

CEQA INITIAL STUDY/MITIGATED NEGATIVE DECLARATION SANTA CRUZ RAIL TRAIL SEGMENT 7 PROJECT (PHASE I)

PREPARED FOR:

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City of Santa Cruz Public Works Department
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Prepared for City of Santa Cruz, Santa Cruz CA.

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Acronyms and Abbreviations

AMBAG	Association of Monterey Bay Area Government
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
B.O.	biological opinion
BMPs	Best Management Practices
BRWL	blue-rich white light
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CDF	California Department of Forestry
CDFW	California Department of Fish and Wildlife
CE	Categorical Exclusion
CEQA	California Environmental Quality Act
CH ₄	methane
CHRIS	California Historical Resources Information System
City	The City of Santa Cruz
CO	carbon monoxide
CO ₂	carbon dioxide
CRLF	California red-legged frog
dB	decibel
dBA.	A-weighted sound level
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
ESAs	environmentally sensitive areas
Farmland	Farmland of Statewide Importance
FMMP	Farmland Mapping and Monitoring Program
GHGs	greenhouse gases
IS/MND	Initial Study/Mitigated Negative Declaration
LED	Light-emitting diode
Master Plan	Monterey Bay Sanctuary Scenic Trail Network Master Plan
MBSST Network	Monterey Bay Sanctuary Scenic Trail Network
MBTA	Migratory Bird Treaty Act
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MLD	Most Likely Descendant
Mmax	Maximum Moment Magnitude
N ₂ O,	nitrous oxide
NAHC	Native American Heritage Commission
NCCAB	North Central Coast Air Basin
NEPA	National Environmental Policy Act
NO ₂	nitrogen dioxide
NWIC	Northwest Information Center
O ₃	ozone
Pb	lead
PCE	Tetrachloroethylene
PG&E	Pacific Gas & Electric
PM ₁₀ , PM _{2.5}	particulate matter
ROW	right-of-way
SC&MB Railway	Santa Cruz & Monterey Bay

SCCRTC	Santa Cruz County Regional Transportation Commission
SCPD	Santa Cruz Police Department
SCSD	Santa Cruz City Schools District
Service	United States Fish and Wildlife Service
SO ₂	sulfur dioxide
State	State of California
STB	Surface Transportation Board
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWPPP	stormwater pollution prevention plan
TMP	transportation management plan
Tph,	Total Petroleum Hydrocarbons
UCSC	University of California at Santa Cruz
USACE	United States Army Corps of Engineers

Section 1

Background & Project Description

1. **Project Title:**
Santa Cruz Rail Trail Segment 7 Project (Phase I)
2. **Lead Agency/Sponsor's Name and Address:**
City of Santa Cruz
Public Works Department
809 Center Street, Room 201
Santa Cruz, California 95060
3. **Contact Person and Phone Number:**
Nathan Nguyen, P.E. 831.420.5188
4. **Project Location:**
The Project site is located along an existing rail line within the City of Santa Cruz limits, from Natural Bridges Drive on the west to the intersection of California Street and Bay Street on the east.
5. **General Plan Designation:**
City of Santa Cruz General Plan (2030)
Industrial and Low Density Residential
6. **Zoning:**
City of Santa Cruz Municipal Code
IG/PER2 (General Industrial/Performance)
R-1 (Multiple Residence)
7. **Description of Project:**
Refer to Sections 1.1-1.6.

1.1 Introduction and Background

The City of Santa Cruz (City), in coordination with Santa Cruz County Regional Transportation Commission (SCCRTC), is proposing to construct a 1.36-mile paved bicycle/pedestrian trail along an existing rail line within the City limits, from Natural Bridges Drive on the west to the intersection of California Street and Bay Street on the east (Project). The Project is the central portion of Segment 7, one of 20 segments within the proposed 32-mile Coastal Rail Trail alignment and the broader Monterey Bay Sanctuary Scenic Trail Network (MBSST Network). This is the first phase of development of Segment 7, and is described as Phase I.

The 32-mile Coastal Rail Trail extends from Davenport to Watsonville in Santa Cruz County, and is considered the spine or primary alignment of the 50-mile MBSST Network extending along the entire Santa Cruz County coast, from the Santa Cruz/San Mateo County line on the north to the Santa Cruz/Monterey County line on the south. The MBSST Network has various gaps and includes several spur trails connecting a number of origin, destination, and recreation areas to the Coastal Rail Trail.

The Coastal Rail Trail is located within the Santa Cruz Branch Rail Line (rail) right-of-way (ROW), owned by the SCCRTC. The Santa Cruz & Monterey Bay (SC&MB) Railway has an operating agreement with the SCCRTC to operate freight trains on the rail line. SC&MB Railway is a company of Iowa Pacific Holdings, is designated as the common carrier on this line by the Surface Transportation Board (STB), and has an agreement with the SCCRTC for their operations. Regular freight service is currently provided in the south county area. Freight operations on the other portions of the line are currently being considered. Occasional recreational passenger rail does occur. This includes recreational passenger service during the tourist season, from approximately 1,000 feet west of the wye to the Boardwalk, by Roaring Camp Railroads in Felton California. Recreational passenger service up-coast from the City may be considered in the future. The SCCRTC prepared the Monterey Bay Sanctuary Scenic Trail Network Master Plan (Master Plan) to establish a continuous alignment, design standards, and guidelines for the Coastal Rail Trail and its associated Trail Network. The Master Plan divides the 32-mile Coastal Rail Trail alignment into 20 segments: Segments 1-5 (Northern Reach), Segments 6-14 (Central Reach), and Segments 15-20 (Watsonville Reach). The Project represents the majority of Segment 7 of the Coastal Rail Trail in the Master Plan.¹

In compliance with the California Environmental Quality Act (CEQA), the SCCRTC certified the Final Environmental Impact Report (EIR) for the Master Plan on November 7th, 2013, and an addendum to the Final EIR on February 6, 2014. Because funding sources for the Project include both local, state, and federal sources, the environmental documentation for the Project must comply with both CEQA and the National Environmental Policy Act (NEPA). As the CEQA lead agency, the City is preparing this Initial Study/Mitigated Negative Declaration (IS/MND). As the NEPA lead agency assigned by the Federal Highway Administration, the California Department of Transportation (Caltrans) is preparing a Categorical Exclusion (CE).

1.2 Purpose and Need

The Project is needed for the following reasons:

- There are existing gaps to the MBSST Network segments, resulting in a non-continuous Trail Network.
- The existing connectivity for bicyclists and pedestrians to access the coastal edge, beaches, and activity centers is limited.
- The primary purposes of the Project are to:
- Maximize safe and convenient opportunities for a multi-use bicycle/pedestrian trail separate from roadway vehicle traffic;

¹ Segment 7 of the Coastal Rail Trail is 3.1 miles and extends from the Moore Creek Trestle Bridge to the intersection of Beach Street and Pacific Avenue, as described in the Master Plan. The 1.36-mile Project is the first phase of development of this segment (the central portion from Natural Bridges Drive to California Street and Bay Street) and is referred to as Phase I. The Project does not include the approximately 1.0-mile section from the Moore Creek Trestle Bridge to Natural Bridges Drive, nor does it include the 0.75-mile section from California Street and Bay Street to Pacific Avenue (slightly beyond Beach Street and Coastal Cliff Drive). The 0.75-mile section east of the Project alignment is referred to as Phase II.

- Provide connectivity to other existing local and regional bicycle and pedestrian facilities from residential neighborhoods and commercial and industrial areas;
- Provide ideal start/end points from residential neighborhoods;
- Develop public trail access along the Monterey Bay National Marine Sanctuary to enhance appreciation, understanding, and protection of the Sanctuary;
- Promote awareness of the trail, trail opportunities, and trail user responsibilities; and
- Reduce transportation related energy use and greenhouse gas generation.

1.3 Project Description

The Project is a 1.36-mile paved bicycle/pedestrian trail along an existing rail line within the City from Natural Bridges Drive on the west, near Moore Creek, to the intersection of California Street and Bay Street on the east, near La Barranca Park (Figures 1 and 2). The Project alignment would create a paved pedestrian and bicycle path that would run parallel to the existing rail. A second phase of the trail is planned as part of a later project.

Trails within the Project alignment would be approximately 12-16 feet wide. The edge of the alignment would range from 8.5 feet (in constrained areas) to a maximum of 45 feet from the rail centerline.

The Project alignment would be within the existing rail ROW, except where the trail would cross public streets, and where the trail would require limited private land adjacent to the rail ROW to maintain minimum clearance from the rail tracks. These locations include the New Leaf Market parcels and a small portion of one parcel at Almar Avenue. Therefore, permanent easements would be required from each of these locations. No property acquisition or structure removal would be required.

The Project area is primarily flat and open and extends through residential, commercial, industrial, and recreational areas. For purposes of this analysis, the Project alignment has been divided into five sections, labeled A through E. Section A is the most western section that begins at Natural Bridges Drive, and Section E, is the most eastern section that ends at the intersection of California Street and Bay Street (Figures 3 through 8).

The Project includes:

- Construction of approximately 1.36 miles of new Class I² multi-use paved trail adjacent to the coastal, or south side of the rail;³

² A Class I bicycle path provides a completely separated ROW for the exclusive use of bicycles and pedestrians.

³ Per the Master Plan EIR, a multi-use paved path is a derivative of the Caltrans-defined Class I bike path. Unless otherwise noted, the terms “trails” and “paths” in this document are used synonymously to refer to paved bike/pedestrian multi-use facilities defined by Caltrans as a “Class I Bikeways (Bike Paths)” in the Caltrans Highway Design Manual, Chapter 1000, Bicycle Transportation Design, Topic 1003 - Bikeway Design Criteria. A Class I bike path provides bicycle travel on a paved ROW, completely separated from any street or highway. A multi-use paved path permits a variety of users, in addition to bicyclists, including walkers, joggers, wheelchair users, and non-motorized scooter users. Santa Cruz County Regional Transportation Commission. 2014. Monterey Bay Sanctuary Scenic Trail (MBSST) Network Final Master Plan. Adopted November 7, 2013.

- 11 roadway crossings, nine of which are cross-bike facilities;⁴
- One drainage crossing (Arroyo Seco) via construction of a clear span bridge in Section A;
- Two pedestrian hybrid beacons⁵ in Sections B and C at Swift Street and Fair Avenue, respectively;
- Relocation and reconstruction of one trash enclosure in Section B;
- Seven new parking spaces at New Leaf Market, and three on-street parking spaces along Fair Avenue in Section B;
- Installation of one new storm drain inlet in Section B;
- Extension of three culverts (one between Rankin Street and Younglove Street in Section D and two on either side of Palm Street in Sections D and E); and,
- New retaining walls in Section C.

The Project alignment would cross several roadways. Six of the roadways (Rankin Street, Younglove Avenue, Bellvue Street, Dufour Street, Palm Street, and Lennox Court) are residential streets with relatively low-volume neighborhood traffic. Four streets, Natural Bridges Drive, Swift Street, Fair Avenue, and Almar Avenue, are located in industrial areas, and carry higher traffic volumes. The two highest volume roadways, Swift Street and Fair Street, will include pedestrian hybrid beacons to promote trail user safety. One roadway, Bay Street, also carries higher traffic volumes and the crossing will be stop controlled to improve crossing safety and access.

At each roadway crossing, new curbs, curb ramps, and gutters would be constructed. In Section B, the Project would add seven net new parking spaces to the New Leaf Market parking lot. East of New Leaf Market and north of Ingalls Street, a park lane island would be constructed on Fair Avenue. This island would function similarly to a bulb-out and would accommodate three new on-street parking spaces. There are two existing culverts underneath the rail on either side of Palm Street in Sections D and E of the Project alignment. These culverts would continue to function with Project implementation, and would be extended underneath the Project alignment beneath the trail on either side of Palm Street for uninterrupted drainage. Additionally, there would be a single culvert extension constructed between Rankin Street and Younglove Avenue within the rail ROW to similarly preserve the existing drainage pattern in this area.

The Project's logical termini are the existing bicycle facilities and sidewalks at each end of the rail and at each crossing, to which the Project alignment would connect. The Project would not require future construction or transportation improvements to fully use the trail and, therefore, has independent utility.

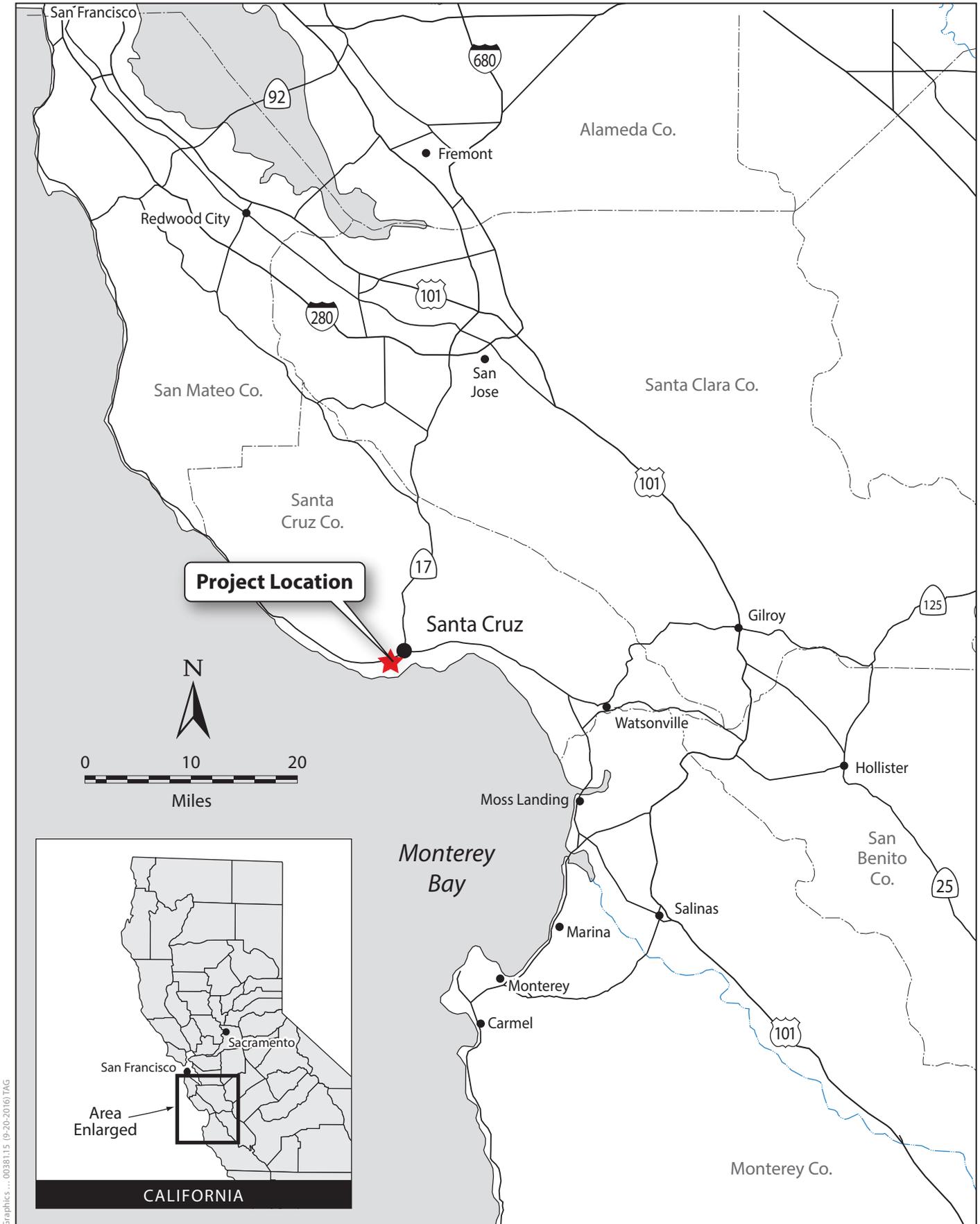
1.3.1 Section A

Section A is the westernmost section of the Project alignment, starting at Natural Bridges Drive to the west and extending to Swift Street to the east (Figure 4). This section of the Project

Revised February 6, 2014. (<http://sccrtc.org/projects/multi-modal/monterey-bay-sanctuary-scenic-trail/mbsst-master-plan/>).

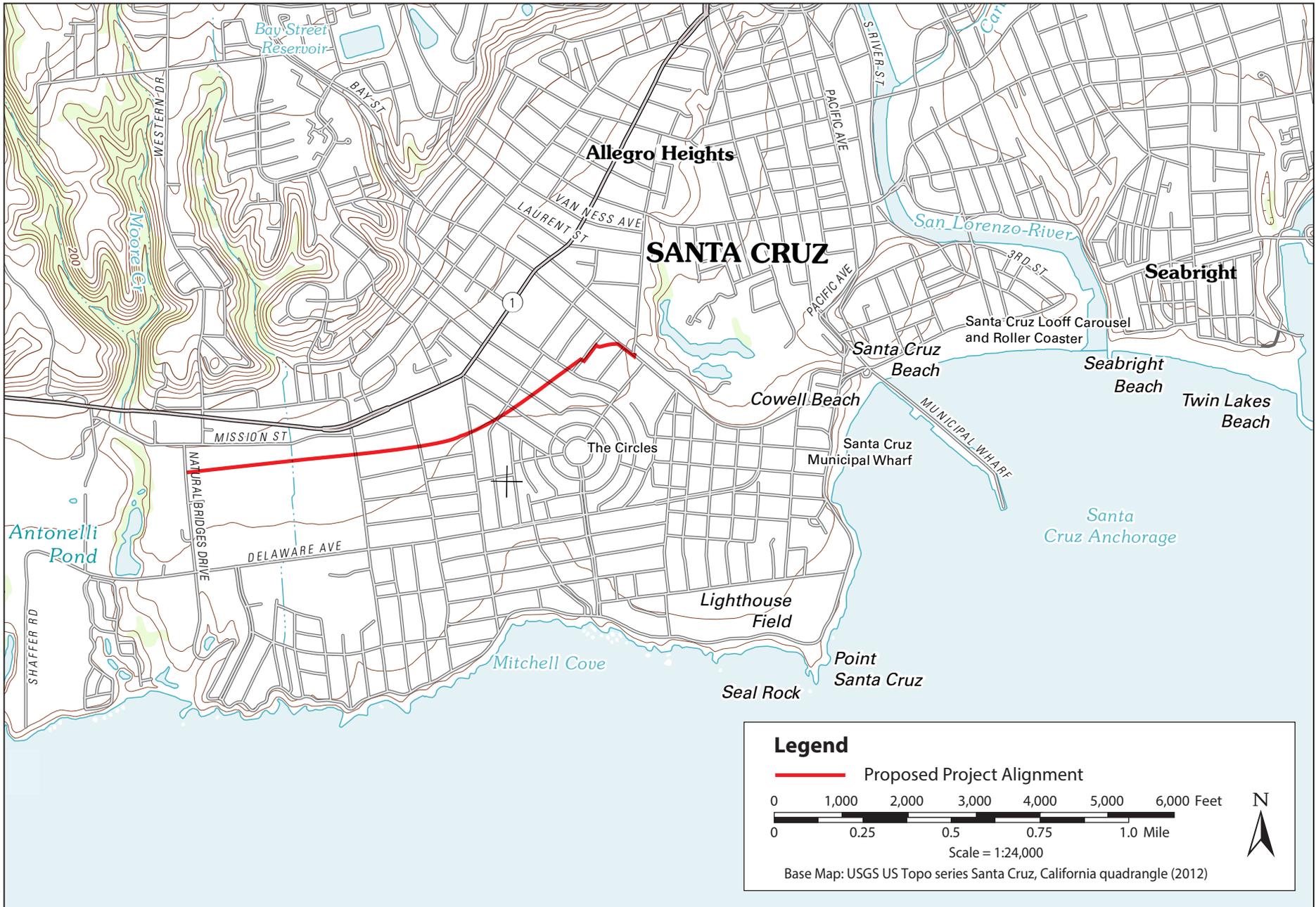
⁴ A design within a crosswalk that allows bicyclists to stay mounted on their bikes.

⁵ A traffic control device used at uncontrolled marked crosswalks that is activated by pedestrians.



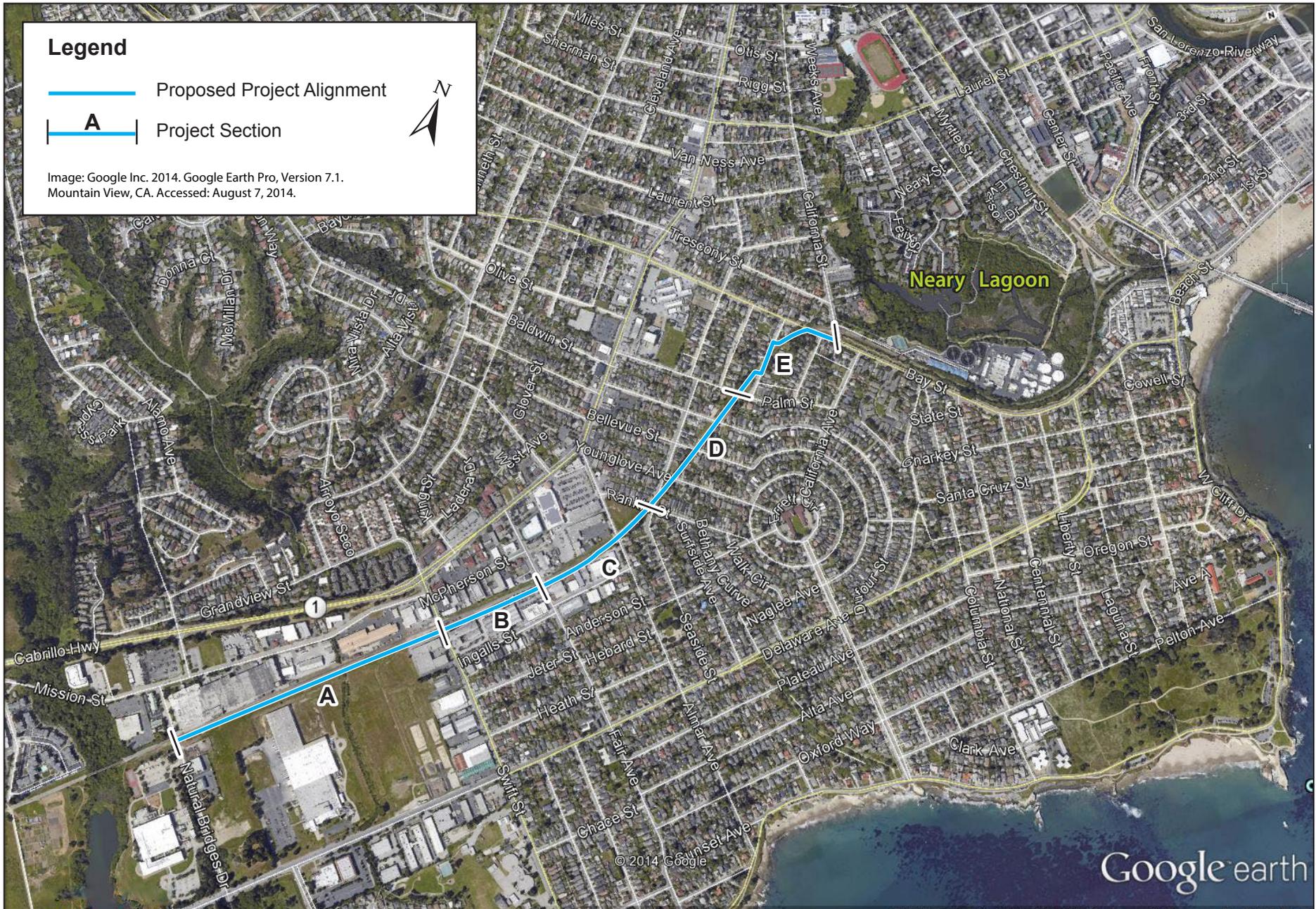
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Figure 1
Project Regional Location



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Figure 2
Proposed Project Alignment Location



Legend

- Proposed Project Alignment
- A Project Section



Image: Google Inc. 2014. Google Earth Pro, Version 7.1.
Mountain View, CA. Accessed: August 7, 2014.

Neary Lagoon

Google earth

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Figure 3
Proposed Project Alignment

alignment would be approximately 0.45-mile long and 12-16 feet wide. The Project alignment would cross one drainage, Arroyo Seco. The Project would construct a clear span bridge structure to avoid encroachment into the embankment. Installation of the bridge would not require tree removal. Existing land uses to the north are industrial/commercial and include the Pacific Coastal and Marine Science Center, storage facilities, and a R.V. Service Center. Land uses to the south are open space, commercial and industrial.

1.3.2 Section B

Section B begins at Swift Street and extends to Fair Avenue (Figure 5). This section of the Project alignment would be approximately 0.17-mile long and 12-16 feet wide. Construction of this section of the alignment would require the partial relocation and reconstruction of one trash enclosure at the New Leaf Market grocery store to accommodate the trail. The trail would require parking spaces in the New Leaf Market parking lot to be removed and replaced. In addition, a total of seven net new parking spaces would be added to the parking lot. The Project would also include the construction of a park lane island along Fair Avenue, east of New Leaf Market, to accommodate an additional three on-street parking spaces. Land uses to the north are industrial/commercial uses and single-family residential (immediately west of Fair Avenue). Land uses to the south are industrial/commercial uses including the New Leaf Market grocery store.

1.3.3 Section C

Section C begins at Fair Avenue and extends to Rankin Street (Figure 6). This section of the Project alignment would be approximately 0.28-mile long and 12-16 feet wide. At the intersection of Rankin and Seaside Street, the trail would cross Seaside Street to the east corner of the intersection, and then cross Rankin Street. Land uses to the north and south of the rail are industrial and single-family residential. In addition, a vacant lot is located on the north side of the Project alignment.

1.3.4 Section D

Section D begins at Rankin Street and extends to Palm Street, crossing Younglove Avenue, Bellevue Street, and Dufour Street (Figure 7). This section of the Project alignment would be approximately 0.18-mile long and 12-16 feet wide. As the Project alignment approaches Palm Street, it would veer farther away from the rail to avoid an existing culvert on the western side of Palm Street. At this location, an additional culvert would be constructed to extend the existing culvert underneath the trail to maintain the existing drainage pattern. The surrounding land uses are single-family residential. Up to 20 trees of varying species and a row of bamboo could be removed to accommodate the trail. Depending on the diameter of these trees, up to three of these trees could qualify as heritage trees under the Santa Cruz City Code Chapter 9.56.⁶

⁶ Santa Cruz City Code Chapter 9.56 defines heritage trees as any tree with a diameter of fourteen inches measure at fifty-four inches above existing grade, any tree, grove of trees, shrubs or group of shrubs which have historical significance, or any tree, grove of trees, shrubs or group of shrubs, which have horticulture significance.

1.3.5 Section E

Section E of the Project alignment begins at Palm Street and extends to California Street, crossing Lennox, Redwood, and Bay Streets (Figure 8). This section of the Project alignment would be approximately 0.27-mile long and 12-16 feet wide. From Palm Street, the trail would continue to veer away from the rail to avoid a second existing culvert on the eastern side of Palm Street. Similar to the culvert that would be extended in Section D of the trail, an additional culvert would be constructed to extend the existing culvert underneath the trail to maintain the existing drainage pattern. From this point, the trail would begin to curve northward, crossing Lennox Street approximately 50 feet south of where the rail crosses the street. The Project would include a striped pedestrian crosswalk at this crossing. Additionally, the existing sidewalk would be extended out and around an existing heritage Cypress Tree on Lennox Street for pedestrian travel while bicyclists would continue to travel along the low volume road.

The trail would continue adjacent to the coastal side of the rail to Bay Street. At Bay Street, the trail would turn east and continue along Bay Street, crossing Redwood Street, to California Street. This section of the trail would include a Cycle Track (Class IV Pathway)⁷ for bicyclists traveling east or west on Bay Street. At California Street, the trail would follow the existing crosswalk at Bay Street and California Street to cross Bay Street. The existing three-way stop located at Bay Street and California Avenue would be relocated to Bay Street and California Street to create a controlled stop. The Project would also include a curb ramp⁸ on each end of the existing crosswalk for trail users at this crossing. Surrounding land uses are single-family residential to the north, west, and south and La Barranca Park on the east side of Bay Street. Up to five trees of varying species could be removed to accommodate the trail. Depending on the diameter of these trees, up to three of these trees could qualify as heritage trees.

1.4 Project Features

The following features would be included in the Project:

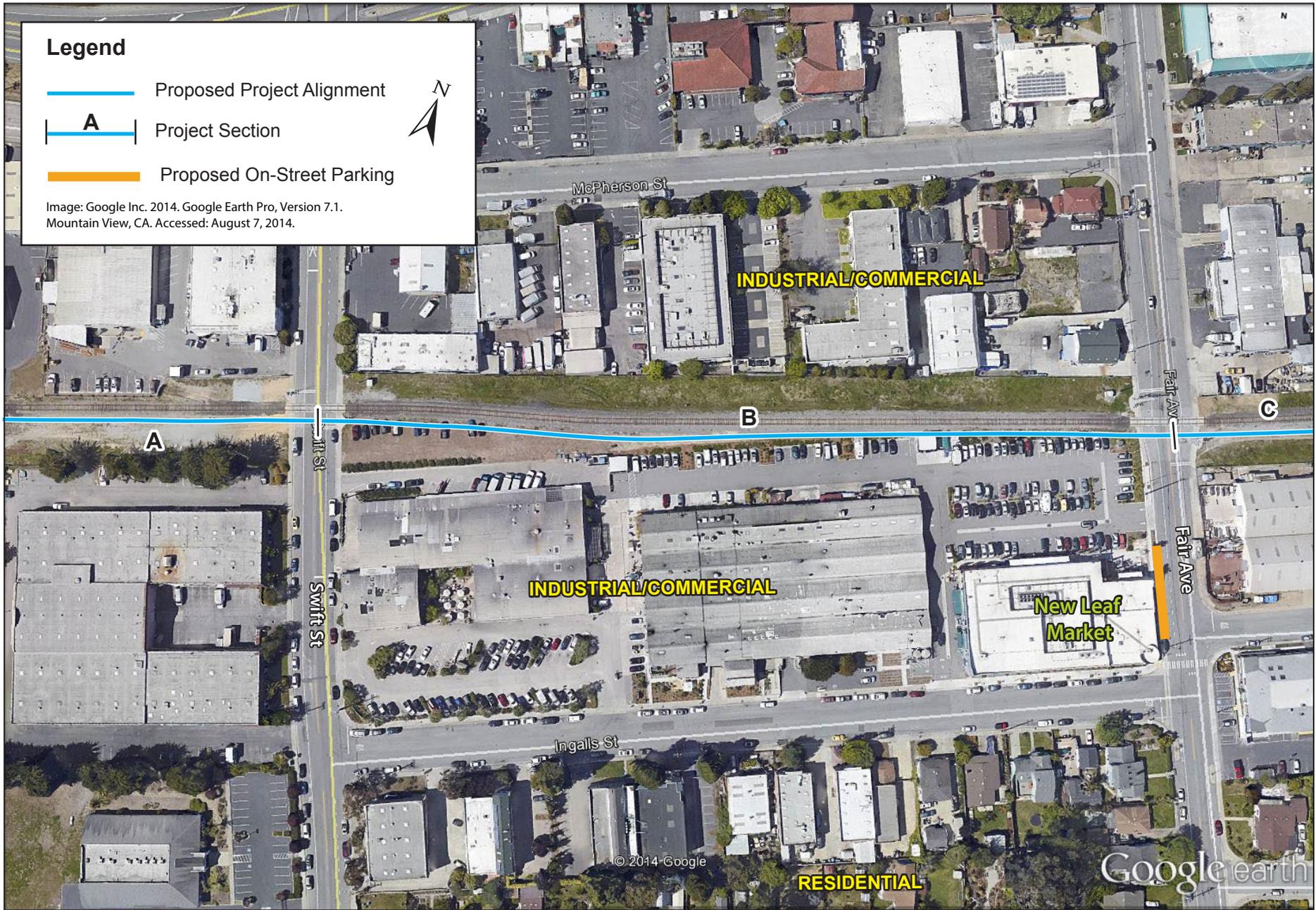
- **Access:** Bicycle and pedestrian access points to the trail would be available at all street crossings.
- **Safety Fencing:** Smooth wire fencing with concrete, wood, or metal posts separating the inner edge of the trail from the rail would be approximately 54-inches high.
- **Lighting:** Safety lighting at each street crossing exists, or would be installed.
- **Way-Finding Elements:** Way-finding, directional, and safety signage as well as pavement markings at all street crossings would be installed.
- **Landscaping:** The existing vegetation surrounding the rail would be trimmed to keep the alignment clear.

⁷ A Class IV Pathway promotes active transportation and provides a ROW designated exclusively for bicycle travel adjacent to a roadway and which are protected from vehicular traffic.

⁸ A curb ramp is a solid (usually concrete) ramp that is graded down from the surface of the sidewalk curb to the street surface.



Figure 4
Project Section A



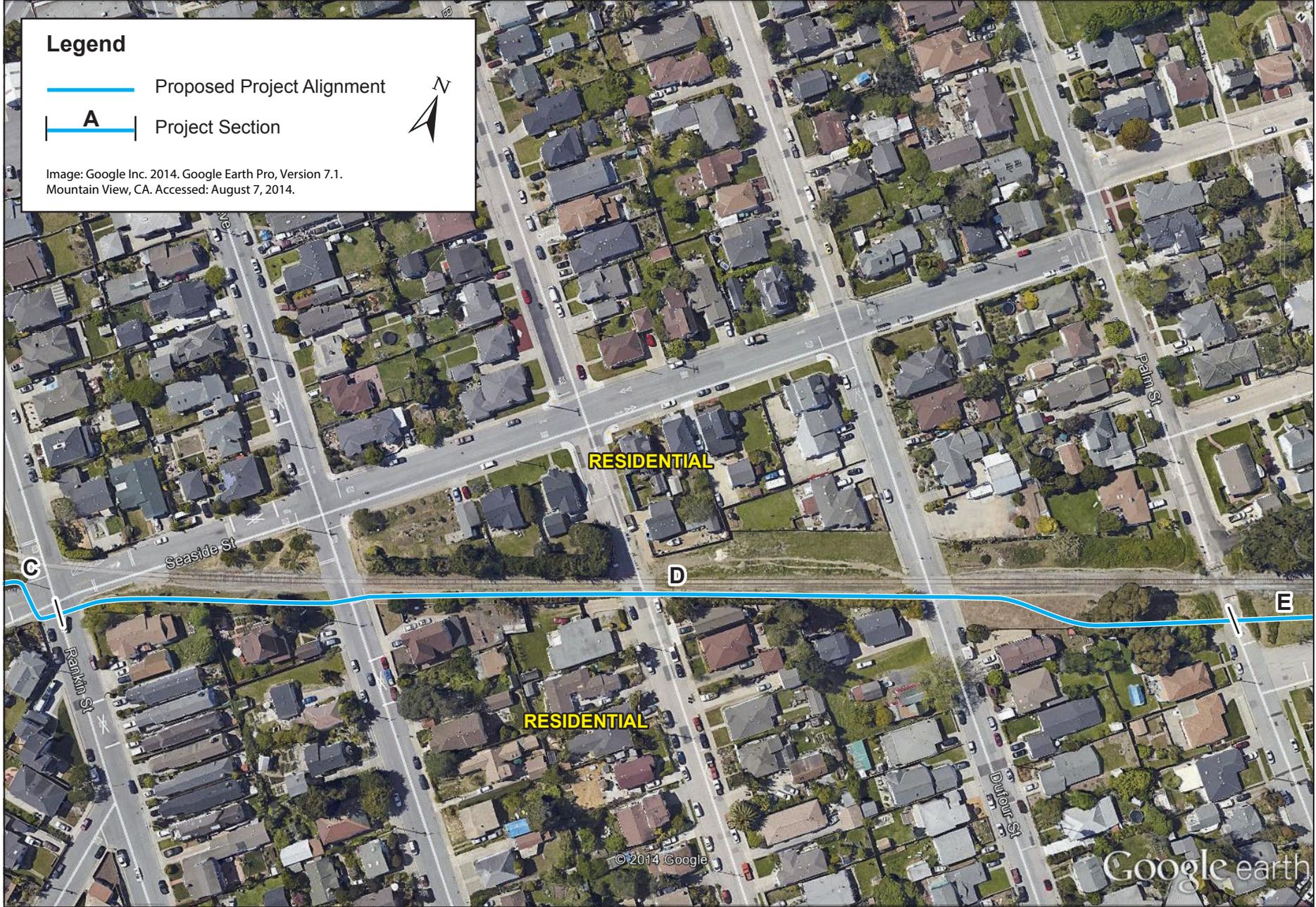
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Figure 5
Project Section B



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Figure 6
Project Section C



Graphics ... 0038115 (6-29-2017)

Figure 7
Project Section D

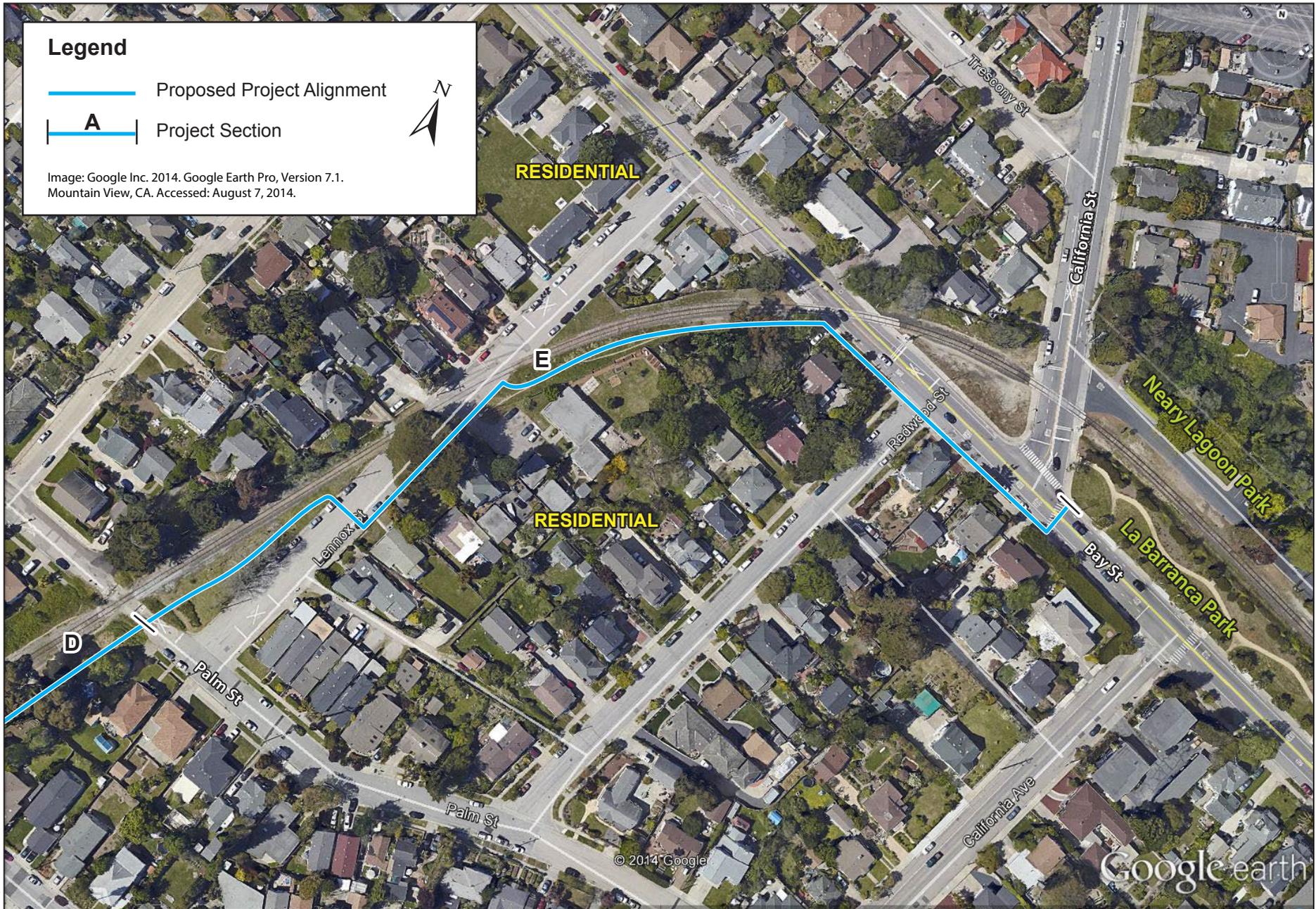


Figure 8
Project Section E

- **Stormwater Drainage Improvements:** Drainage improvements necessary for the Project would be made in conjunction with trail construction. At the Arroyo Seco drainage in Section A, a clear span bridge would be installed to avoid encroachment into the stream and the existing embankment. The height and design of the bridge would take into account potential flooding.
- **Retaining Walls:** A retaining wall would be required along Section C of the trail, just west of Almar Avenue, to support the trail. This retaining wall would be approximately 55 feet in length and would vary in height from 1-5 feet tall.

1.5 Maintenance

The City would be responsible for maintenance of the Project. The trail is anticipated to be open from dawn to dusk. In accordance with the Master Plan EIR, general maintenance activities anticipated for the trail include:⁹

- Tree, shrub, and grass trimming;
- Fallen tree removal;
- Weed control;
- Graffiti removal;
- Trash disposal;
- Drainage system cleaning;
- Pavement sealing, repaving, and pothole repair;
- Bollard replacement;
- Signs, striping, fence, and lighting repair and replacement; and
- Bridge (over Arroyo Seco drainage) inspection and repair.

1.6 Project Construction

1.6.1 Excavation and Grading

It is estimated that excavation necessary for construction of the Project trail, signage, and as-needed utility trench work would be up to four feet deep. During excavation, soils would be tested for contamination as needed. Clean soils would be used or available for reuse.

Contaminated soils would be disposed of at an appropriate facility. The amount of cut material is unknown at this time.

⁹ The operation and maintenance activities are based on the trail management activities identified in the Trail Network Master Plan. Refer to pages 7-2 and 7-3 in the Master Plan for additional information. Santa Cruz County Regional Transportation Commission. 2014. Monterey Bay Sanctuary Scenic Trail (MBSST) Network Final Master Plan. Adopted November 7, 2013. Revised February 6, 2014. (http://scrtc.org/wp-content/uploads/2012/10/MBSST-NETWORK-FULL_MASTER_PLAN.pdf).

1.6.1.1 Construction Hours and Duration

Construction is anticipated to occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. Section 9.36.010 of the City's municipal code restricts offensive noise between 10 p.m. and 8 a.m., with the following exception. Construction could start at 7:00 a.m. or occur on Saturdays with written approval from the City's Public Works Director. There would be no construction on Sundays or national holidays.

Project construction is anticipated to start in fall 2017 and would be approximately 4.5 to 6 months in duration.

1.6.2 Vehicle Access

Construction truck activity and haul routes would be limited to arterial and collector roads; however, the construction routes are unknown at this time. Temporary lane closures throughout the Project alignment are anticipated, and construction signage and a flagger would be present at these locations, as needed. Construction activities are not anticipated to result in any long-term road or lane closures.

1.6.3 Construction Staging and Equipment

Potential construction staging areas include vacant land in the following areas:

- Land between Natural Bridges Drive and Swift Street, within the coastal side of the rail ROW;
- Land between Fair Avenue and Almar Avenue, within the coastal side of the rail ROW;
- Land between Almar Avenue and Rankin Street, within the inland side of the rail ROW;¹⁰
- Land northwest of the intersection of Bay Street and California Street and within the rail ROW

Construction equipment and vehicles could include: backhoes, loaders, tractors, cranes, lifts, concrete trucks and pump, paving machine, compactors/rollers, and trucks for demolition, grading, and materials delivery. Power tools could include: jackhammers, air compressors, generators, concrete saws, power drills, welding equipment, sandblasting equipment, painting equipment, power and impact wrenches, and the like.

8. Surrounding Land Uses and Setting:

The surrounding land use and setting are described per Segment in Section 7. Description of Project above.

9. Other Public Agencies Whose Approval may be Required (e.g., permits, financing approval, or participation agreement):

The Project's anticipated permits and approvals are listed in Table 1-1.

¹⁰ Additionally, the private property land across from this vacant patch of land may be used temporarily.

Table 1-1. Anticipated Permits and Approvals

Agency	Anticipated Permit/Approval
City of Santa Cruz Zoning Administrator	Coastal Development Permit ^a
City of Santa Cruz	Santa Cruz City Code Chapter 9.56 Heritage Tree and Street Tree Permits
City of Santa Cruz Council	CEQA Certification
California Department of Transportation (Caltrans)	NEPA Certification Executive Order 13112: Prevention and Control of Invasive Species NPDES Statewide Stormwater Permit (Order No. 2012-0011-DWQ, Encroachment)
California Public Utilities Commission	GO 88-B Permit
USFWS	Executive Order 13186: Migratory Bird Treaty Act (MBTA) Endangered Species Act: Section 7(a)2: Section 7 Consultation ^b
California State Water Resources Control Board	Construction General Permit (Order No. 2009-0009-DWQ, and amended by Order No. 2012-0006-DWQ)
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit
Regional Water Quality Control Board	Clear Water Act Section 401 Water Quality Permit
California Department of Fish and Wildlife (CDFW)	California Fish and Game Code Sections 1602: Streambed Alteration Agreement California Endangered Species Act Section 2081 (b) and (c). Incidental Take Permit California Fish and Game Code Sections 3503 and 3503.5: Birds and Raptors California Fish and Game Code Section 3513: Migratory Birds California Fish and Game Code Sections 3511, 4700, 5050, and 5515: Fully Protected Species

^a A local coastal permit from the City is required, instead of a Coastal Development Permit from the California Coastal Commission, because there is an exemption for bike facilities, as long as parking is not being removed in the coastal zone. There is one appealable areas along the alignment in Section A where the trail crosses the drainage. In this area, the local permit could be appealed to the Santa Cruz Planning Commission, then City Council and ultimately the Coastal Commission, which could require a Coastal Development Permit.

^b Caltrans has a programmatic biological opinion (B.O.) for California red-legged frog which prevents the need for Section 7 consultation with USFWS if it is utilized for the Project. However, USFWS notification of the Project and the use of the B.O. is still required.

10. Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

The California Native American Heritage Commission (NAHC) was contacted on July 7, 2015, to identify any areas of concern within the Project area that may be listed in the NAHC's Sacred Land File. The NAHC responded on July 31, 2015, stating that a search of their files failed to indicate the presence of Native American cultural resources in the immediate Project area.

The NAHC also provided a list of ten Native American contacts that might have information pertinent to this Project, or have concerns regarding the proposed actions. A letter explaining the Project, along with a map depicting the Project area, was sent to all ten contacts listed by the NAHC on August 4, 2015. The letter also solicited responses from each of the contacts, should they have any questions, comments, or concerns regarding the Project.

Letters were sent to the following contacts.

- Jakki Kehl
- Linda G. Yamane
- Patrick Orozco, Costanoan Ohlone Rumsen-Mutsen Tribe
- Valentin Lopez, Chairperson, Amah Mutsun Tribal Band
- Edward Ketchum, Amah Mutsun Tribal Band
- Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band
- Michelle Zimmer, Amah Mutsun Tribal Band
- Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan
- Rosemary Cambra, Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area
- Ramona Garibay, Representative, Trina Marine Ruano Family

Follow-up phone calls to the Native American contacts listed above were conducted on September 9, 2015. Two contacts provided commentary; phone messages were left, when possible, with the other contacts. Mr. Lopez requested to be present when any ground disturbance was occurring within 300 feet of a natural water source. Ms. Garibay suggested a Native American Monitor be present during any ground disturbing activities.

Section 2

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, but would be mitigated to a less-than-significant level with implementation of recommended mitigation measures, as indicated by items marked “Potentially Significant Unless Mitigation Incorporated” within the checklist on the following pages.

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination. (To be completed by the Lead Agency.)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Christophe Schneider, Asst. Public Works Director
Public Works Department
City of Santa Cruz

8/8/17

Date

Evaluation of Environmental Impacts

This section identifies the environmental impacts of this project by answering questions from Appendix G of the CEQA Guidelines, the Environmental Checklist Form. The environmental issues evaluated in this chapter include:

- Aesthetics
- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Mineral Resources
- Population and Housing
- Recreation
- Utilities and Services Systems
- Agricultural Resources
- Biology
- Geology
- Hazards and Hazardous Materials
- and Use Planning
- Noise
- Public Services
- Transportation/Traffic
- Mandatory Findings of Significance

All analyses take account the entire action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Impacts are categorized as follows:

Potentially Significant Impact is appropriate if there is substantial evidence that an effect is significant, or where the established threshold has been exceeded. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) may be required.

Less Than Significant with Mitigation Incorporated applies where the incorporation of mitigation measures would reduce an effect from Potentially Significant Impact to a Less Than Significant Impact. Mitigation measures are prescribed to reduce the effect to a less than significant level.

Less Than Significant applies when the project will affect or is affected by the environment, but based on sources cited in the report, the impact will not have an adverse effect. For the purpose of this report, beneficial impacts are also identified as less than significant. The benefit is identified in the discussion of impacts, which follows each checklist category.

A **No Impact** answer is adequately supported if referenced information sources show that the impact simply does not apply to projects like the one involved. A No Impact Answer is explained where it is based on project-specific factors as well as general standards.

I. AESTHETICS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The Project is located in the Monterey Bay area of the California Central Coast, in the City of Santa Cruz in Santa Cruz County, California. The landscape is characterized by the coastal development associated with the City. Land use within the Project corridor is primarily suburban, with a mix of residential, industrial, and commercial land uses. The existing rail ROW is predominantly flat and with occasional passenger rail service. Because the area is highly developed, the majority of views toward the Project corridor are only available from adjacent residences and businesses that face the corridor and that have few obstructions to limit views. Some views are also available to residences and businesses that have views of the Project corridor where the alignment crosses local roadways. Commercial and industrial businesses along the Project corridor generally lack landscaping and the corridor is mostly bordered by swaths of ruderal grasses (Segments B and C). In some locations, views towards the Project corridor are limited by privacy fencing, residential landscaping, and local parks (Segments D-E). The area surrounding the Project corridor is well-lit at night due to the presence of lighting associated with residential, industrial, and commercial interior and exterior lighting, street lighting, and vehicle headlights.

Discussion

a) *Have a substantial adverse effect on a scenic vista?*

No Impact. Highway 1 is eligible for designation as a State scenic highway, but is not officially designated (Caltrans 2017). There are no other roadways within or near the Project area that are designated in federal, state, or local plans as a scenic highway or route worthy of protection for maintaining and enhancing scenic viewsheds. Due to the developed nature of the existing rail, there are no scenic vistas associated with the Project alignment. Therefore, there would be no impact on a scenic vista.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?*

Less Than Significant with Mitigation Incorporated. As discussed in checklist item a), there are no scenic vistas or officially designated scenic roadways within or near the Project alignment. In addition, the Project is not located near any rock outcroppings or historic building. The Project would not affect these type of scenic resources.

Construction of the Project would, however, result in the loss of 25 trees and a row of bamboo within Section D. Up to 6 of those trees could qualify as heritage trees. The removal of up to 6 heritage trees could potentially result in a significant impact to scenic resources. As described in impact I(c) below, impacts from tree removal would be mitigated with **Mitigation Measures AES-1** and **AES-2**, which requires the use of native grass and wildflower species in erosion control grassland seed mix and the replacement of landscaping. Potential impacts related to damage of scenic resources would be less than significant after implementation of **Mitigation Measures AES-1** and **AES-2**.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

Less Than Significant with Mitigation Incorporated. *Construction-Related Visual Impacts.* Construction of the Project would create temporary changes in views of the existing Project corridor. Construction activities would introduce heavy equipment and associated vehicles, including dozers, graders, scrapers, and trucks, into the viewshed of public roadways and residential and commercial/industrial properties. Safety and wayfinding signage, and striping would also be a visible element. Construction is expected to require no longer than 4.5-6 months and would primarily occur during daylight hours (limited to 8:00 a.m. to 5:00 p.m. Monday through Friday) so that high-intensity lighting to illuminate construction activities would not be needed. Construction would not occur in any one place for an extended period of time. Staging would occur in areas identified under Construction Staging and Equipment. These staging areas would not permanently introduce a new visual feature into the landscape. Therefore, the impact on visual quality due to construction staging is considered less than significant.

Commercial, industrial, residential, and roadway user groups would be minimally affected by construction because it would be temporary and construction would take place during daylight hours, when many viewer groups would be at work. Therefore, construction-related visual impacts are considered moderate-low because the most sensitive neighbors, residential viewers, would experience only a temporary change in the visual character and the impact would be less than significant.

The Project alignment would be 12-16 feet wide, 8.5-45 feet from the railroad centerline, and have safety fencing separating the trail from edge of rail tracks. The trail parallels the existing tracks within the rail ROW and, in many locations, the trail would not be visible or only minimally visible because the area is predominantly flat and the proposed trail would also be flat so that it would not stand out from the tracks and the gravel rail bed. Where it is visible, the trail would not greatly alter existing views because it would be flat and be of a width that is similar to the existing tracks and the gravel rail bed and would blend with the existing linear corridor. Construction-related visual impacts would be less than significant.

Tree Removal and Grading. The Project alignment would require the removal of up to 25 trees and a row of bamboo within Section D. Removal of trees in the ROW are likely to be perceived negatively by adjacent property owners. In addition, grading could result in impacts to grasses and shrubs. These temporary impacts could result in a potentially significant impact to the visual quality of the

Project site. **Mitigation Measures AES-1** and **AES-2** would be implemented to minimize the impact. **Mitigation Measure AES-1** requires the use of native grass and wildflower species in erosion control grassland seed mix. **Mitigation Measure AES-2**, requires replacement or relocation of landscaping and related appurtenances, fencing, privacy walls, and other similar features removed from private properties as a result of construction. The visual impacts from tree removal and grading would be less than significant after implementation of **Mitigation Measures AES-1** and **AES-2**.

Presence of Trail Users. It is unlikely that trail users would negatively affect existing commercial and industrial neighbors in Segments A through C because the trail could serve to help employees and employers use the trail for commuting to work or could bring new business to commercial establishments. Roadway users in all segments of the trail would have to be slightly more aware of their surroundings with the addition of new trail users crossing roadways, but safety signage, striping, lighting and pedestrian beacons would alert them to the trail crossings and would not differ greatly compared to existing pedestrian crossings along and near the Project corridor. Residential neighbors in Segments C through E would be the most likely to be affected by the presence of trail users. Trail users may be viewed favorably by the presence of recreational activities occurring in the area. Experience and studies have shown that public use trails reduce illegal activities and increase property values. The impact on visual quality would, therefore, be less than significant.

Retaining Walls. One retaining wall in Section C that varies in height from approximately 1-5 feet tall would be constructed as part of the Project. The retaining wall in Section C would not block views because it is below the grade of the railroad and adjacent street. There is not a great deal of variation in terrain, so the wall would be relatively short. In addition, this area is industrial in nature, so a short concrete retaining wall would be in keeping with the existing visual character. The impact on visual quality would, therefore, be less than significant.

Safety Fencing and Signs. In addition to the trail, there would be safety fencing, safety signage at street and railroad crossings, and directional and wayfinding signage in proximity to the trail. The safety fencing would be 4.5 feet tall and made of concrete, wood or steel post and wire, as identified in the Master Plan, which would maintain the open feel and views of the coastal environment and neighborhood connectivity. Therefore, fencing would not greatly alter or detract from the quality of existing views. Existing signage associated with roadway and pedestrian safety, parks, and businesses is very common to the area surrounding the Project corridor. Therefore, signage associated with the Project would not stand out within this setting and the impact would be less than significant.

Bridge Crossing. The bridge crossing of Arroyo Seco in Segment A would be a low-profile clear span bridge structure that would not detract from or greatly alter the existing visual character of views available from industrial neighbors. The impact on visual quality would, therefore, be less than significant.

Culvert Extension. The three extended culverts in Sections D and E to accommodate the trail crossings would slightly lengthen an existing visual feature and would not alter the character of the Project corridor. The impact on visual quality would, therefore, be less than significant.

Easements. In Section B, near New Leaf and in Section C, near Almar Avenue, the railroad track is close to the trail ROW and easements are required from the adjacent property owners to accommodate the minimum trail width. It is anticipated that this would not substantially affect the properties with implementation of **Mitigation Measure AES-2**, which requires that any site features

and landscaping affected during construction be replaced. The impact would be less than significant after mitigation.

Mitigation Measure AES-1: Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix. The Project proponent will require construction contractors to incorporate native grass and wildflower seed to standard seed mixes (i.e., Santa Cruz mix), for erosion control measures that will be applied to all exposed slopes. Wildflowers will provide seasonal interest to areas where trees and shrubs are removed and grasslands are disturbed. Only wildflower and grass species that are native will be incorporated into the seed mix, and under no circumstances will any invasive grass or wildflower plant species be used as any component in any erosion control measures. Species will be chosen that are indigenous to the area and for their appropriateness to the surrounding habitat. For example, upland grass and wildflower species will be chosen for drier, upland areas, and wetter species will be chosen for areas that will receive more moisture. If not appropriate to the surrounding habitat, wildflowers should not be included in the seed mix.

Mitigation Measure AES-2: Replace or Relocate Site Features and Landscaping Affected by Project. Where appropriate and to the degree possible, landscaping and related appurtenances, fencing, privacy walls, and other similar features removed from private properties as a result of construction will be replaced or restored in place and in kind to mitigate for visual impacts resulting from the loss of such features. The Project proponent would not be required to mitigate for the instances where private landowners have incorporated portions of the SCCRTC ROW into their private yards and landscaping.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less Than Significant with Mitigation Incorporated. The area surrounding the Project corridor is well-lit due to the presence of lighting associated with residential, commercial, and industrial interior and exterior lighting, street lighting, and lighting from vehicle headlights at night. Safety lighting is existing or would be installed at road crossings. Light-emitting diode (LED) lighting could adversely affect sensitive receptors by increasing nuisance light and glare and increasing ambient light glow, if proper shielding is not provided and blue-rich white light (BRWL) lamps are used (International Dark-Sky Association 2010a, 2010b, 2015). This would result in a substantial source of nighttime light and glare that could adversely affect nighttime views in the area, resulting in a significant impact. **Mitigation Measure AES-3** would reduce light and glare impacts caused by Project lighting by requiring application of lighting standards. The impact from safety lighting would be less than significant after mitigation.

The majority of tree removals would occur within Sections D. Within Section D, removals would occur where trees are growing within the ROW, along the fence lines or properties, to accommodate the trail. Removal of these trees would likely increase light and glare for adjacent residences because the amount of shading provided by trees would be reduced. Implementation **Mitigation Measures AES-2** would minimize lighting and glare impacts by required landscaping replacement, where appropriate. The impact from tree removal would be less than significant after mitigation.

Mitigation Measure AES-3: Apply Minimum Lighting Standards. All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines, and in compliance with International Dark-Sky

Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that are shielded and direct the light only towards objects requiring illumination. The lowest allowable wattage will be used for all lighted areas and the amount of nighttime lights needed to light an area will be minimized to the degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing. LED lighting will avoid the use of BRWL lighting and use a correlated color temperature, consistent with the International Dark-Sky Associations Fixture Seal of Approval program (International Dark-Sky Association 2010a, 2010b, 2015).

II. AGRICULTURAL AND FOREST RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in a loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project site is mapped as “Urban and Built-Up Land” by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). The “Urban and Built-Up Land” classification is defined as areas occupied by structures with a building density of at least 1 unit to

1.5 acres, or approximately 6 structures to a 10-acre parcel (California Department of Conservation 2014). The California Department of Conservation, Conservation Program Support also makes prepares maps of the parcels under Williamson Act contract. The Project site is not under a Williamson Act contract (California Department of Conservation 2016). The Project is not located in the agriculture land use designation of the General Plan (City of Santa Cruz 2012a). In addition, the Project site is not zoned for agriculture use (City of Santa Cruz 2004). No forest land or timberland are identified in the Santa Cruz General Plan and the City does not include any forest zoning classifications.

Discussion

- 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 a non-agricultural use?*

No Impact. The maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency classify the proposed Project site as “Urban Built-Up Land.” No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are located at the proposed Project site; therefore, no impact to these farmland resources would occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. The Project site is not zoned for agricultural use and is not under a Williamson Act contract; therefore, the Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

No Impact. The proposed Project is located in an urban environment and does not contain forest or timberland and is not zoned for forest land, timberland, or timberland production. The Project would, therefore, not conflict with any forest or timberland zoning. No impact would occur.

- d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. As described in Response II(c) above, no forest or timberland are located in the Project site; therefore, no impact from the loss of forest land or conversion of forest land to non-forest use would occur.

- 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 nonforest use?*

No Impact. As described in Response II(a-d) the Project would not result in direct losses of agricultural or forest lands. Furthermore, the Project would not result in any indirect impacts to agricultural or forest lands because the Project would not induce population growth. The Project involves a trail, which would not remove a barrier to population growth. Because the Project would not induce population growth, the Project would not result in an indirect impact from the conversion of agricultural lands to non-agricultural use or conversion of forest land to nonforest use.

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project site is located within the North Central Coast Air Basin (NCCAB) and is within the jurisdiction of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). Within the NCCAB, ambient air quality standards for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀, PM_{2.5}), and lead (Pb) have been set by both the State of California (State) and the federal government. As of January 2013, the NCCAB is under non-attainment status for ozone and PM₁₀ and under attainment for PM 2.5, NO₂, SO₂, and Pb for State standards. Santa Cruz County is under unclassified status for CO for State standards. The NCCAB is under attainment for PM₁₀ and SO₂ and under attainment/unclassified for O₃, PM_{2.5}, CO, NO₂, and Pb for federal standards (MBUAPCD 2013:9).

Discussion

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of an air quality plan is to bring the area into compliance with the requirements of Federal and State air quality standards. To bring the NCCAB region into attainment, the MUAPCD’s Air Quality Management Plan (AQMP) is updated, in compliance with the California Clean Air Act (CCAA). The Air Quality Management Plan

has been updated a total of six times since the initial preparation of the Plan in 1991. The region's Air Quality Management Plan prescribes methods for attaining ozone and particulate matter standards and for maintaining air quality in the region.

The air quality plans use the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. The Air Quality Management Plan identifies that the emission inventory and 2035 emission projections were calculated to be consistent with the Association of Monterey Bay Area Government's (AMBAG's) 2010 Metropolitan Transportation Plan (MBUAPCD 2013:18). The 2010 Metropolitan Transportation Plan identifies the Monterey Bay Sanctuary Scenic Trail (MBSST) Network Project as a project to be constructed in the future (AMBAG 2010:24). The Project is a segment of the MBSST; therefore, the Project is accounted for in the emission projections described in the Air Quality Management Plan.

The Air Quality Management Plan identifies a strategy to reduce emissions, including reduction of mobile source emissions through the District's incentive programs (AMBAG 2010:27). One of these incentives is support for bike to work events. The Project would not increase mobile sources of emissions and could potentially reduce some mobile sources of emissions. Therefore, the Project is consistent with the AQMP and would not conflict with or obstruct with implementation of the AQMP.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant with Mitigation Incorporated. The long-term and short-term impacts of the Project to air quality are discussed below. Greenhouse gas emissions are discussed in Section VII of this document.

Long-Term (Operational) Emissions. Long-term air emissions impacts are associated with any change in permanent use of the Project site by on-site stationary and off-site mobile sources that substantially increase vehicle trip emissions. No stationary sources are associated with the Project. The Project consists of a trail which once completed, would not generate vehicle or other mobile emissions. Therefore, long-term operation of the Project would not contribute to an existing or projected air quality violation.

Short-Term (Construction) Emissions. Construction activities, such as grading and vehicle/equipment use would result in air pollutant emissions. Construction activities could generate exhaust emissions from utility engines, on-site heavy duty construction vehicles, equipment hauling materials to and from the Project site, and motor vehicles transporting construction crews. The use of construction equipment would result in localized exhaust emissions which would vary daily as construction activities levels change. However, projected short-term emissions of criteria pollutants as a result of Project construction would be temporary in nature.

Fugitive dust emissions are associated with excavation, land clearing, land exposure, and cut-and-fill operations. Dust generated daily during construction would vary substantially, depending on the level of activity, the specific operations, and weather conditions. On a limited basis, sensitive receptors in the vicinity and on-site workers may be exposed to blowing dust, depending on the prevailing wind. The air quality impact from construction, therefore, could be potentially significant. Implementation of **Mitigation Measure AIR-1** described below, would reduce short-term construction period air quality impact to a less-than-significant level and prevent nuisances to nearby residents.

Mitigation Measure AIR-1: Control Construction Related Dust. Consistent with guidance from the MUAPCD and City construction standards, the following “Best Management” construction practices shall be implemented at the construction site to control emissions:

- Water all active construction sites at least twice daily.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area.
- Haul trucks shall maintain at least 2feet of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the MBUAPCD shall also be visible to ensure compliance with Rule 402 (Nuisance).

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Less Than Significant with Mitigation Incorporated. As described above in Section III(b), the Project would result in temporary increases in air pollutants (e.g., fugitive dust). However, implementation of **Mitigation Measure AIR-1**, described above, would reduce impacts to a less than-significant level. Therefore, temporary increases in air pollutants would not be cumulatively considerable.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant with Mitigation Incorporated. Portions of the proposed trail are located adjacent to or near residences, which are considered sensitive receptors. Construction of the Project may expose surrounding land uses to airborne particulates and fugitive dust, as well as a small quantity of pollutants associated with the use of construction equipment (e.g., diesel-fueled vehicles and equipment). Implementation of **Mitigation Measure AIR-1**, described above, would reduce construction-related emissions to a less-than-significant level. As discussed in Section III(b), the Project would not result in any long-term air quality impacts. Therefore, nearby sensitive receptors would not be exposed to substantial pollutant concentrations and the impact would be less than significant after mitigation.

e) *Create objectionable odors affecting a substantial number of people?*

No Impact. Some objectionable odors may be generated from the operation of diesel-powered construction equipment and/or asphalt paving during the Project construction period. However,

these odors would be short term in nature, limited to the area under construction, and would not result in permanent impacts to surrounding land uses, including sensitive receptors in the vicinity of the Project site. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES.				
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Natural resources in Big Basin, Castle Rock, Felton, Los Gatos, Davenport, Laurel, Santa Cruz, and Soquel U.S. Geological Survey 7.5 minute quadrangles were identified from the following databases:

- California Native Plant Society Inventory of Rare and Endangered Plants (2016)

- California Department of Fish and Wildlife's California Natural Diversity Database (2016)
- U.S. Fish and Wildlife Service Listed Species Quad Search (2016)

This section is based on observations made during a reconnaissance-level biological survey for special-status species, vegetation communities, and riparian habitat, including any potentially jurisdictional waters of the U.S. for the Project alignment. A survey of the biological study area was conducted by an ICF biologist on June 29, 2015, which is consistent with the appropriate blooming period for all potentially occurring species identified in the above databases. The biological study area is defined as the anticipated Project footprint, as well as a 50-foot buffer on either side of the existing rail ROW. In addition, the biological study area includes potential waters of the U.S. that cross or are adjacent to the 50-foot buffer due to their value for the presence of special-status plants and wildlife and to aid in a future jurisdictional determination.

Vegetation Communities. Three vegetation communities were identified in the biological study area: developed/ruderal, Central Coast riparian scrub, and aquatic. These communities encompass Arroyo Seco, potential wetland swales, and the culverted ditches. Vegetation community classification in the biological study area is based on CFDW's Natural Communities List (2010).

Developed/Ruderal. The majority of the biological study area is classified as developed or ruderal. Non-native ruderal vegetation dominates the rail ROW where it is not fully developed. Areas adjacent to commercial development or undeveloped area in Sections B and C of the Project alignment (which tend to be wider) are dominated by ruderal grasslands composed of oat species, spring vetch (*Vicia sativa*), mouse barley (*Hordeum murinum*), ribwort plantain, radish, cut-leaf plantain (*Plantago coronopus*), smooth cat's ear (*Hypochaeris glabra*), cudweed (*Pseudognaphalium sp.*), and dock species (*Rumex sp.*).

Common wildlife species that occur in disturbed/ruderal areas are typically adapted to human disturbance and include European starling (*Passar domesticus*), Anna's hummingbird (*Calpte anna*), Virginia opossum (*Didelphis virginiana*), Norway rat (*Rattus norvegicus*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*) (FHWA and Caltrans 2001).

Central Coast riparian scrub. Central Coast riparian scrub is present outside of the proposed Project area near Neary Lagoon. This habitat is low-quality because, as described above, the disturbance caused by the presence of the existing rail ROW has led to a dominance of invasive vegetation which includes English ivy (*Hedera helix*), cape ivy (*Delairea odorata*), and Himalayan blackberry (*Rubus armeniacus*). Arroyo willow (*Salix lasiolepis*) is present in small patches on the coastal side and more densely on the inland side of the rail, as well as horsetail (*Equisetum arvense*), stinging nettle (*Urtica dioica*), coast live oak, California blackberry (*Rubus ursinus*), and black cottonwood (*Populus balsamifera*).

Common wildlife species that occur in Central Coast riparian scrub include Sierran tree frog (*Pseudacris sierra*), California newt (*Taricha torosa*), arboreal salamander (*Aneides lugubris*), slender salamander (*Batrachoseps sp.*), California toad (*Anaxyrus boreas halophilus*), common red-sided garter snake (*Thamnophis sirtalis infernalis*), California legless lizard, western fence lizard (*Sceloporus occidentalis*), California alligator lizard (*Elgaria multicarinata multicarinata*), dusky-footed woodrat (*Neotoma fuscipes*), California quail (*Callipepla californica*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), tree swallow (*Tachycineta bicolor*), flycatchers, warbling vireo (*Vireo gilvus*), and song sparrow (*Melospiza melodia*).

Aquatic. Three types of aquatic habitats are present along the Project site: wetland swales, culverted ditches, and Arroyo Seco.

1. The wetland swales are associated with culvert outflow between Almar and Fair Avenues and between Fair and Swift Avenues in Sections B and C of the Project alignment. The wetland swales are dominated by tall, dense wetland vegetation including common velvetgrass (*Holcus lanatus*), Italian ryegrass (*Festuca perennis*), tall flatsedge (*Cyperus eragrostis*), and bristly ox-tongue. The rail ballast acts as an artificial bank causing the swale to channelize and run most of the length between the two culverts.
2. There are three culverted ditches, two in Section D and one in Section E, which are devoid of vegetation and drain upland runoff at road crossings. They are not jurisdictional because they do not possess a bed and bank or ordinary high water mark. Therefore, they do not meet the definition of a tributary under the Clean Water Act.
3. Arroyo Seco is an approximately 60-foot-wide ephemeral drainage that crosses the railroad west of Swift Street in Section A of the Project alignment. It is completely unvegetated at the rail and becomes vegetated with willows and weedy vegetation approximately 40 feet south of the rail. The bottom of Arroyo Seco is wide and sandy with some fill and very little rock. Its hydrology is described in *Section 3.1.1, Physical Conditions*.

Based on the wetland assessment conducted during the field survey, all three types of aquatic habitat could be considered Waters of the United States and State by the U.S. Army Corps of Engineers and the Regional Water Quality Control Board, respectively.

Special-Status Plants. Based on the CNDDDB search results and the CNPS list for the Project region, five special-status plant species, Loma Prieta hoita (*Hoita strobilina*); Santa Cruz tarplant (*Holocarpha macradenia*); San Francisco popcornflower (*Plagiobothrys diffusus*); Congdon's tarplant (*Centromadia parryi ssp. congdonii*) and Choris' popcornflower (*Plagiobothrys chorisianus var. chorisianus*), have the potential to occur in the biological study area.

After completion of the field survey, which was conducted during the appropriate blooming period for all five plants, the biologist determined that none of these species are present in the biological study area.

The Monterey pine (*Pinus radiata*) has a California Rare Plant Rank of 1B.1 and is present in the biological study area. Native Monterey pine forest is considered a sensitive community by CDFW. The Monterey Pine trees in the Project site are not naturally occurring, but were planted as ornamental landscaping; therefore, they are considered non-native vegetation and are not considered special-status in this context in the Project site.

Special-Status Wildlife Species. Based on the CNDDDB search results and the USFWS list for the biological study area, eight special-status wildlife species, California red-legged frog (CRLF) (*Rana draytonii*); western pond turtle (*Emys marmorata*); pallid bat (*Antrozous pallidus*); Cooper's hawk (*Accipiter cooperii*); white-tailed kite (*Elanus leucurus*); tricolored blackbird (*Agealaius tricolor*); San Francisco (saltmarsh) common yellowthroat (*Geothlypis trichas sinuosa*); and osprey (*Pandion haliateus*), were determined to have the potential to occur.

Of the eight species identified, only four occur in the Project area. The San Francisco (saltmarsh) common yellowthroat, tricolored blackbird, and osprey, are limited to habitat in and around Neary Lagoon. Similarly, within the Project area Western pond turtles do not occur in Arroyo Seco, only in Neary Lagoon.

Migratory Birds and Raptors. Migratory birds and raptors have the potential to nest in trees, shrubs, and existing infrastructure in and adjacent to the biological study area. During the June 29, 2015 site visit, cliff swallows (*Petrochelidon pyrrhonota*) were observed nesting on the U.S. Geological Survey Pacific Coastal and Marine Science Center adjacent to the inland side of the tracks just east of Natural Bridge Drive. Although this species is not considered a special-status wildlife species, their occupied nests and eggs are protected by CFGC Sections 3503, 3503.5, and 3800; and the Migratory Bird Treaty Act (MBTA).

Discussion

- a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less than Significant with Mitigation Incorporated. No special-status plant species were documented during the biological survey and none are expected to occur on or adjacent to the site. Therefore, there would be no impact to special-status plant species.

California Red-Legged Frog. CRLF habitat was assessed within one (1) mile of the Project site. The biological study area is not within designated CRLF critical habitat; however, one critical habitat unit (Unit SCZ-1) is located approximately 0.1 mile west of Natural Bridges Drive and 0.4 mile west of Arroyo Seco in Antonelli Pond. Additionally, there are 15 CNDDDB occurrences within 5 miles of the biological study area (CDFW 2016). Neary Lagoon provides suitable migration and breeding habitat for CRLF. Suitable upland habitat is limited to the riparian corridor along Arroyo Seco. Arroyo Seco is an ephemeral drainage and lacks emergent vegetation. Therefore, it is unlikely that CRLF would occur in Arroyo Seco, except during the wettest times of the year as migration habitat. This aquatic habitat has steep, eroded banks which are somewhat vegetated with herbaceous species and leaf litter.

CRLFs could be directly affected by construction activities occurring adjacent to Arroyo Seco. If CRLFs are present within the construction work area, they could be inadvertently killed or wounded by construction vehicles, construction personnel, and accidental spill of toxic fluids (e.g., gasoline and other petroleum-based products). If CRLFs must be captured and relocated outside the construction work area, they could be exposed to increased risks or disease, predation, and competition that could result in increased mortality.

Construction activities in potential CRLF habitat in the biological study area could result in indirect effects on water quality downstream from the construction work area. Increased sedimentation could reduce the suitability of CRLF habitat downstream of the construction area by filling in pools and smothering eggs. Accidental spills of toxic fluids also could result in the subsequent mortality of CRLFs if these substances flow downstream from the construction area and CRLFs are present.

The potential direct and indirect impacts to CRLFs would be potentially significant.

Implementation of Mitigation Measure BIO-1 would minimize the impact by requiring pre-construction surveys of the Project site, training for construction personnel, and implementation of best management practices (BMPs). Implementation of **Mitigation Measure BIO-1** would prevent direct and indirect impacts to CRLFs; therefore, the impact to CRLFs would be less than significant after mitigation.

Mitigation Measure BIO-1: California Red-Legged Frog Avoidance Measures. The following avoidance measures for CRLFs are based on the Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program (8-10-F-58) (USFWS 2011). The Programmatic Biological Opinion eligibility criteria are listed immediately below, followed by an explanation of why the Project qualifies for coverage under this Programmatic Biological Opinion.

Criterion 1: Actions that would be appropriately considered in this biological opinion are likely to result in adverse effects to the California red-legged frog and its critical habitat, but would not affect the long-term viability of the population in the action area Caltrans and United States Fish and Wildlife Service (Service) have previously consulted on numerous projects that met these criteria. These projects include: retrofitting of bridges to reduce damage that may be caused by earthquakes; repair, widening, and replacement of bridges; repair of stream bank protection; replacement of low-flow stream crossings with bridges; small-scale stabilization of stream slopes; minor improvement of drainage; replacement of culverts; rehabilitation of highway surfaces; and improvement of the safety and operation of highways.

Criterion 2: To qualify for use of this programmatic biological opinion, the measures to reduce or avoid adverse effects to the California red-legged frog and its critical habitat, provided herein, must be implemented; these measures may be modified on a project-specific basis upon the agreement of the Caltrans and the Service.

Criterion 3: The projects must be single and complete, and not part of larger actions or associated with other development projects including, but not limited to, housing subdivisions, commercial or industrial developments, or golf courses.

Criterion 4: The projects must not, in the Service's view, take place in areas where populations of California red-legged frogs are so isolated that even the small effects described in this biological opinion may have substantial impacts.

The Project meets Criterion 1 because installation of a trail within an existing rail ROW will not affect the long term viability of the population, Criterion 2 because the City will implement the avoidance measures, Criterion 3 because it is a single project that would not require future construction, and Criterion 4 because it does not occur in an area where CRLF are isolated.

The City will ensure that projects being implemented in accordance with this biological opinion will be designed to avoid adverse effects to CRLFs and their habitat. At a minimum, the following measures will be implemented to avoid adverse effects to CRLFs and their habitat:

1. A biologist with experience in the identification of all life stages of the California red-legged frog, and its critical habitat (75 FR 12816), will survey the Project site (where potentially suitable habitat is present) no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is detected, the Service will be notified prior to the start of construction. If Caltrans and the Service determine that adverse effects to the California red-legged frog or its critical habitat cannot be avoided, the Project will not commence until Caltrans completes the appropriate level of consultation with the Service.
2. Before work begins on the 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 to the subspecies during the Project.

3. If any life stage of the CRLF is detected in the biological study area during construction, work will cease 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 Service determine that adverse effects to CRLF cannot be avoided, construction activities will remain suspended until Caltrans and the Service complete the appropriate level of consultation.
4. 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.
5. Prior to the onset of work, the City 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 of the appropriate measures to implement should a spill occur.
6. Construction staging of equipment and vehicles will occur at least 60 feet from aquatic or riparian habitat and not in a location from where 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.
7. 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 activities associated with the Project, unless Caltrans and the Service determine that it is not feasible or practical.
8. Habitat contours will be returned to their original configuration at the end of Project activities in all areas that have been temporarily disturbed by activities associated with the Project, unless Caltrans and the Service determine that it is not feasible or modification of original contours would benefit the California red-legged frog.
9. The number of access routes, 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 to 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.
10. To control sedimentation during and after Project implementation, the City will implement best management practices outlined in any authorizations or permits, issued under the authorities of the Clean Water Act that it receives for the specific project. If best management practices are ineffective, the City will attempt to remedy the situation immediately, in coordination with the Service.
11. To ensure that diseases are not conveyed between work sites by the Service-approved biologist, the enclosed fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.

- a. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires and all other surfaces. Rinse cleaned items with sterilized (e.g. boiled or treated) water before leaving each study site.
- b. Boots, nets, traps, etc., should then be scrubbed with 70% ethanol solution (or sodium hypochlorite 3 to 6%) and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond or wetland.
- c. In remote locations, clean all equipment as described above upon return to the lab or "base camp". Elsewhere, when washing machine facilities are available, remove nets from poles and wash with bleach on a "delicates" cycle, contained in a protective mesh laundry bag.
- d. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolates species, wear disposable gloves and change them between handling each animal. Dedicate sets of nets, boots, traps, and other equipment to each site being visited. Clean and store them separately and the end of each field day.
- e. When amphibians are collected, ensure the separation of animals from different sites and take great care to avoid indirect contact between them (e.g. via handling, reuse of containers) or with other captive animals. Isolation from un-sterilized plants or soils which have been taken from other sites is also essential. Always use disinfected/disposable husbandry equipment.
- f. Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.
- g. Used cleaning materials (liquids, etc.) should be disposed of safely and if necessary taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

Cooper's hawk, white-tailed kite, and migratory birds. Cooper's hawk, white-tailed kite, and other migratory birds have habitat and potential to nest in suitable trees within the Project site. These species were not observed during the June 29, 2015 field survey. Construction of the Project could result in the loss or abandonment of active nests for special-status birds species and migratory birds. Tree removal or noise associated with construction activities could result in the disturbance of special-status bird species or migratory birds if active nests are present in or near the construction area. These disturbances could cause nest abandonment and death of young or loss of reproductive potential at active nests located in or near the biological study area. The Project could result in a potentially significant impact, through loss of eggs or young, on a species regulated under the MBTA. Implementation of **Mitigation Measure BIO-2** would ensure that the Project would have no effect on nesting birds by requiring pre-construction surveys and temporary fences, if active nests are found. The impact would be less than significant after implementation of mitigation.

Mitigation Measure BIO-2: Nesting Birds Surveys. Prior to construction or site preparation activities, the City will retain a qualified biologist to conduct nest surveys of appropriate nesting habitat. The survey will be required for only those projects that will be constructed during the nesting/breeding season of raptors and migratory birds (typically February 15 through August 31).

The survey area will include all potential nesting habitat, including the suitable nesting trees within the biological study area and trees and emergent vegetation that are within 250 feet of the Project grading boundaries. The survey will be conducted no more than 14 days prior to commencement of construction activities.

If active nests of raptors or migratory bird species protected under the MBTA and the California Fish and Game Code are present in the construction zone or within 250 feet of the construction zone, a temporary fence will be erected at a distance of 250 feet around the nest site (or less if determined to be appropriate by the biologist and according to the species and site conditions). Caltrans/ City must be notified if the Project will result in adverse effects to migratory birds. Clearing and construction within the fenced area will be postponed until juveniles have fledged as determined by the biologist.

Pallid Bat. Pallid bat could roost in trees within the biological study area, and could forage over any of the open habitats within the Project site. These species and evidence of an active roost were not observed during the June 29, 2015 field survey. Mature trees in the biological study area, which provide potential bat roosting areas could be directly disturbed during construction of the Project. Noise disturbances associated with construction could disturb day-roosting bats if they are present in suitable adjacent trees during construction. Tree-roosting bats could be directly impacted by the removal of mature trees in the construction area. A significant impact could potentially occur if a substantial number of pallid bats were affected. Implementation of **Mitigation Measure BIO-3** would ensure that the Project would have no effect on roosting bats by requiring pre-construction surveys. The impact to pallid bats would be less than significant after mitigation.

Mitigation Measure BIO-4: Pallid Bat Surveys. A qualified biologist will examine suitable roosting habitat within the biological study area for roosting pallid bats and conduct a nighttime acoustic survey for foraging pallid bats no more than 24 hours before any initial bridge demolition activities; vegetation, woody debris, tree removal, or other initial ground-disturbing activities. If a pallid bat is observed roosting or detected acoustically at any time before or during Project activities, all activities will cease. The City will coordinate with the appropriate agencies to develop avoidance measures before commencing Project activities.

- b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant with Mitigation Incorporated. Central Coast riparian scrub is not located on the Project site; therefore, no impacts would occur to Central Coast riparian scrub. Furthermore, the Central Coast Riparian Scrub near the proposed Project is not considered a natural community of special concern due to the sparsity of native vegetation and dominance of invasive species, physical and hydrological disconnect from Neary Lagoon, lack of a bed or bank, and limited suitability for wildlife. Therefore, it is not considered part of the riparian corridor or floodplain and is not subject to CDFW 1602 jurisdiction. A streambed alteration agreement would not be required for construction.

The culverted ditches are not considered natural communities of special concern; however, Arroyo Seco and the wetland swales associated with culvert outflow between Almar and Fair Avenues are considered natural communities of special concern.

Slope stabilization would permanently obstruct wetland hydrology. Indirect impacts on the wetlands and Arroyo Seco could also occur from adjacent construction activity and staging. Vegetation adjacent to the construction area would not be removed for construction but could sustain damage from equipment. Arroyo Seco water quality could be affected due to erosion and sedimentation as a result of earth moving activities. These impacts could potentially result in a significant impact to aquatic habitat. Implementation of **Mitigation Measure BIO-5** would minimize these impacts by requiring the installation of silt fencing, implementation of best management practices to protect water quality, an environmental awareness program for construction personnel, and construction monitoring by a biologist. The indirect impacts on the wetlands and Arroyo Seco would be less than significant after mitigation.

Construction of the Project could result in direct effects on potential wetlands along the Project site. Direct effects could occur from the installation of the paved trail directly on top of sensitive vegetation. Associated construction activities such as grading could also remove or crush vegetation. These direct impacts on the potential wetlands would be significant if it is determined that they are jurisdictional.

As detailed in Table 1. Anticipated Permits and Approvals, several regulatory permits may be required prior to construction. Obtaining permits are often required prior to the start of construction. The direct impacts to the unnamed seep and potential wetlands would be less than significant after mitigation.

Mitigation Measure BIO-5: Install Silt Fencing Around Environmentally Sensitive Areas

The City or its contractor will install silt fencing to minimize impacts to environmentally sensitive areas (ESAs) in and adjacent to the construction area. A qualified biologist will identify sensitive biological resources adjacent to the construction area. This would include staging or access areas used during Project construction. Portions of these areas that are to be avoided during construction will be fenced off to limit disturbance. Sensitive biological resources that occur adjacent to the construction area include sensitive natural communities and protected trees to be retained. Temporary fences around the ESAs will be installed as one of the first orders of work following Caltrans specifications. Before construction, the construction contractor will work with the Project engineer and a resource specialist to identify the locations for the barrier fencing and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as ESAs and clearly identified on the construction plans. The fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

Protect Water Quality and Prevent Erosion and Sedimentation in Arroyo Seco

The City or their construction contractor shall ensure the construction specifications include the following water quality protection and erosion and sediment control BMPs, based on standard City requirements, to minimize construction-related contaminants and mobilization of sediment to Arroyo Seco and Monterey Bay.

The BMPs will be selected to achieve maximum sediment control and represent the best available technology that is economically achievable and are subject to review and approval by the City. The City will perform routine inspections of the construction area to verify the BMPs are properly implemented and maintained. The City will notify contractors immediately if there is a noncompliance issue and will require compliance.

The BMPs will include, but are not limited to, the following:

- All earthwork or foundation activities involving Arroyo Seco and the clear span bridge will occur in the dry/low-flow season to the maximum extent possible. Work will not occur within 24 hours (before or after) of a 25% chance or greater rain event. Disturbed areas near Arroyo Seco will be stabilized prior to rainfall.
- Equipment used in and around drainages will be in good working order and free of dripping or leaking engine fluids. All vehicle maintenance will be performed at least 300 feet from all drainages. Any necessary equipment washing will be carried out where the water cannot flow into drainages.
- Any surplus concrete rubble, asphalt, or other rubble from construction will be taken to an appropriate recycling or disposal site.
- An erosion and sediment control plan will be prepared and implemented for the Project. It will include the following provisions and protocols.
 - Keep disturbed areas (areas of grading and related activities) to the minimum necessary for construction of the Project.
 - Keep runoff away from disturbed areas during grading and related activities.
 - Stabilize disturbed areas as quickly as possible, either by vegetative, mechanical and/or physical methods.
 - Trap sediment before it leaves the site with such techniques as check dams, sediment ponds, or straw wattles including perimeter protection.
 - Use dirt and sediment tracking BMPs, including stabilized construction entrances and wheel washes.
 - Cover exposed soils and material stockpiles to prevent wind erosion.
 - Paved streets will be swept as needed during construction activities to minimize dust.
 - The contractor will conduct periodic maintenance of erosion and sediment control measures.
 - An appropriate seed mix of locally occurring native species will be planted on disturbed areas upon completion of construction. A qualified botanist will approve the seed mix prior to planting.
- Routine monitoring of erosion control facilities during construction and during/after rain events.
- A Storm Water Pollution Prevention Plan (SWPPP) will be implemented as part of the NPDES Permit and a General Construction Activity Storm Water Permit to minimize the potential for sediments or contaminants to be discharged into Monterey Bay or wetlands within vicinity. A toxic materials control and spill response plan will be implemented to regulate the use of toxic materials (e.g., fuel and lubricants) and minimize the risk of spills or leaks of toxic materials into the waterway.

Prepare Environmental Awareness Program and Conduct Environmental Awareness Training for Construction Employees

The City will retain a qualified biologist to develop an environmental awareness program and conduct environmental awareness training for construction employees. The program will explain the importance of onsite biological resources, including sensitive natural communities, protected trees to be retained, special-status wildlife habitats, and how to best avoid take of federally listed species. The program will include invasive plant identification and the importance of controlling and preventing the spread of invasive plant infestations.

The environmental awareness program will be provided to all construction personnel to inform them on the life history of special-status species in or adjacent to the biological study area, the need to avoid impacts on sensitive biological resources, any terms and conditions required by state and federal agencies, and the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the Project, the contractor's superintendent will ensure that the personnel receive the mandatory training before starting work. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during Project construction and identifies all relevant permit conditions will be provided to all construction personnel.

Retain a Biologist to Conduct Construction Monitoring

The City will retain a qualified biologist to conduct construction monitoring in and adjacent to all identified ESAs. The frequency of monitoring will range from daily to weekly depending on the biological resource. The monitor, as part of the overall monitoring duties, will inspect the ESA fencing once a week in the construction area. The biological monitor will assist the construction crew as needed to comply with all Project implementation restrictions and guidelines. The biological monitor also will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources.

Avoid and Minimize Potential Disturbances to Vegetation

The City and its construction contractor will avoid and minimize potential impacts to vegetation in natural communities of special concern by implementing the following measures.

- The potential for long-term loss of woody vegetation will be minimized by trimming vegetation rather than removing entire shrubs to the maximum extent possible. Shrubs that need to be trimmed will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting will be limited to the minimum area necessary within the construction zone.
- A certified arborist will be retained to perform any necessary pruning or root cutting of retained trees.
- The areas that undergo vegetative pruning and tree removal will be inspected immediately before construction, immediately after construction, and 1 year after construction to determine the amount of existing vegetative cover, cover that has been removed, and cover that resprouts. After 1 year, if these areas have not resprouted sufficiently to return the cover to the pre-project level, the City will replant the areas with the same native species to reestablish the cover to the pre-project condition.

- c) *Would the project have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Less Than Significant with Mitigation Incorporated. As discussed in Impact IV (b), construction of the Project could potentially result in direct and indirect impacts to aquatic habitat, which are considered potentially jurisdictional waters. The impacts to jurisdictional water would be less than significant after implementation of **Mitigation Measure BIO-5**.

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

Less Than Significant with Mitigation Incorporated. The Project is located within an urban area and there are no wildlife corridors within the Project area. Arroyo Seco and Neary Lagoon are not wildlife corridors for migratory fish species because there is low quality habitat and barriers to fish passage between the ocean and the Project area; therefore, the Project would not affect any migratory fish species. There is the potential, however, that migratory birds could use the trees in the Project area for nesting. Construction of the Project would require vegetation pruning and tree removal; therefore, a potentially significant impact to migratory birds could occur if they are present at the Project site. As described in Impact IV(a), the impact to migratory birds would be less than significant after implementation of **Mitigation Measure BIO-3**.

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

Less than Significant Impact. Heritage trees, shrubs, and all street trees of any size are regulated by the Santa Cruz City Code Chapter 9.56 (City of Santa Cruz 2016b) and require a heritage tree permit or street tree permit, respectively. The City defines a Heritage tree as any tree, grove of trees, shrub or group of shrubs, growing on public or private property within the City, which has a trunk with a circumference of 44 inches, has historical significance, or has horticulture significance.

Numerous native and non-native trees are present along the rail ROW. Up to 25 trees of various species could be removed as part of the Project in Sections D and E. Of these 25 tree removals, up to 6 trees could qualify as heritage trees. Tree replacement is required as a condition of the tree removal permit, per the City Code. The Project would not conflict with local policies regarding tree removal because the City would comply with City code requirements. The impact would be less than significant.

- f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?*

No Impact. The Project site is not located in an area that is managed by a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state Habitat Conservation Plan. The Project would, therefore, not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

V. CULTURAL RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

Bibliographic references, previous survey reports, historic maps, and archaeological site records pertinent to the Project area were compiled through a records search of the California Historical Resources Information System (CHRIS) in order to identify prior archaeological studies and known cultural resources within a 0.5-mile area surrounding, or adjacent to, the Project alignment. ICF conducted an archaeological field survey of the Project area in accordance with the January 22 2014, *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (the PA), and in accordance with other Caltrans guidance. This archaeological field survey took place on June 29, 2015.

Through the records search and literature review, no prehistoric resources were identified within the Project area; however, three prehistoric resources were identified within 0.25 mile of the Project area. No indications of archaeological resources were noted during field surveys, and it is unclear if deposits—intact or lacking integrity—still exist within the current Area of Potential Effect (APE).

Areas near natural water sources are often considered sensitive, or even highly sensitive, for prehistoric archaeological deposits and associated human remains. These ecologically rich areas would have provided abundant and readily accessible resources for the aboriginal population that favored these areas as places for locating habitation and resource processing sites. However, because archaeological evidence of past human alteration or occupation of a landscape is subject to the same processes that affect the preservation, distribution, and visibility of geological deposits (Bettis 1992:119), the nature and timing of landscape evolution ultimately determines whether archaeological remains will be buried, destroyed, or redeposited (Kuehn 1993; Waters 1992).

The alluvial build-up of general sandy, loamy deposits throughout the Project area, combined with the previously recorded sites within and adjacent to the Project, make this area potentially sensitive for buried prehistoric material. The low slopes, and general proximity to the coast, as well as fresh water sources create prime locations for both seasonal processing sites and/or stable, long-term habitation. Therefore, the archaeological sensitivity for prehistoric archaeological resources is considered high.

With regards to historic-era archaeological resources, the review of historic documentation (the background records search), as well as the field survey, did not identify any historic resources. No historic-era archaeological resources were observed during the field survey.

Discussion

a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

No Impact. Based on the records search and literature review or the field survey, no historical resources were identified within the Project area; therefore, the Project would not cause a substantial adverse change in the significance of a historical resource.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less Than Significant with Mitigation Incorporated. No indications of archaeological resources were noted during field surveys, and it is unclear if deposits—intact or lacking integrity—still exist within the current Area of Potential Effect (APE). Archaeological resources are not anticipated to be discovered during Project activities. If, however, such resources are discovered, implementation of **Mitigation Measure CUL-1** would reduce potential impacts to a less-than-significant level.

Mitigation Measure CUL-1: Discovery of Prehistoric or Historical Archaeological

Materials. If deposits of prehistoric or historical archaeological materials are discovered during non-monitored Project activities in the eastern portions of the Project alignment, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted, if one is not present, to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The City shall also be notified. Project personnel shall not collect or move any archaeological materials. It is recommended that adverse effects to the finds be avoided by Project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated to determine if they qualify as a historical resource or unique archaeological resource, or as historic property. If the deposits do not so qualify, avoidance is not necessary. If the deposits do so qualify, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation may consist of, but is not limited to, recovery and analysis of the archaeological deposit; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Educational public outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological deposits discovered. The report shall be submitted to the City and the Northwest Information Center (NWIC).

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant with Mitigation Incorporated. The proposed Project is located within the Late Pleistocene Alluvium geologic unit (City of Santa Cruz 2011: Figure 4.9-5). Based on literature review, this geologic unit is known to contain fossils (City of Santa Cruz 2011:4.9-14). There is some potential that paleontological resources could be discovered during excavation, resulting in a potentially significant impact. In the event that paleontological resources are encountered, implementation of **Mitigation Measure CUL-2** would reduce impacts to a less-than-significant level.

Mitigation Measure CUL-2: Discovery of Paleontological Resources. If paleontological resources are encountered during Project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Adverse effects to such deposits shall be avoided by Project activities. Paleontological resources are considered significant if they may provide new information regarding past life forms, paleoecology, stratigraphy, or geological formation processes. If found to be significant, and Project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City, and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.

d) *Disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant with Mitigation Incorporated. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority. There is no indication that human remains are present within or along the Project alignment. However, a potentially significant impact could occur if previously undiscovered human remains were encountered during excavation. Implementation of **Mitigation Measure CUL-3** would ensure that potential impacts to human remains, should they be encountered, would be reduced to a less-than-significant level.

Mitigation Measure CUL-3: Discovery of Human Remains. In the event that human remains are encountered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City and the NWIC.

VI. GEOLOGY AND SOILS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as described 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The City is situated on the southwestern slope of the central Santa Cruz Mountains, part of the Coast Ranges physiographic province of California. The northwest-southeast structural grain of the Coast Ranges is controlled by a complex of active faults within the San Andreas fault system. Southwest of the San Andreas fault, the Coast Ranges, including the Santa Cruz Mountains, are underlain by a large, northwest-trending, fault-bounded, elongated prism of granitic and metamorphic basement rocks. The granitic and metamorphic basement is Cretaceous in age, or older, and is overlain by a sequence of dominantly marine sedimentary rocks of Paleocene to Pliocene age and non-marine

sediments of Pleistocene and Holocene age. The older sedimentary rocks are moderately to strongly deformed, with steep-limbed folds and several generations of faults associated with uplift of the Santa Cruz Mountains (City of Santa Cruz 2011).

The site is underlain by Quaternary Age lowest emergent coastal terrace deposits and basin deposits. There are no active faults within the City, and the nearest active fault is the Monterey Bay-Tularcitos (Monterey Bay section) fault, approximately 2 miles north of the Project alignment. The Monterey Bay-Tularcitos has a Maximum Moment Magnitude (Mmax) of 7.3.

Discussion

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
- i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Less Than Significant Impact. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. There are no formally recognized faults in Santa Cruz. The City lies within 15 miles of at least six major seismic faults and fault system, including the San Andreas, Zayante, Ben Lomond, San Gregorio, Butano, and the Monterey Bay Fault Zone (City of Santa Cruz 2012a:91). No active or potentially active faults have been mapped at or along the Project site; therefore, the potential for fault rupture at the site is low and the impact is less than significant.

- ii. *Strong seismic ground shaking?*

Less Than Significant with Mitigation Incorporated. The Project alignment is in a seismically active part of California which is subject to strong seismic ground shaking. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is typically the major cause of damage in seismic events. The extent of ground-shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The City Local Hazard Mitigation Plan identifies that the Hayward, Calaveras, San Gregorio, and San Andreas faults are all considered historically active and even a moderate earthquake in the Santa Cruz area could result in deaths, property and environmental damage (City of Santa Cruz 2013:35). A potentially significant impact could occur if the proposed Project was not designed to withstand ground shaking due to an earthquake. Implementation of **Mitigation Measure GEO-1**, described below, would reduce potential geotechnical impacts related to ground shaking to a less-than-significant level.

Mitigation Measure GEO-1: Geotechnical Concerns. The Project shall be constructed using the requirements of the current applicable codes to minimize any geophysical risks associated with construction of the Project. These recommendations are as follows:

- A geotechnical engineer shall be retained to review the geotechnical aspects of the project plans and structural calculations, as appropriate to evaluate if they are in general conformance with the intent of the geotechnical recommendations.

- A geotechnical engineer shall be retained to observe the geotechnical aspects of construction, particularly grading, installation of the helical piers, footing excavations, subsurface drainage installation, over excavations and placement and compaction of select fill or backfill, and to perform appropriate field and laboratory testing, as applicable.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant with Mitigation Incorporated. Liquefaction is the transformation of loose water-saturated granular materials (such as sand or silt) from a solid to a fluid-like state due to earthquake shaking or other rapid loading. Liquefaction can lead to ground failure and has been observed within the City during the 1989 Loma Prieta Earthquake. The Project site is not located in an area identified as potentially vulnerability to liquefaction (City of Santa Cruz 2013:35). The Project site is, however, located adjacent to an area that is potentially vulnerable to liquefaction. The area near Neary Lagoon is potentially vulnerable to liquefaction. Implementation of **Mitigation Measure GEO-1**, described above, would reduce potential geotechnical impacts related to liquefaction to a less than significant level.

iv. Landslides?

No Impact. The Project site is not located in a potential slide threat area, as shown in the City Local Hazard Mitigation Plan (City of Santa Cruz 2013:111). The urban center of Santa Cruz is at relatively low risk for landslides, although they do occur on steeper slopes within the City (City of Santa Cruz 2013: 114). The Project site is not located on or near steep slopes. The Project is relatively flat and is therefore not subject to landslides. Implementation of the proposed Project would not adversely impact persons or structures due to landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction would involve disruption of soil surfaces during excavation and would have the potential to cause erosion. The Project will be required to comply with the compliance measures in the Caltrans NPDES Statewide Stormwater Permit (Order No. 2012-0011-DWQ), Caltrans' Storm Water Management Plan (SWMP), and the Construction General Permit (Order No. 2009-0009-DWQ, and amended by Order No. 2012-0006-DWQ). Both NPDES permits require implementation of a stormwater pollution prevention plan (SWPPP) and erosion control BMPs. The Caltrans' SWMP identifies a list of BMPs that could be implemented to control sediment and erosion, including using fiber rolls, geotextiles, erosion blankets, and hydro seeding (Caltrans 2016:F-5 to F-10). Furthermore, the Geotechnical Investigation for the Project identifies that the surface soils are classified as having a moderate potential for erosion and, therefore, the finished ground surface (other than the trail) should be planted with ground cover and continually maintained to minimize surface erosion (RRM Design Group 2015:13). Because erosion would be minimized during construction by implementing BMPS, as required by NPDES permits and because the affected area would be hydro seeded after construction has been completed, the erosion impact would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant with Mitigation Incorporated. As described above, the potential for hazard from landslide and liquefaction is low. Therefore, the potential for liquefaction induced lateral spreading is also low. The impact is potentially significant. Implementation of **Mitigation Measure GEO-1**, described above, would ensure that unstable soil conditions such as liquefaction and lateral spreading would be mitigated as part of the design and construction of the proposed Project.

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?*

No Impact. The Santa Cruz Local Hazard Mitigation Plan indicates that the City is not affected by expansive soils (City of Santa Cruz 2013:29). The proposed Project would, therefore, not be located on expansive soils and would not result in impacts associated with being located on expansive soils.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

No Impact. Septic tanks and alternative wastewater disposal systems would not be installed on the Project site. Therefore, implementation of the proposed Project would not result in impacts to soils associated with the use of such wastewater treatment systems.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS.				
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) that contribute to global climate change have a broader global impact. Global climate change is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth’s atmosphere. The principal GHGs contributing to global climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space. Among the potential implications of global climate change are rising sea levels, and adverse impacts to water supply, water quality, agriculture, forestry, and habitats. In addition, global warming may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health. Like most criteria and toxic air pollutants, much of the GHG production comes from motor vehicles. GHG emissions can be reduced to some degree by improved coordination of land use and transportation planning on the city, county and sub-regional level, and

other measures to reduce automobile use. Energy conservation measures can contribute to reductions in GHG emissions.

Discussion

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?*

Less Than Significant Impact. GHG emissions associated with implementation of the proposed Project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust.

Long-Term GHG Emissions. The proposed Project would provide a trail in the City and would not generate GHGs because the trail is not anticipated to generate vehicle trips and peak hour trip changes as a result of the Project would be imperceptible. The proposed Project would not cause a long-term increase in GHG emissions. No impact would occur from the operation of the Project.

Short-Term GHG Emissions. Construction would produce combustion emissions from various sources. During site preparation and construction of the Project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. As described in the MBSST Network Final EIR (refer to Section 4.7, page 4.7-19), construction emissions are not anticipated to exceed thresholds and no GHG emissions as a result of operations would be negligible. Therefore, the Project's contribution to GHG emissions would be less than significant.

- a) *Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

No Impact. The City has developed a Climate Action Plan to meet State land use requirements pertaining to climate change, achieve the policies identified in the General Plan, and accomplish GHG reduction goals set by the City Council. The Climate Action Plan identifies and supports the MBSST Network as a project that would help meet the Climate Action Goal of reducing town car trips by 30 percent (City of Santa Cruz 2012b:41,44). The Project is a component of the MBSST Network. The Project would, therefore, be consistent with the Climate Action Plan and no impact would occur.

Implementation of the Climate Action Plan will meet and exceed State requirements as outlined in AB 32, which requires limits on greenhouse gas emissions from all major industries. Because the Project does not conflict with the Climate Action Plan, the Project would also not conflict with AB 32. No impact would occur from conflicts with AB 32.

VIII. HAZARDS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Affected Environment

Land uses along the Project alignment include commercial, industrial, and residential uses. Soils in the existing rail ROW could be contaminated with petroleum by-products, lead from leaded fuel,

commercial and industrial byproducts, and/or household hazardous wastes such as cleaning products from stormwater runoff from existing and historic land uses.

According to the California Department of Toxic Substances Control (DTSC) EnviroStor website and the Department of Toxic Substance Control (DTSC) EnviroStor website, no open-hazardous materials sites are found in the Project alignment. Table 3-1 identifies the list of open hazardous sites within the 0.25 mile of the Project alignment.

Table 3-1. Open Hazardous Sites within 0.25 mile of the Proposed Project

Name	Contaminant	Medium	Location	Distance	Status
Santa Cruz Industries	Volatile Organic Compounds	Soil and Groundwater	411 Swift St. Santa Cruz, CA.	1200 feet south	Open-Remediation as of 5/13/2010. Soil vapor extraction was conducted and, more recently, several phases of groundwater injection were conducted. 2014 annual groundwater monitoring data indicates that reductive dechlorination at MW-5 continues. Possibility that persulfate remains in the source area.
Rudolph Property (Leaky Underground Storage Tank)	Benzene, gasoline	Soil and Groundwater	2429 Mission St. Santa Cruz, Ca. 95060	400 feet north	Open-Remediation as of 10/19/2016
Almar Cleaners	Tetrachloroethylene (PCE)	Groundwater	857 Almar Avenue Santa Cruz, CA 95060	550 feet north	Open - Verification Monitoring as of 11/22/2010. Low concentration of chlorinated hydrocarbons were detected and soil excavation occurred in April 2009.
Gas & Shop (Leaky Underground Storage Tank)	Benzene, Diesel, Ethylbenzene, Gasoline, Mtbe/Tba/ Other Fuel Oxygenates, Toluene, Total Petroleum Hydrocarbons (Tph),	Groundwater and Soil	2003 Mission Street Santa Cruz, CA 95060	900 feet north	Open - Eligible for Closure as of 4/19/2016

Name	Contaminant	Medium	Location	Distance	Status
	Waste Oil/ Motor/Hydraulic/ Lubricating, Xylene				
Herco Gas Station	Gasoline	Groundwater	1725 Mission Street Santa Cruz, Ca 95060	1300 feet north	Open – Remediation as of 12/10/2007
Wastewater Treatment Plant (Voluntary Cleanup)	Diesel	None Specified	110 California Street Santa Cruz, CA 95060	100 feet	Open – Inactive as of 1/1/1975

Source: California Department of Toxic Substance Control 2017 and State Water Resources Control Board 2017

Discussion

- 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. After Project construction, no routine transport or disposal of hazardous materials would be associated with the Project. While gas and diesel fuel would typically be used by construction vehicles, Best Management Practices (BMPs) would be utilized to ensure that no construction-related fuel hazards occur. Use, storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities would be performed in accordance with existing local, state, and federal hazardous materials regulations. Therefore, implementation of the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact is considered less than significant.

- 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 with Mitigation Incorporated. As described in Section VII(a) above, operation of the Project would not require routine use of hazardous materials; therefore, no hazards or hazardous materials impacts related to long term operation of the Project are anticipated. However, construction activities would include the use of limited quantities of ordinary equipment fuels and fluids. In the unlikely event of a spill, fuels would be controlled and disposed of in accordance with applicable regulations. Furthermore, open hazardous sites are located within 0.25 mile of the Project site. If any of the hazardous materials from these open hazardous sites migrated to the Project site, and were discovered as part of the

Implementation of **Mitigation Measure HAZ-1** would ensure that handling of or discovery of hazardous materials during construction activities would not create a hazard to the public or the environment, thereby reducing potential impacts to a less-than-significant level.

As Described in Impact III(b), construction could potentially result in air quality emissions. These emissions could pose a potentially significant risk to receptors within the vicinity; however, impacts would be minimized to less than significant levels after implementation of air quality BMPs, per **Mitigation Measure AIR-1**.

Mitigation Measure HAZ-1: Handling or Discovery of Hazardous Materials During

Construction. Project construction plans shall include emergency procedures for responding to hazardous materials releases for materials that would be brought onto or discovered at the site, as part of construction activities. If evidence of contaminated soils is discovered during construction, work in the vicinity of the contaminated area shall cease until the soils are characterized or remediated. The emergency procedures for hazardous materials releases shall include the necessary personal protective equipment, spill containment procedures, and training of workers to respond to accidental spills/releases. The Contractor shall be required to have on hand at all times adequate absorbent materials and containment booms to handle a spill equivalent to the largest container of fuels or oil in their possession.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?*

Less Than Significant with Mitigation Incorporated. The closest school to the Project alignment is Bay View Elementary School, which is approximately 0.2 mile from Segment E of the Project. As described in Impact VIII(b) above, potential impacts from the potential accidental release of hazardous materials, the potential release of contaminants found in soil and groundwater, and the potential air quality emissions could be significant. However, implementation of **Mitigation Measures HAZ-1** and **AIR-1** would ensure that impacts would be less than significant after mitigation. Impacts to Bay View Elementary School would be less than significant after mitigation.

- 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. The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

- 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 for people residing or working in the project area?*

No Impact. The Project site is not located within an airport land use plan, or within two miles of a public airport or public use airport. The Watsonville Municipal Airport is the only public airport located within Santa Cruz County. The Watsonville Municipal Airport is over 13 miles away from the Project site. Therefore, the proposed Project would not result in a safety hazard for people residing or working in the Project area. No impact would occur.

- f) *For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The Project site is not in the vicinity of a private airstrip. Therefore, implementation of the proposed Project would not expose persons to airport-related hazards. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The City of Santa Cruz General Plan does not identify specific evacuation routes but identifies policies to ensure emergency preparedness (City of Santa Cruz 2012a). In the event that road lanes are temporarily closed during construction, emergency vehicles would be waved through the construction site. Furthermore, after completion of the Project, emergency access would be similar to the existing conditions. The impact to emergency access would be less than significant.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. The Project site is in a developed area, and the proposed Project is a new trail that would not include flammable materials or any structures for human occupation. The Project would, therefore, not expose people or structures to significant loss, injury, or death from wildfires.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY.				
Would the Project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY.				
Would the Project: runoff?				
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project is located within the Baldwin Wilder watershed, which is located southeast of the Majors Creek watershed and west of the San Lorenzo River watershed. Spanning approximately 20 square miles, the drainage area is comprised of Baldwin Creek, Lombardi Gulch, Sandy Flat Gulch, Old Dairy Gulch, Wilder Creek, Moore Creek, and the Arroyo Seco. Generally, the Project drains towards the Arroyo Seco or into the City storm drain system.

The Project is not located within a 100-year floodplain. The closest 100-year floodplain is San Lorenzo River floodplain, which is located approximately 0.5 miles north of the end of the trail at Segment E. The San Lorenzo River watershed has a drainage area of 138 square miles and is the largest watershed existing entirely within Santa Cruz County. Beginning in the Santa Cruz Mountains, the San Lorenzo River watershed is comprised of a 29-mile long main stem with 9 principal tributaries: Branciforte, Carbonera, Zayante, Bean, Fall, Newell, Bear, Boulder, and Kings Creek. With the exception of urban area pockets, the majority of the watershed is forested. The San Lorenzo River is on the 2010 Clean Water Act Section 303(d) List of Water Quality Limited Segments for chlordane, chlorpyrifos, nutrients, pathogens, polychlorinated biphenyls (PCBs), and sedimentation.

In December 1955, a record flow of 30,400 cubic feet per second was recorded for the San Lorenzo River. During this storm event, flooding reached depths as high as 6.5 feet and inundated 410 acres of the City. In 1958, the United States Army Corps of Engineers (USACE) constructed flood control levees, channel improvements, and bank protections as a response to this storm event. No flooding was reported when similar flows occurred in January 1982. Levees and floodwalls along the San Lorenzo River were rebuilt in 2004 by USACE.

Hydraulic data for the Arroyo Seco is undefined.

According to the geotechnical investigation, groundwater was encountered at depths ranging from 6 to 14 feet. Actual groundwater levels may be higher or lower than what was encountered. Groundwater depth will vary by location and will fluctuate with variations in rainfall, runoff, irrigation and other changes to the conditions existing at the time measurements were made (RRM Design Group 2015:4-5).

Discussion

a) *Violate any water quality standards or waste discharge requirements?*

Less Than Significant with Mitigation Incorporated. Development of the proposed Project would result in a small increase in the amount of impervious surface area and an associated increase in the rate and volume of stormwater runoff from the site. The impact could be potentially significant and the City would be required to comply with the Caltrans NPDES Statewide Stormwater Permit (Order No. 2012-0011-DWQ) and the Construction General Permit (Order No. 2009-0009-DWQ, and amended by Order No. 2012-0006-DWQ) to minimize water quality impacts. In addition, **Mitigation Measure HYD-1** would require the City to prepare a drainage plan to ensure that proposed storm drainage systems are adequate to channel runoff from the proposed Project.

As described in Impact VI(b), construction of the proposed Project would require excavation that could result in erosion, which could affect water quality. Implementation of BMPs described in the Caltrans SWMP and as required by compliance with the Caltrans NPDES Statewide Stormwater Permit (Order No. 2012-0011-DWQ) and the Construction General Permit (Order No. 2009-0009-DWQ, and amended by Order No. 2012-0006-DWQ). Water quality impacts due to erosion would be less than significant after implementation of BMPs.

Construction of the proposed Project would require the use of oils and other petroleum products that could pose a potential impact to water quality if these hazardous materials were spilled during construction. As described in Impact VIII(b), implementation of **Mitigation Measure HAZ-1** would require emergency procedures for responding to hazardous materials releases. The potential impact to water quality from an accidental spill would be less than significant after mitigation.

If dewatering is necessary areas where groundwater is encountered within the planned depth of excavation, depending on surface and groundwater levels at the time of construction, a permit for discharge of the extracted groundwater would be obtained from the Regional Water Quality Control Board (RWQCB). This discharge shall be consistent with RWQCB requirements and as such would not result in a violation of water quality standards or waste discharge requirements.

Mitigation Measure HYD-1: Drainage Plan. A drainage plan for the site shall be prepared to ensure that proposed storm drainage systems are adequate to channel runoff from the proposed Project.

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Less than Significant Impact. The Project would not result in the construction of large areas of impervious surfaces that would prevent water from infiltrating into the groundwater nor would it result in direct additions or withdrawals to existing groundwater. Groundwater was encountered at

depths ranging from 6 to 14 feet during the geotechnical investigation and excavation; therefore, there is the potential that groundwater could be encountered during construction. De-watering may be required if groundwater is encountered during excavation. However, no groundwater would be extracted per se. Dewatering, if necessary, would be conducted in compliance with the permit conditions of the RWQCB.; therefore, the impact to groundwater from dewatering would be less than significant.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

Less Than Significant with Mitigation Incorporated. Construction of the Project would require 1 drainage crossing (Arroyo Seco) via construction of a clear span bridge in Section A, installation of one 1 new storm drain inlet in Section B, and the extension of 3 culverts in Segments D and E. Installation of the clear span bridge would avoid impacts to the drainage, therefore, no impact would occur from the clear span bridge. The installation of a storm drain inlet and the extension of 3 culverts would be needed to accommodate the Project and would help maintain the existing drainage patterns. **Mitigation Measure HYD-1** would be implemented to ensure that proposed storm drainage systems are adequate to channel runoff from the proposed Project. Adequate storm drainage will ensure that erosion is minimized; therefore, the impact would be less than significant after mitigation.

During construction, BMPs would be implemented so that on-site and off-site erosion sedimentation would be controlled to the extent practicable per the Caltrans SWMP and in compliance with the Caltrans NPDES Statewide Stormwater Permit (Order No. 2012-0011-DWQ) and the Construction General Permit (Order No. 2009-0009-DWQ, and amended by Order No. 2012-0006-DWQ). Erosion impacts due to construction would be less than significant.

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

Less Than Significant with Mitigation Incorporated. Development of the proposed Project would result in a small increase in the amount of impervious surface area and a small increase in rate and volume of stormwater runoff from the site. The proposed Project would also require 1 drainage crossing (Arroyo Seco) via construction of a clear span bridge in Section A, installation of one 1 new storm drain inlet in Section B, and the extension of 3 culverts in Segments D and E. Implementation of **Mitigation Measures HYD-1** would ensure adequate storm drainage, which would avoid flooding impacts. The flooding impact would be less than significant after mitigation.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant with Mitigation Incorporated. See Response VIII(d).

- f) *Otherwise substantially degrade water quality?*

Less Than Significant with Mitigation Incorporated. See Response VIII(a).

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. No housing units are proposed as part of the Project; therefore, the Project would not result in an impact associated with placing housing within a 100-year flood hazard area (FEMA 2012).

- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

No Impact. The Project will not be located within a 100-year flood hazard area; therefore, no structures would impede or redirect flood flows. No impact would occur.

- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?*

No Impact. Pursuant to the recent Supreme Court case decision in the CBIA vs. BAAQMD case, CEQA does not require an analysis of how the existing environmental conditions will affect a Project's residents or users unless the Project would exacerbate those conditions. Therefore, when discussing impacts of the environment on the Project, such as exposing people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, the analysis will first determine if there is a potential for the Project to exacerbate the issue. If evidence indicates it would not, then the analysis will conclude by stating such. If it would potentially exacerbate the issue, then evidence is provided to determine if the exacerbation would or would not be significant.

According to the Santa Cruz County Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz 2015:129), the Project is located near but nothing within the dam failure inundation zone for Newell Creek Dam. The Project would not be located near any dams and would not affect any dams; therefore, conditions under the Project would be similar to the existing conditions and would not increase the potential of dam failure.

Levees exist around the San Lorenzo River and were constructed to minimize the risk of flooding. Maps of the levee failure inundation areas are not currently available; however, due to the proximity of the Project from the San Lorenzo River, it is likely that the Project trail would be inundated in the event of a levee failure. The Project would not include any activities that would involve these levees; therefore, conditions under the Project would be similar to the existing conditions and would not increase the potential of levee failure.

Although the Project is expected to increase bike and pedestrian traffic, it is not expected to substantially increase the overall presence of people in the Project area. The possibility of exposing people or structures to a substantial risk of loss, injury, or death involving flooding as a result of dam or levee failure is highly unlikely. Therefore, operations of the Project would not exacerbate the risk dam or levee failure.

- j) Inundation by seiche, tsunami, or mudflow?*

No Impact. Pursuant to the recent Supreme Court case decision in the CBIA vs. BAAQMD case, CEQA does not require an analysis of how the existing environmental conditions will affect a project's residents or users unless the project would exacerbate those conditions. Therefore, when discussing impacts of the environment on the Project, such as exposing people or structures to a significant risk

of loss, injury, or death involving inundation by seiche, tsunami, or mudflow, the analysis will first determine if there is a potential for the Project to exacerbate the issue. If evidence indicates it would not, then the analysis will conclude by stating such. If it would potentially exacerbate the issue, then evidence is provided to determine if the exacerbation would or would not be significant.

According to the Tsunami Inundation Map for Emergency Planning (California Emergency Management Agency 2009), the end of Segment E is located near but not within the tsunami inundation zone. Conditions under the Project would be similar to the existing conditions and would not increase the potential of site inundation.

Other than the Pacific Ocean, there are no nearby waterbodies that could result in inundation by seiche. Due to the relatively flat topography of the Project area, landslides and slope failure are not considered hazards, and the Project area is not within a designated landslide area. Therefore, the Project area would not be subject to inundation by seiche or mudflows.

Although the Project is expected to increase bike and pedestrian traffic, it is not expected to substantially increase the overall presence of people in the Project area. The possibility of exposing people or structures to a substantial risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow is highly unlikely. In addition, people would be given sufficient warning to evacuate the Project site by the West Coast and Alaska Tsunami Warning Center, which monitors earthquakes and issues tsunami warnings when a tsunami is forecast to occur. Therefore, operations of the Project would not exacerbate the risk of seiche, tsunami, or mudflow.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING.				
Would the Project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The City of Santa Cruz’s General Plan designates Sections A, B, and a portion of Section C of the Project alignment as Industrial and the remaining portion of Section C and Sections D and E as Low Density Residential. The proposed Project would be located in the following zones: IG/PER2 (General Industrial/Performance) and R-1 (Multiple Residence). The Project alignment would be located within the Santa Cruz Branch Rail Line right-of-way.

Discussion

a) *Physically divide an established community?*

No Impact. The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. The proposed Project would provide a new trail. The Project is a component of the MBSST Network, which would ultimately connect various areas along 50 miles of the Santa Cruz coast. The proposed Project would ultimately increase access along communities and would not physically divide an established community.

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

Less Than Significant Impact. The City of Santa Cruz General Plan (2012a), the City Municipal Code, the MBSST Master Plan (Santa Cruz County Regional Transportation Commission 2014), the City Active Transportation Plan (City of Santa Cruz 2017), and the 2014 Santa Cruz Regional Transportation Plan (County of Santa Cruz 2014) are the primary land use plans containing policies and regulations applicable to the Project. The proposed Project is an allowable land use according to the general plan land use and zoning designations for the Project site.

The City of Santa Cruz identifies goals to improve mobility in Chapter 5 of the General Plan (City of Santa Cruz 2012a:51). The construction of a bike trail would be consistent with the General Plan and would help the City meet their mobility goals. The Project would meet the following goals:

- Goal M-1: Land use patterns, street design, parking, and access solutions that facilitate multiple transportation alternatives.
- Goal M-2: A safe, sustainable, efficient, adaptive, and accessible transportation system.
- Goal M-4: A citywide interconnected system of safe, inviting, and accessible pedestrian ways and bikeways

As described in the Biological Resources and Noise sections, the proposed Project would not conflict with ordinances in the Municipal Code and would follow all requirements to comply.

The City Active Transportation Plan identifies the MBSST project as a key type of improvement and notes that the Active Transportation Plan was undertaken in the context of the policies and standards of the MBSST Master Plan (City of Santa Cruz 2017:80,117). The Project is a component of the MBSST Network. The proposed Project is, therefore, consistent with the planning in the City Active Transportation Plan.

The 2014 Santa Cruz Regional Transportation Plan also identifies the MBSST as a project underway that would contribute to the transportation network (County of Santa Cruz 2014:2-18). The Project is a component of the MBSST Network. The proposed Project is, therefore, consistent with the planning in the 2014 Santa Cruz Regional Transportation Plan.

The proposed Project is consistent with all the goals, policies and ordinances of the relevant planning documents with implementation of the mitigation measures contained in this document. Impacts related to applicable plans, policies, or regulations would, therefore, be less than significant.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. The Project site is not located in an area that is managed by a Habitat Conservation Plan or Natural Community Conservation Plan; therefore, the Project would not conflict with a Habitat Conservation Plan or Natural Community Conservation Plan.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES.				
Would the Project:				
a. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat and oil bearing rock, but excluding geothermal resources, natural gas and petroleum. Rock, sand, gravel and earth are also considered minerals by the California Department of Conservation when extracted by surface mining operations. The Division of Mines and Geology of the California Department of Conservation prepared a report in 1987 and an updated report in 2000 that identified mineral land classifications in the San Francisco and Monterey Bay Area (California Department of Conservation 1987, 2000). The 2000 report identifies five areas within Santa Cruz County that contain extractable aggregate deposits. These five areas are named Sector A, B, C, L, and M (California Department of Conservation 2000:10-11). Table 3-2 shows the type of mineral deposits within the Project vicinity and their distance from the Project. Sector C is the closest mineral deposit (sandstone) from the Project. No known mineral resources are located on the Project site.

Table 3-2. Mineral Deposits in the Project Vicinity

Sector Name	Mineral Deposit	Approximate Distance from Project
A	Quartz diorite	6 miles north of the Project
B	Sandstone	6 miles north of the Project
C	Sandstone	1.8 miles west of the Project
L	Quartz diorite and siltstone	9 miles north-east of the Project
M	Fluvial sand and gravel	10 miles north-east of the Project

Source: California Department of Conservation 2000:10-11

Discussion

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. No known mineral resources are located on the Project site. The closest mineral resource is a sandstone deposit located 1.8 miles west of the Project site. Because no known mineral resources are located on the Project site, the proposed Project would not result in the loss of availability of a known mineral resource.

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. Other than the mineral resources identified by the Division of Mines and Geology of the California Department of Conservation, no additional locally-important mineral resources have been identified in the City of Santa Cruz General Plan or the County of Santa Cruz General Plan. The proposed Project would not have an impact on any locally-important mineral resources.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE.				
Would the Project:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A *decibel* (dB) is a unit of measurement that indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3.0 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3.0 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness. Sound intensity is normally measured through the *A-weighted sound level* (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive.

The Project site is located near residential, commercial, and industrial areas. The noise in the Project site would be typical of those land uses.

Construction noise is prohibited from the hours of 10:00 p.m. to 8:00 a.m., per Chapter 9.36 of the City Municipal Code.

Discussion

- a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant with Mitigation Incorporated. The long-term operational and short-term construction noise impacts of the proposed Project are described below.

Long-Term Operational Impacts. The primary purpose of the proposed Project is to provide a new trail in the City. The Project trail would not accommodate vehicular traffic. The addition of the trail would add noise sources such as human voices or barking dogs. However, the noise sources would not typically be loud enough to disturb sensitive receptors in the Project vicinity. Therefore, the long-term, operational phase of the proposed Project would not expose persons to or generate noise levels in excess of standards in the local general plan or noise ordinance.

Short-Term (Construction) Impacts. Chapter 9.36 of the City Municipal Code establishes the standards for construction noise. The Municipal Code states that “No person shall between the hours of 10:00 p.m. and 8:00 a.m. make, cause, suffer or permit to be made any offensive noise (1) which is made within one hundred feet of any buildings or place regularly used for sleeping purposes, or (2) which disturbs, or would tend to disturb, any person within hearing distance of such noise.” Construction for the Project is limited to the hours between 8:00 a.m. and 5:00 p.m. Construction of the proposed Project would not occur during the prohibited hours described in the Municipal Code. The Project would, therefore, not conflict with the standards established in the Municipal Code and no impact would occur during construction. See response XII(d) for a discussion of the noise levels that would be generated during construction.

- b) *Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact. Construction of the proposed Project would require some equipment that could potentially generate groundborne vibration, such as a jackhammer. These activities would, however, be short-term impacts that would cease after construction has been completed. The Project would, therefore, not generate excessive groundborne vibration or groundborne noise levels. The impact would be less than significant.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact. As described in response XII(a), noise from the new trail would not result in a substantial permanent increase in noise levels in the Project vicinity above levels existing without the Project. The permanent impact to ambient noise levels would be less than significant.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant with Mitigation Incorporated. Construction of the Project would require grading and earthwork activities that could generate a temporary increase in ambient noise levels. Construction noise would be temporary, infrequent, and would cease after construction has been completed. As described in impact XII(a), construction would fall within the allowable hours dictated by the City Municipal Code. Implementation of **Mitigation Measure NOISE-1** will ensure that noise levels are reduced by assuring that equipment is maintained, including mufflers. The impact would be less than significant with **Mitigation Measure NOISE-1**.

Mitigation Measure NOISE-1: All equipment shall be maintained in proper working order, including proper muffling.

- 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 expose people residing or working in the project area to excessive noise levels?*

No Impact. The Watsonville Municipal Airport is the only public airport located within Santa Cruz County. The Watsonville Municipal Airport is over 13 miles away from the Project site. The Project site is not located within an Airport Land Use Compatibility Plan. Due to the Project's distance from an airport, the Project would have no impact from exposing people residing or working the Project area to excessive noise levels.

- f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The proposed Project is not located within the vicinity of a private airstrip; therefore, the Project would result in no impacts from exposing people residing or working the Project area to excessive noise levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING.				
Would the Project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Existing land uses in the Project area consist of the Santa Cruz Branch Rail Line, which operate freight trains; local roadways; and commercial and industrial development, such as New Leaf Market. Residential developments do not occur directly within the Project area but are adjacent to the Project site and within the vicinity.

Discussion

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. No housing, new commercial areas, or new industrial areas are proposed as a part of the Project. The Project would not result in direct population growth from the operation of the Project. During construction, a construction crew would be required, which could potentially and insubstantially increase the population of the City. The potential growth from the construction crew would be minimal because some of the construction workers would live in the City and because a large number of construction workers would not be needed. The potential direct impact to population growth would be less than significant. The Project would not have any indirect impacts on population growth because the Project would not provide additional vehicle access or additional major infrastructure and would, therefore, not remove any barrier to population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project would be primarily located within the existing rail ROW with portions of the Project located within public streets (e.g., when the projects crosses public streets). In addition to these locations, the trail would require limited private land adjacent to the rail ROW to maintain minimum clearance from the rail tracks. None of these locations have houses and include New Leaf Market parcels and a small portion of one parcel at Almar Avenue. Permanent easements would be required from each of these locations. No property acquisition or structure removal would be

required. No housing would be displaced as a result of the proposed Project; therefore, no impact would occur.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. As described in Response XIII(b) above, the Project would not result in the displacement of housing. Therefore, no people would be displaced and no impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES.				
Would the Project:				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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:				
i. Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project site is in an urban area served by existing public services.

Police Protection. Police protection is provided to the City by the Santa Cruz Police Department (SCPD). In addition, the City has mutual aid agreements with county law enforcement (Sheriff’s Office, Capitola, Scotts Valley, Watsonville, California Highway Patrol, State Parks and UCSC Police Departments) (City of Santa Cruz 2011). The City’s police station is located at 155 Center Street, approximately 0.5-mile north east of Section E of the Project alignment.

Fire Protection. The City Fire Department provides fire protection and emergency response for all areas within the City limits and maintains mutual aid agreements with other fire districts in the County, University of California at Santa Cruz (UCSC) and California Department of Forestry (CDF) to provide fire protection to areas surrounding the City. The City serves the Paradise Park subdivision through an annexation to the service area that was approved by the Local Agency Formation Commission of Santa Cruz County (City of Santa Cruz 2011). The closest fire station to the Project

alignment is Station 3, located at 335 Younglove Avenue, approximately 0.1 mile to the north of Section C.

Schools. Schools and educational services are provided to City residents by the Santa Cruz City Schools District (SCSD), as well as a number of private schools, for grades K-through 12 (City of Santa Cruz 2011). The closest school to the Project is Bay View Elementary School, approximately 0.2 miles from Section E.

Parks. For a discussion of parks, see Section XV. *Recreation*.

Discussion

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, police protection, schools, parks, other public facilities?*

No Impact. The proposed Project would not result in an increase in population or facilities that would require the provision of fire or police services, schools, parks, or other public facilities, or result in the need for physically altered facilities. The demand for public services would be the same as under existing conditions after the construction of the proposed Project. Therefore, no impact on public services would occur from the Project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION.				
Would the Project:				
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 will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The City is served by a network of community and neighborhood parks, open spaces, and beaches. The City manages 18 neighborhood parks, 5 community parks, and 3 greenbelt open spaces. Furthermore, the City is served by beaches that are managed by the State of California, including Lighthouse Field State Beach, Natural Bridges State Beach, Santa Cruz Mission State Historic Park, Twin Lakes State Beach, and Seabright State Beach. The closest parks to the Project site are La Barranca Park and Neary Lagoon Park.

Discussion

- 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?*

Less Than Significant Impact. The Project would not increase the use of existing recreational facilities during construction or during operation of the Project.

Construction of the Project would not result in any direct impacts to parks or recreational facilities. The presence of equipment and the noise caused during construction could potentially result in less visitors using parks within the vicinity of the Project, including La Barranca Park and Neary Lagoon Park. Recreationalist could, however, use many of the other parks within the vicinity, including Lighthouse State Beach, Derby Park, Depot Park, and Garfield Park. The indirect impacts to nearby parks would not result in substantial people using other parks. Construction of the Project would, therefore not substantially increase the use of recreational facilities and the impact would be less than significant.

Operation of the Project would result in a trail that serves the recreational needs of residents in the City. Furthermore, once the MBSST project is completed, the Project would also play a part in serving the need of the region. The Project would serve a need for recreation and would, therefore, not increase demand for parks. The impact from operation of the Project would be less than significant.

- 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?*

Less Than Significant with Mitigation Incorporated. The Project would entail a bicycle trail that would serve as a recreational facility. As shown in this Initial Study, the Project could potentially result in some significant impacts on the environment; however, these impacts would be mitigated to less than significant levels with the mitigation identified in this Initial Study. Impacts would be less than significant after mitigation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC.				
Would the Project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non- motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC.				
Would the Project:				
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project site is bounded by railroad tracks on the north side of the proposed trail and industrial, commercial, and residential areas on the southern side of the proposed trail. The Project would cross a total of 12 roads (Swift Street, Fair Avenue, Almar Avenue, Seaside Street, Rankin Street, Younglove Avenue, Bellevue Street, Dufour Street, Palm Street, Lennox Street, Redwood Street, and Bay Street) and would incorporate pedestrian hybrid beacons and cross-bike facilities in the design of these crossings. Primary vehicle access to the Project site is provided via SR-1.

Discussion

- a) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*

Less Than Significant with Mitigation Incorporated. Both the 2014 Santa Cruz Regional Transportation Plan and the City Active Transportation Plan identify the MBSST as a project that would contribute to the transportation network (City of Santa Cruz 2017:80,117 and County of Santa Cruz 2014:2-18). Because the Project is a component of the MBSST, the Project would be in compliance with these transportation plans. After completion, the Project would not generate additional vehicle trips, but would increase the effectiveness of the circulation system by adding a new bicycle connection. A small increase in traffic would occur in the Project area during the

construction phase of the Project from construction vehicles and construction workers accessing the site. The Project may also require land lane closures during construction. A small increase in traffic and temporary lane closures could cause an increase in traffic during construction activities. Construction activities would be short-term and temporary. Implementation of **Mitigation Measure CIRC-1** would reduce potential impacts associated with lane closures to a less than significant level.

Mitigation Measure CIRC-1: Transportation Management Plan. Prior to construction, a transportation management plan (TMP) will be developed by the contractor for review and approval by the City or their consultants prior to the start of construction. The TMP will include specific measures to ensure safe access and detours during construction. The TMP will be implemented by the construction contractor throughout the construction period. The TMP will follow Caltrans' Transportation Management Plan Guidelines (2009) and provide alternate routes for any road closures.

- b) *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

Less Than Significant with Mitigation Incorporated. See XVI(a), above.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?*

No Impact. The Watsonville Municipal Airport is the only public airport located within Santa Cruz County and it is located over 13 miles from the Project site. The Project site is not located within an Airport Land Use Compatibility Plan that manages air traffic safety. Due to the distance to the nearest airport, the Project would not interfere traffic patterns. Furthermore, none of the Project components could possibly interfere with air traffic patterns. No helicopters or other equipment that could fly would be used during construction and the operation of a trail would not erect any structure that could potentially interfere with air traffic. The Project would, therefore, have no impact on air traffic levels that could cause a safety risk.

- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant with Mitigation Incorporated. No incompatible uses or hazardous design features are associated with operation of the proposed Project. The Project would involve 11 roadway crossings; however, the design of the Project, including pedestrian hybrid beacons and cross-bike facilities, would ensure that the impact would be less than significant.

During construction activities, a short-term increase in the potential for accidents involving motor vehicles, bicycles, and/or pedestrians could occur. Because of the temporary disruption to traffic flow, the potential removal of traffic lanes, the presence of construction equipment in the public ROW, and the localized increase in traffic congestion, drivers would be presented with unexpected driving conditions and obstacles, potentially resulting in an increase in automobile accidents. Implementation of **Mitigation Measure CIRC-1**, described above, would reduce potential impacts to a less than significant level.

e) *Result in inadequate emergency access?*

Less Than Significant Impact. The proposed Project is designed to provide a trail connection with a safe crossing for bicyclists and pedestrians, and emergency access would be similar to existing conditions after Project completion. During construction activities, there could be slight delays to emergency access due to temporary lane closures and construction vehicles accessing the Project site. However, construction activities would be short-term and temporary, and any emergency vehicles would be waved through during lane closures. Therefore, the proposed Project would not result in inadequate emergency access. The impact would be less than significant.

f) *Conflict with adopted polices, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

No Impact. As described in Impact XVI(a), the Project would help implement the 2014 Santa Cruz Regional Transportation Plan and the City Active Transportation Plan. The proposed Project would help meet the mobility goals of the City, including a citywide interconnected system of safe, inviting, and accessible pedestrian ways and bikeways (Goal M-4 in the City of Santa Cruz General Plan). The Project would be compatible with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, and would increase the performance and safety of such facilities. No impact would occur.

XVII. UTILITIES AND SERVICE SYSTEMS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XVII. UTILITIES AND SERVICE SYSTEMS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project site is in an urban area served by existing public services.

Water Supply, Wastewater, Solid Waste, Stormwater. The Santa Cruz Municipal Utilities provides customer service for water, sewer, and refuse and recycling services to the residents and business of the City. The City obtains all of its water from local sources. Most of the water comes from surface waters with a small amount coming from groundwater (City of Santa Cruz 2016a). Wastewater in Santa Cruz is treated at the Santa Cruz Wastewater Treatment Facility. The City storm drain system collects storm water runoff from City streets along gutters and through underground pipes to discharge into waterways and ocean.

Solid Waste. There are three permitted solid waste landfills within the County of Santa Cruz yards (CalRecycle 2017):

- The City of Santa Cruz Recovery Facility has a remaining capacity of 6,150,000 cubic yards.
- The City of Watsonville Landfill has a remaining capacity of 2,100,000 cubic yards.
- The Buena Vista Drive Sanitary Landfill in Watsonville has a remaining capacity of 3,303,629 cubic yards.

Gas and Electricity. Pacific Gas & Electric (PG&E) provides natural gas and electricity in the Santa Cruz area.

Communication Facilities. Pacific Bell and AT&T provides local telephone service to the Santa Cruz area.

Discussion

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less than Significant Impact. No wastewater would be generated by the Project. If dewatering is necessary in areas where groundwater is encountered, depending on surface and groundwater levels at the time of construction, a permit for discharge of extracted groundwater would be obtained from the RWQCB. This discharge shall be consistent with RWQCB requirements and as such would not result in a violation of water quality standards or waste discharge requirements.

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less than Significant Impact. The proposed Project would not require water or wastewater

treatment as no potable water and/or toilets would be provided as part of trail construction. Additional water may be needed for irrigation of proposed landscaping. However, such an increase in water demand would be minimal and would not require the construction of new wastewater treatment facilities or expansion of existing facilities. Therefore, this impact is considered less than significant.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant with Mitigation Incorporated. Construction of the Project would require installation of one 1 new storm drain inlet in Section B and the extension of 3 culverts in Segments D and E. In addition, development of the proposed Project would result in a small increase in the amount of impervious surface area and an associated increase in the rate and volume of stormwater runoff from the site. **Mitigation Measure HYD-1** would require the City to prepare a drainage plan to ensure that proposed storm drainage systems are adequate to channel runoff from the proposed Project. Implementation of **Mitigation Measure HYD-1** would ensure that no new storm water drainage facilities are required for the Project. The impact would be less than significant after mitigation.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Less than Significant Impact. As described in Impact XVII(b) above, the only potential water demand from the Project would be due to irrigation of proposed landscaping. The water demand from irrigation would be minimal because the landscaping that would be planted would be native species, per **Mitigation Measure AES-1**. Native species are adapted to the existing climate and, therefore, would require less water than non-native species that may not be adapted to the local climate. Due to the minimal amount of water that would be required for irrigation and because water demand would be minimized by using native plants, the impact to the existing water supply would be less than significant.

- e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less than Significant Impact. As described in Impact XVII(a) above, the Project would not generate wastewater and if dewatering is required, the discharge shall be consistent with RWQCB requirements and as such would not result in a violation of water quality standards or waste discharge requirements. The proposed Project would not have an impact on the capacity of the Santa Cruz Wastewater Treatment Facility. The impact to the Santa Cruz Wastewater Treatment Facility would be less than significant.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Less Than Significant Impact. Construction of the proposed Project would generate solid waste. The amount of construction waste would not be substantial, would be limited to the construction time period, and would not result in a substantial reduction in the capacity of a landfill. There are three permitted solid waste landfills within the County of Santa Cruz that could be used to dispose of construction waste. All three landfills currently have remaining capacity and recycle some

construction waste. The City of Santa Cruz Recovery Facility has a remaining capacity of 6,150,000 cubic yards, the City of Watsonville Landfill has a remaining capacity of 2,100,000 cubic yards, and the Buena Vista Drive Sanitary Landfill in Watsonville has a remaining capacity of 3,303,629 cubic yards (CalRecycle 2017). There is sufficient capacity in the landfills within the region to serve the Project; therefore, construction of the Project will not result in an impact to the capacity of landfills.

Operation of the bicycle trail would not generate solid waste; therefore, operation of the Project will not result in an impact to the capacity of landfills.

g) Comply with federal, State, and local statutes and regulations related to solid waste?

No Impact. The Project would comply with all federal, State, and local statutes and regulations related to solid waste. No impact would occur.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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 with Mitigation Incorporated. The Project is located in an urban environment near railroad tracks. The Project would not affect sensitive habitats and would thereby not degrade the quality of the environment. Implementation of the mitigation measures recommended in this Initial Study would ensure that the construction and operation of the proposed Project would reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory. Section IV, Biological Resources, includes mitigation measures to minimize impacts to CRLF, western pond turtle, pallid bat, special-status birds, and nesting birds. Impacts would be less than significant after mitigation.

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.)*

Less Than Significant Impact. Cumulative impacts related to development accommodated by the City’s General Plan were analyzed in the General Plan 2030 EIR. Although the Project is not specifically called out in the General Plan, the Project is consistent with the policies in the General Plan and would help the City achieve its goal of providing a bicycle network in Santa Cruz. The Project is considered a project accommodated for in the General Plan.

Cumulative impacts related to development accommodated by the City’s General Plan over the next 15+ years were found to be less than significant in the General Plan 2030 EIR, except for potential significant cumulative impacts related to traffic, water supply, population and noise (City of Santa Cruz 2011:5-3 and 5-4).

The cumulative impacts for traffic, noise, and population were found to be significant due to the growth in population that would occur from multiple development projects. The General Plan 2030 EIR identifies the following:

- **Population.** Cumulative growth could result in physical effects, such as increased traffic and water supply demand.
- **Traffic.** Cumulative development and growth would generate traffic that would result in unacceptable levels of service at 26 intersections.
- **Noise.** Cumulative development and growth would result in noise increases associated with the traffic increases.

Although cumulative impacts on population, traffic, and noise are potentially significant, the Project’s contribution to the cumulative impacts would be less than significant. As described in Impact XIII(a), the Project would not include housing, new commercial areas, or new industrial areas that could induce growth and would also not remove any barriers that could result in population growth. Because the Project would not result in population growth, the Project’s contribution on a cumulative population impact would be less than significant. The Project entails the construction of a bicycle and pedestrian trail and would, therefore, not generate traffic. In fact, the Project would provide the infrastructure to reduce traffic in Santa Cruz. Because the Project will not result in increased traffic, the Project’s contribution on a cumulative traffic impact would be less than significant. Furthermore, because the Project will not result in increased traffic, the proposed Project would not result in the increased noise associated with increased traffic. The Project’s contribution to a cumulative noise impact would, therefore, be less than significant.

With regards to cumulative water impacts, as disclosed in the City’s General Plan 2030 EIR, the

City's future water supply availability continues to be uncertain, and overall water demand continues to decrease. The City faces a series of ongoing challenges that potentially could lead to some loss of existing supply in the future, although it is uncertain at this time which supplies might be affected and to what extent. These considerations include the preparation of an HCP that could adjust diversions in some scenarios, water rights petitions, and reduction of groundwater production to protect against saltwater intrusion City of Santa Cruz 2011:5-4). The Project would not include any facilities that would require water; however, water would be needed to irrigate vegetation that would be planted to (1) replace landscaping that is removed during construction and (2) for erosion control. Irrigation for vegetation that would be planted for the Project would be similar to the existing irrigation in the area. The water that would be used for the Project would be minimal and the Project's contribution to a significant impact on water would be less than significant. Furthermore, water use would be minimized with implementation of **Mitigation Measure AES-1**, which requires use of native plants for landscaping. Native plants are adapted to the local climate and would require less water than plants not native to the local climate.

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

Less Than Significant with Mitigation Incorporated. As described in this document, the implementation of the proposed Project could result in temporary air quality, greenhouse gas, hazardous materials, and noise impacts during the construction period. Implementation of the mitigation measures recommended in this document would ensure that the proposed Project would not result in environmental effects that would cause substantial adverse effects on human beings. Impacts would be less than significant after mitigation.

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