.

Comment 11:

Mission St/Chestnut St Ext

- A crosswalk on the north side is required
- Removal of the slip lanes on the northeast and southwest corners.
- Bike lanes are raised to curb level.
- Protected intersection for cyclists Highland Ave
- Crosswalks on either side of Highland Ave
- People going to the gas station or from the bus stop to the businesses on the northeast corner of the intersection need somewhere to cross
- Bike lanes are raised to curb level

Response to comment 11: Please see Master Response 1 regarding adding crosswalks. Caltrans is also looking into the possibility of implementing raised bike lanes for a section of the Mission Street Corridor. Caltrans is investigating slip lane alternatives at the Mission Street/Chestnut Street Extension intersection for the northeast and southwest corners. A final decision will be made during the final design (Plans, Specifications, and Estimates) phase. Installing a protected intersection for cyclists at Highland Avenue extends outside the Area of Potential Impacts that was studied in this environmental document and Caltrans right-of-way. Therefore, Caltrans cannot include that improvement in this project.

Comment 12:

Highland Ave

- Crosswalks on either side of Highland Ave
    - People going to the gas station or from the bus stop to the businesses on the northeast corner of the intersection need somewhere to cross
- Bike lanes are raised to curb level

Response to comment 12: Please see Master Response 1 regarding adding crosswalks. Caltrans is also looking into the possibility of implementing raised bike lanes for a section of the Mission Street Corridor. A decision regarding whether or not this improvement could be implemented will be made during the final design (Plans, Specifications, and Estimates) phase of the project.

Comment 13:

King St/Union St

- Crosswalk on the north side
- Shorten crosswalk on the west side (King St)

Response to comment 13: Caltrans is exploring extending the curb ramp radius when ramps are removed and replaced to meet Americans with Disabilities Act requirements. This would effectively shorten the crosswalk on the west side of King Street. Please see Master Response 1 regarding adding crosswalks.

Comment 14:

Locust St

- Crosswalks across Mission St

Response to comment 14: Please see Master Response 1 regarding adding crosswalks.

Comment 15:

Chrystal Terrace

- Crosswalks across Mission St

Response to comment 15: Please see Master Response 1 regarding adding crosswalks.

Comment 16:

Towne Terrace

- Crosswalks across Mission St

Response to comment 16: Please see Master Response 1 regarding adding crosswalks.

Comment 17:

Peyton St

- Crosswalks across Mission St

Response to comment 17: Please see Master Response 1 regarding adding crosswalks.

Comment 18:

Walnut Ave

- Bike lanes are raised to curb level

Response to comment 18: Caltrans will be following the City of Santa Cruz's Active Transportation Plan for bicycle-related improvements at the Walnut Avenue/Mission Street intersection. For Walnut Avenue as a street, please contact the City of Santa Cruz for this suggestion because it falls outside the project limits.

Comment 19:

Otis St

- Crosswalks across Mission St

Response to comment 19: Please see Master Response 1 regarding adding crosswalks.

Comment 20:

Rigg St

- Crosswalks across Mission St

Response to comment 20: Please see Master Response 1 regarding adding crosswalks.

Comment 21:

PM 18.681

- Crosswalks across Mission St

Response to comment 21: Please see Master Response 1 regarding adding crosswalks.

Comment 22:

Laurel St

- Remove sharrows. This street is too highly trafficked for sharrows.
    - Implement curb level bike lanes

Response to comment 22: Most of the street is outside of the Area of Potential Impacts that was studied in the project's environmental studies. At this stage in the environmental review process, Caltrans is unable to incorporate work outside of the Area of Potential Impacts into this project. Please contact the City of Santa Cruz for changes to Laurel Street outside of the Caltrans right-of-way.

Comment 23:

PM 18.766

- Crosswalk added because transit users need to be able to access business on either side of Mission St

Response to comment 23: Please see Master Response 1 regarding adding crosswalks.

Comment 24:

Van Ness Ave

- Crosswalk on the north side is needed

Response to comment 24: Please see Master Response 1 regarding adding crosswalks.

Comment 25:

Laurent St

- Crosswalks across Mission St

Response to comment 25: Please see Master Response 1 regarding adding crosswalks.

Comment 26:

Trescony St

- Crosswalks across Mission St

Response to comment 26: Please see Master Response 1 regarding adding crosswalks.

Comment 27:

Bay Ave

- Crosswalk on the north side is needed
- Convert this intersection to a roundabout

Response to comment 27: Bay Avenue is outside of the limits of this project. For Bay Street, Caltrans is collaborating with the City of Santa Cruz about incorporating parts of the City's planned redesign of the Bay Street/Mission Street intersection into this project via a Cooperative Agreement. Please contact the City of Santa Cruz for your suggestions about incorporating a crosswalk on the north side and converting this intersection into a roundabout. A roundabout would need to be implemented separately from this Santa Cruz Route 1 Capital Preventative Maintenance project.

Comment 28:

Olive St

- Crosswalk on the south side

Response to comment 28: Please see Master Response 1 regarding adding crosswalks.

Comment 29:

Palm St

- Crosswalks across Mission St

Response to comment 29: Please see Master Response 1 regarding adding crosswalks.

Comment 30:

Dufour St

- Crosswalks across Mission St

Response to comment 30: Please see Master Response 1 regarding adding crosswalks.

Comment 31:

Berkshire Ave

- Crosswalk on the south side

Response to comment 31: Please see Master Response 1 regarding adding crosswalks.

Comment 32:

Bellevue St

- Crosswalks across Mission St

Response to comment 32: Please see Master Response 1 regarding adding crosswalks.

Comment 33:

Averitt St

- Crosswalks across Mission St

Response to comment 33: Please see Master Response 1 regarding adding crosswalks.

Comment 34:

Younglove Ave/Almar Ave

- Crosswalk on the east side

Response to comment 34: Please see Master Response 1 regarding adding crosswalks.

Comment 35:

Miramar Dr

- Roundabout

Response to comment 35: Installing roundabouts is beyond the scope and purpose and need of this project. If a sufficient need for roundabouts is found in the future, a different project would study them.

Comment 36:

Fair Ave

- Crosswalks across Mission St

Response to comment 36: Please see Master Response 1 regarding adding crosswalks.

Comment 37:

King St

- Crosswalk on the east side

Response to comment 37: Please see Master Response 1 regarding adding crosswalks.

Comment 38:

Swift St

- Roundabout

Response to comment 38: Installing roundabouts is beyond the scope and purpose and need of this project. If a sufficient need for roundabouts is found in the future, a different project would study them.

Comment 39:

Western Dr

- Roundabout

Response to comment 39: Installing roundabouts is beyond the scope and purpose and need of this project. If a sufficient need for roundabouts is found in the future, a different project would study them.

Comment 40:

Caltrans has the opportunity, and more importantly, the obligation to make this street safe for all users. By failing to address Caltrans' safe systems approach, public concerns, and the state, county, and city's climate goals, Caltrans is actively making it unsafe for the most vulnerable road users. This opportunity must be used to promote actual safe streets - not the haphazard design that Caltrans has proposed.

Response to comment 40: Thank you for your interest in this project and for your suggestions on how the project may be improved. Caltrans has formally committed to a Safe System approach by including it as part of the 2020-24 Strategic Highway Safety Plan and Caltrans 2020-24 Strategic Plan. Caltrans will continue to work with the City of Santa Cruz, community members, and feasible best practices such as the Federal Highway Administration's Proven Safety Countermeasures to build a safe facility for all users. Future projects through the area will also serve as opportunities to improve pedestrian and bicycle facilities.

Comment from Sharon Morentin, Email

Comment 1:

I am concerned about pedestrians and bicyclists safety when vehicles make left turns at non-designated left turn signal areas. They stop on mission Street and focus on upcoming cars and not on the bicyclist or pedestrians, when making the left-hand turn. Is it possible to only allow left turn at designated signal intersections?

Response to comment 1: Caltrans is looking into the possibility of allowing only left turns at designated signal intersections through the project limits. Per Caltrans policy, to restrict left turns at unsignalized intersections, vehicles must be able to make a U-turn at signalized intersections and left turns into private driveways between the public intersections, which would also need to be restricted for effective implementation. Caltrans will reconsider this suggestion in future design phases when survey data has been obtained to determine which intersections physically meet the U-turn requirements and if the roadway can accommodate a physical barrier to prevent left turns.

List of Technical Studies Bound Separately (Volume 2)

- Visual Impact Assessment
- Air Quality, Greenhouse Gas, Noise and Water Quality Technical Memorandum
- Natural Environment Study Minimal Impact
- Cultural Resources Historic Properties Survey Report, Archaeological Survey Report, Historical Resources Evaluation Report, Environmentally Sensitive Areas Action Plan
- Paleontological Identification Report
- Hazardous Waste Initial Site Assessment
- Hydraulics Location Hydraulic Study, Floodplain Evaluation Report Summary
- Geologic Hazards Report
- Climate Change Report

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Lara Bertaina
District 5 Environmental Division
California Department of Transportation
50 Higuera Street, San Luis Obispo, California 93401

Or send your request via email to: lara.bertaina@dot.ca.gov

Or call: 805-779-0792

Please provide the following information in your request:

Project title: Santa Cruz Route 1 Capital Preventative Maintenance Project

General location information: On State Route 1 through Santa Cruz, from post mile 17.50 to post mile 20.20

District number-county code-route-post mile: 05-SCR-1-PM 17.50-20.20

Project ID number: 0519000067