Initial Study/Mitigated Negative Declaration

MST SURF! Busway and Bus Rapid Transit Project

Monterey County, California



Prepared for:

MST
MONTEREY-SALINAS TRANSIT

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March 2021

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Environmental Initial Study

and

Mitigated Negative Declaration

Prepared for:

Monterey-Salinas Transit District

and

Transportation Agency for Monterey County

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Table of Contents

Draft Mitigated Negative Declaration....iv
1.0 Introduction & Purpose....1
1.1 Purpose and Scope of the Initial Study....1
2.0 Description of Proposed Project....2
2.1 Project Background, Location, and Setting....2
Location....2
Project Background and Prior Studies....2
Physical Site Conditions and Setting....3
Land Use, Zoning, and Jurisdictional Boundaries....3
Project Characteristics....3
Operational Information....3
Project Phasing, Construction, and Staging....4
2.2 Required Entitlements, Permits and Easements....4
3.0 Initial Study Checklist....5
3.1 Project Information....5
4.0 Environmental Analysis....7
4.1 Aesthetics....7
4.2 Agriculture and Forestry Resources....9
4.3 Air Quality....11
4.4 Biological Resources....15
4.5 Cultural Resources....25
4.6 Energy....28
4.7 Geology and Soils....30
4.8 Greenhouse Gas Emissions....34
4.9 Hazards and Hazardous Materials....36
4.10 Hydrology and Water Quality....40
4.11 Land Use and Planning....43
4.12 Mineral Resources....44
4.13 Noise....45
4.14 Population and Housing....47
4.15 Public Services....48
4.16 Recreation....50

4.17 Transportation 51
4.18 Tribal Cultural Resources 53
4.19 Utilities and Service Systems 55
4.20 Wildfire 57
4.21 Mandatory Findings of Significance 59
5.0 Report Preparers 61
6.0 References 62

List of Figures

Note: All figures are attached within respective Appendices.

Figure 1: Regional Location

Figure 2: General Project Location

Figure 3A and 3B: Land Use and Coastal Zone Boundaries

Appendices to the Initial Study

Appendix 1: Draft Mitigated Negative Declaration

Appendix 2: Traffic Impact Assessment

Appendix 3: Detailed Project Description

Appendix 4: Aerial Plots and Project Design Details

Appendix 5: Aesthetics and Visual Resources

Appendix 6: Air Quality Assessment

Appendix 7: Biological Resources Assessment

Appendix 8: Cultural Resources Assessment

Appendix 9: Consistency with Land Use Policy

Appendix 10: Geology and Soils

Appendix 11: Greenhouse Gas Emissions Analysis

Appendix 12: Hazards and Hazardous Materials

Appendix 13: Hydrology and Water Quality

Appendix 14: Noise Analysis

Technical Attachments

Attachment 6A: Air Quality and Greenhouse Gas CalEEMod Model Outputs

Attachment 8A: CHRIS Results

Attachment 14A: Acoustical Data Outputs

TAMC, September 2011. Monterey Peninsula Light Rail Project Administrative Draft Environmental Assessment/Environmental Impact Report (SCH # 2009111044) including appendices incorporated by reference.

1.0 INTRODUCTION & PURPOSE

1.1 Purpose and Scope of the Initial Study

This Initial Study has been prepared specifically to support MST's findings, as the Lead Agency under the California Environmental Quality Act (CEQA), that the project under review would not result in significant environmental impacts with the application of existing regulations, design features and permit conditions. This study (and its supporting Appendices) has been prepared pursuant to CEQA (Pub. Resources Code, Section 21000, et seq.). The Initial Study is supported by a combination of new and prior studies, including the Administrative Draft Environmental Assessment/Environmental Impact Report (TAMC, 2011). This document and its supporting appendices are incorporated herein by reference.

CEQA requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of an environmental impact report on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment. This Initial Study and supporting documentation has concluded that all potential adverse environmental effects can be mitigated to a less than significant level.

The conclusions herein are based on CEQA standards, professional judgement, field review, project-specific technical studies and available public documents. This Initial Study and its Appendices constitutes substantial evidence supporting the conclusion that preparation of an EIR is not required prior to approval of the project and that the environmental effects of the project have been fully considered.

2.0 DESCRIPTION OF PROPOSED PROJECT

2.1 Project Background, Location, and Setting

Location

The MST SURF! Busway and Bus Rapid Transit Project (project) would be located between MST's Marina Transit Exchange at Reservation Road and De Forest Road (northern terminus), and Contra Costa Street and Orange Avenue in Sand City (ultimate southern terminus). The project consists of approximately 6 linear miles of roadway surface and related improvements to provide dedicated express busway service between these points.

The majority of the alignment of the busway would be within the Transportation Agency for Monterey County (TAMC) Monterey Branch Line rail corridor right-of-way (ROW), an approximately 100-foot wide corridor generally located between Beach Range Road and the Monterey Peninsula Recreation Trail on the ocean side of Highway 1. Given the length of the proposed busway and its physical location, the project would be located in and/or adjacent to the cities of Marina, Seaside, and Sand City, extending parallel to Highway 1 and Fort Ord Dunes State Park.

The project's regional location is shown in **Figure 1**. The entirety of the project alignment is shown in **Figure 2**. More detailed location details are provided in **Appendix 3**.

Project Background and Prior Studies

The Monterey Branch Line was constructed by Southern Pacific Railroad Company (SPRR) in 1879, and extended 19.6 miles from Castroville to Lake Majella in Pacific Grove. Rail service on this standard-gauge line began in 1880, following eight years of narrow-gauge service operated by the Monterey and Salinas Valley Railroad Company. SPRR operated both freight and passenger rail service on the Del Monte Express between the Monterey Peninsula and San Francisco from 1881 to 1971. Over time, traffic on the line diminished and it fell into disrepair, and the remaining freight service on the branch line was discontinued south of Seaside in 1978.

In 1982, using State Senate Bill 620 funds the cities of Seaside and Monterey purchased the SPRR ROW between Contra Costa Street in Seaside and downtown Monterey. A highly popular pedestrian/bicycle multi-purpose trail (Monterey Bay Coastal Recreation Trail) has been constructed within this section of the ROW extending south from Canyon del Rey Boulevard along the coast into Pacific Grove. North of Contra Costa Street, SPRR continued operation of freight rail service through the 1990s. TAMC purchased this portion of the line from the Union Pacific Railroad in September 2003.

In response to continuing and increasing congestion on Highway 1, MST, in partnership with TAMC, the Association of Monterey Bay Area Governments (AMBAG), Caltrans, Santa Cruz METRO, California Highway Patrol and the Santa Cruz County Regional Transportation Commission (SCCRTC) conducted a study to explore the potential for improving bus operations in the Highway 1 corridor, including a bus-on-shoulder concept. The *Final Project Report Monterey Bay Area Feasibility Study of Bus on Shoulder Operations on State Route 1 and the Monterey Branch Line* ("Bus Study") considered eight alternatives on or parallel to State Route 1, including the possibility of using the Monterey Branch Line rail corridor for bus rapid transit operations. The final study ultimately concluded that operating MST buses along the

Monterey Branch Line would be the most cost-effective solution to improving on-time performance in this critical corridor. This feasibility study was completed in 2018, and the "bus within branch line" concept analyzed is very similar to the project evaluated in this document. See **Appendix 3** for more details on project background and prior studies.

Physical Site Conditions and Setting

The Monterey Branch Line corridor currently contains idle rail lines from the former Southern Pacific Railroad, including the railroad bed surface and aging facilities and utilities. Additional infrastructure associated with the former Fort Ord military base are located along the corridor, including concrete platforms, rail spurs, and access tunnels and bridges. The corridor is heavily disturbed by the rail lines, limited maintenance and regular practice of weed control; however, it is also wide enough to support native and non-native plant communities.

Land Use, Zoning, and Jurisdictional Boundaries

While the rail corridor is owned by TAMC, the underlying land uses are within the boundaries of the City of Marina, City of Sand City, and Monterey County. The rail right-of-way is immediately adjacent to, but outside of, the City of Seaside.

The project area consists of the following parcels:

- Portions of V69-1 (former Southern Pacific Railroad Monterey Branch Line owned by TAMC)
- 031-221-005 (MST 5th Street Station Parcel)
- 031-221-001 (5th Street underpass/busway extension road)

Additionally, the project extends along public roadways in the cities of Marina, Sand City and Seaside.

Project Characteristics

As mentioned above, the entirety of the project is approximately six miles in length. However, the area of potential affect, or APE, is 4.9 miles long. This is the portion of the project located within the TAMC ROW where most physical construction would occur. The APE is shown on **Figures 3A** and **3B**.

For ease of discussion and analysis, the six-mile long project is broken down into the following segments. See **Appendix 3** for details of each project segment.

- Segment 1 – Marina Transit Exchange to Palm Avenue Corridor Entry and Platform
- Segment 2 – Palm Avenue Corridor Entry to 5th Street Station
- Segment 3 – 5th Street Station to California/Fremont/Monterey/SR 1 Interchange (California Avenue Roundabout Connection)
- Segment 4 – California/Fremont/Monterey/SR 1 Interchange to Playa Avenue
- Segment 5 – Playa Avenue to Contra Costa Avenue (using public roadways)

Operational Information

Busway Vehicles

Under the California's Innovative Clean Transit (ICT) Rule, MST will be required to incorporate zero emission buses as part of its regular procurement schedule and transition to a 100% zero emission fleet by 2040. To meet environmental objectives of the project, MST plans to move to 100% percent zero

emission vehicle operation over time as procurements are made and fulfilled and as existing vehicles are replaced.

Dedicated Busway Lanes, Transportation Controls and Technology

The dedicated bi-directional bus lanes will consist of two 12-foot asphalt lanes, which will be separated from existing rail lines by 9 to 12 feet (from center of rail line), except when the busway must cross the rail line to avoid constraints. With busway operations, traffic control signals at crossing locations would be activated by on-board technology on buses.

Potential Ridership, Headways and Travel Times

Buses would operate to maximize ridership in the southbound direction during the morning peak commute period (6:00 AM to 10:00 AM) and the northbound direction during the evening peak commute period (4:00 PM to 8:00 PM). It is estimated that travel time along the route would be reduced from 15.1 minutes (no busway) to 4.5 minutes (with busway), plus time for the single stop at the 5th Street Station mid-way.

Project Phasing, Construction, and Staging

MST anticipates that the major components of the project would be constructed simultaneously, with sections of busway progressing in increments based on the flow and availability of construction materials. The primary phases of construction would include:

- Site grubbing and clearing
- Palm Avenue/Del Monte Boulevard bus and roadway improvements
- California Avenue Roundabout
- Linear roadbed construction within the TAMC corridor between Palm Avenue and Playa Avenue
- 5th Street Station improvements
- Habitat restoration efforts
- Final finishes, fencing, lighting, signage and landscaping

See **Appendix 3** for a comprehensive Project Description.

2.2 Required Entitlements, Permits and Easements

The project is expected to require the following approvals:

- Approval by Federal Transit Administration (FTA) as the lead agency under NEPA prior to federal funding
- Natural resource permits (e.g. take or other permits issued by United States Fish and Wildlife Services [USFWS])
- Consolidated Coastal Development Permit issued by the California Coastal Commission
- Encroachment permit issued by Caltrans (e.g. completion of a Design Engineering Evaluation Report (DEER)). For eligible projects and actions, the DEER can be used in lieu of the PSR-PDS, PSR-PR and Project Report process and provides an opportunity to streamlining Caltrans review

3.0 INITIAL STUDY CHECKLIST

3.1 Project Information

1. **Project title:**

   MST SURF! Busway and Bus Rapid Transit Project

2. **Lead agency name and address:**

   Monterey-Salinas Transit District, 19 Upper Ragsdale Drive, Suite 200, Monterey, CA 93940

3. **Contact person and phone number:**

   Michelle Overmeyer, Director of Planning and Innovation, (831)264-5877

4. **Project location:**

   The SURF! busway project would begin at MST's Marina Transit Exchange at Reservation Road and De Forest Road (northern terminus), and end at Contra Costa Street in Sand City (southern terminus). The alignment of the busway would be primarily within the Transportation Agency for Monterey County's (TAMC's) Monterey Branch Line rail corridor, generally located west of Highway 1 between Beach Range Road and the Monterey Peninsula Recreation Trail. Public roadways would be used for the SURF! line at both ends of the route. The project would be located or adjacent to the cities of Marina, Seaside, and Sand City, running parallel to Highway 1 next to Fort Ord Dunes State Park. The project area consists of the following parcels:
   Portions of V69-1 (former Southern Pacific Railroad Monterey Branch Line owned by TAMC), 031-221-005 (MST 5th Street Station Parcel), and 031-221-001 (5th Street underpass/busway extension road).

5. **Project sponsor's name and address:**

   Same as above

6. **General plan designation:**

   Various. Project alignment identified as open space and transportation corridor in local general plans and local coastal plans.

7. **Zoning:**

   Various per local agency zoning codes.

8. **Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

   The project consists of the following primary components:
   - A bus-only entry into the TAMC right-of-way at Del Monte Boulevard and Palm Avenue in the City of Marina. This element requires upgraded intersection traffic and safety controls, as well as bicycle and pedestrian path improvements along Del Monte Boulevard and parallel to Marina Drive.
   - Two lanes (one in each direction) of dedicated busway road surface within the TAMC Monterey Branch Line right-of-way. Work within the TAMC right-of-way to construct the bus lanes will

require grading, drainage improvements, retaining walls, fencing, recreation trail connections, utility relocations and other necessary improvements to create a safe, dedicated busway.

- A new transit station (5th Street Station) located on MST property near 5th Street east of Highway 1. The station would include bus bays, public parking, drop off area and other amenities.
- A new roundabout in the public right-of-way at California Avenue and Highway 1 southbound ramp in Sand City to better accommodate buses re-entering the public right-of-way.
- A stop at Playa Avenue in Sand City where SURF! riders could connect to the existing bus network. The Del Monte Boulevard/Playa Avenue and California Avenue/Playa Avenue intersections would include signalization and synchronization to improve traffic operations at this location. The route would continue to Contra Costa Street in Sand City via existing public roadways.

See **Appendix 3** to this document for details.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The majority of the alignment of the busway would be within the TAMC Monterey Branch Line rail corridor ROW, an approximately 100-foot wide corridor generally located between Beach Range Road and the Monterey Peninsula Recreation Trail on the ocean side of Highway 1. The project would be located in and/or adjacent to the cities of Marina, Seaside, and Sand City, extending parallel to Highway 1 and Fort Ord Dunes State Park. The northern and southern ends of the busway alignment utilize public roadways within an existing urban environment.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

- Approval by Federal Transit Administration (FTA) as the lead NEPA agency prior to federal funding
- Natural resource permits (e.g. take or other permits issued by United States Fish and Wildlife Services [USFWS])
- Consolidated Coastal Development Permit issued by the California Coastal Commission
- Encroachment permit issued by Caltrans (e.g. completion of a Design Engineering Evaluation Report (DEER))

11. 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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Outreach for consultation was conducted by the Lead Agency. No formal consultation was requested following outreach efforts.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

4.0 ENVIRONMENTAL ANALYSIS

4.1 Aesthetics

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

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

Less than significant impact. There are several viewpoints near the busway corridor that could be considered scenic vistas based on the elevated nature of the views and/or visibility of a sweeping landscape. However, these vistas are not significantly affected or compromised by the project. See **Appendix 5** for detailed discussion.

b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. The project site is not located within the viewshed of a state-designated scenic highway, and therefore would not impact or substantially alter scenic resources related to a scenic highway. While many segments of Highway 1 are officially designated as a scenic highway, the segment parallel to the busway is not.

c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. The visual quality of the alignment and lands on either side of the alignment is dominated by Highway 1, the existing railroad tracks and railbed, the coastal dune topography and the Monterey Bay beyond. Visual simulations of the pre-and post-project conditions from selected key viewpoints (KVPs) of the alignment are shown in **Appendix 5**. Based on the existing visual character of the public views and viewing experience from the selected KVPs, implementation of the project would not substantially degrade the existing visual character of the site or its surroundings. See **Appendix 5** for detailed analysis of construction and operational effects.

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

Potentially significant unless mitigation incorporated. The project would not result in unusual or permanent light sources that would significantly affect day or nighttime views in the area during construction activities. All lighting required for construction would be temporary, and no nighttime construction is proposed.

Regarding bus headlights, buses would have direct lighting from headlights and interior cabin lighting travelling along the busway lanes that would introduce a new source of light during nighttime hours. However, these sources of light would be infrequent 10-minute headways and would not be considered a significant new source of lighting in the area compared to existing conditions and adjacent highway.

For safety purposes, limited overhead lighting would be required at key locations where the busway intersects with the bicycle/pedestrian trail network. The following mitigation measure will ensure that new sources of lighting at these locations would be controlled to minimize potential effects on the nighttime environment, coastal zone, and biological resources of the adjacent coastal dune habitat.

Mitigation Measure/Project Condition

MM AES-3.1 Limit New Sources of Lighting

The final construction drawing package shall include a final Lighting Plan indicating the type and location of proposed lighting sources. Construction lighting shall be directed away from sensitive habitat areas if required during evening hours. The Lighting Plan shall include specific products and photometric data demonstrating how new lighting sources necessary for project operational safety shall be shielded or baffled to minimize unwanted light spill and direct light away from the State Park. As the alignment is located within airport Safety Zone 7 of both the Marina Municipal and Monterey Regional airports, the project's Lighting Plan shall also be submitted to the respective airport manager for of each airport for review and approval consistent with ALUC standard conditions.

4.2 Agriculture and Forestry Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

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

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

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

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No impact. No portion of the project alignment is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the State Farmland Mapping and Monitoring Program (FMMP). No Williamson Act contract applies to the project alignment. The project site does not currently support agricultural or forestry uses, and it is designated for transportation and public uses. There would be no impact to agricultural and forestry resources.

4.3 Air Quality

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

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

Less than significant impact. The MBARD's 2008 CEQA Air Quality Guidelines provides criteria for determining cumulative impacts and consistency. The CEQA Air Quality Guidelines note that a project which is inconsistent with an Air Quality Plan would have a significant cumulative impact on regional air quality. The project is consistent with the Air Quality Management Plan for the Monterey Bay Region. The project does not include any changes to land use or zoning designations. The proposed project would result in the construction and operation of a new busway project with zero emission vehicles and does not include new land uses or structures. In addition, the proposed project's construction and operation emissions would not exceed MBARD thresholds. See **Appendix 6** for detailed discussion.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Potentially significant unless mitigation incorporated. As discussed above, the proposed project's construction and operation emissions would not exceed MBARD thresholds. MBARD CEQA Guidelines state that construction activities (e.g. excavation, grading, on-site vehicles), which emit 82 pounds per day or more of PM_{10}, would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. As discussed in further detail in **Appendix 6**, construction emissions

associated with the project would not exceed this threshold for PM_{10}. Given the proximity of sensitive receptors to the project site, the project would be required to comply with the standard conditions below, which would further ensure impacts would be reduced to a less-than-significant level for all construction activities on the project site. See **Appendix 6** for additional details.

Standard Conditions and Requirements

SC AQ-2.1 Reduce Fugitive Dust

The project applicant shall implement the following measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions, and the project applicant shall require all of the following measures to be shown on grading and building plans:

- Limit grading to 8.1 acres per day, and grading and excavation to 2.2 acres per day.
- Water graded/excavated areas and active unpaved roadways, unpaved staging areas, and unpaved parking areas at least twice daily or apply non-toxic chemical soil stabilization materials per manufacturer's recommendations. Frequency should be based on the type of operations, soil and wind exposure.
- Prohibit all grading activities during periods of high wind (more than 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Stabilize all disturbed soil areas not subject to using approved chemical soil binders, jute netting, or gravel for temporary roads and any other methods approved in advance by the APCD.
- Sow exposed ground areas that are planned to be reworked at dates greater than one month after initial grading with a fast germinating, non-invasive grass seed, and water until vegetation is established.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Use street sweepers, water trucks, or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Reclaimed (non-potable) water should be used whenever possible;
- Spray dirt stockpile areas daily as needed.
- Place gravel on all roadways and driveways as soon as possible after grading. In addition, construct building pads as soon as possible after grading unless seeding, soil binders, or frequent water application are used.
- Not exceed a 15-mph vehicle speed for all construction vehicles on any unpaved surface at the construction site.
- Cover or maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) on all trucks hauling dirt, sand, soil, or other loose materials in accordance with California Vehicle Code Section 23114.

- Limit unpaved road travel to the extent possible, for example, by limiting the travel to and from unpaved areas, by coordinating movement between work areas rather than to central staging areas, and by busing workers where feasible.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and inspect vehicle tires to ensure free of soil prior to carry-out to paved roadways.
- Sweep streets at the end of each day, or as needed, if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.

SC AQ-2.2 Designate a Dust Compliance Monitor

The project applicant shall require the contractor(s) or builder(s) to designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20 percent opacity, and to prevent transport of dust off-site. Their duties shall include monitoring during holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the MBARD Compliance Division prior to the start of any grading, earthwork, or demolition. The project applicant shall provide and post a publicly visible sign that specifies the telephone number and name to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall also be visible to ensure compliance with Rule 402 (Nuisance).

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. Under CEQA, residences, schools, daycare centers, and healthcare facilities, such as hospitals, or retirement and nursing homes, are considered sensitive receptors. For this project, Fort Ord Dunes State Park is also considered a receptor to be considered. Some portions of the busway facilities would be located approximately 120 feet from the nearest residential property line. This distance, and the fact that the project would utilize zero emission vehicles, would not expose these residential receptors to substantial pollutant concentrations.

The proposed project involves roadway improvements that would not result in stationary emissions. The project would also include a transit center with approximately 181 parking spaces. However, the nearest sensitive receptors to the proposed transit center are over 2,300 feet away. Thus, the project would not result in a substantial increase in traffic-related pollutant concentrations that could affect sensitive receptors. Furthermore, the dust and equipment exhaust emissions created during construction would be minimal and would be controlled by compliance with MBARD Dust Construction Mitigation Measures. See **Appendix 6** for additional detail.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less than significant impact. Construction activities associated with the project may generate detectable odors from heavy duty equipment (i.e., diesel exhaust), as well as from architectural coatings and asphalt off-gassing. Any construction-related odors would be short-term in nature and cease upon

project completion. Therefore, impacts would be less than significant. See **Appendix 6** for additional details.

4.4 Biological Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

a) 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?

Potentially significant unless mitigation incorporated. Portions of the project are located within the Coastal Zones of the City of Marina and within land immediately adjacent to the City of Seaside and Fort Ord Dunes State Parks. The Coastal Zones support a diversity of environmentally sensitive habitats, such as coastal scrub and dune scrub that occur along the California coast. Special status species known to potentially occur within the project site include the Townsend's big-eared bat, Monterey dusky-footed woodrat, Northern California legless lizard, Coast horned lizard, Smith's blue butterfly, and nesting raptors and other protected avian species. Despite the disturbed condition of the site, there is the potential for these species to be present. To avoid potential impacts associated with project construction the following mitigation measures would be incorporated into the project to reduce impacts to special status species in the project area to a less than significant level. See **Appendix 7** for detailed discussions on vegetation, sensitive habitats, and special status species within the project alignment.

Mitigation Measures/Project Conditions (For All Project Segments)

MM BIO-1.1 Construction Best Management Practices

The following best management practices will be implemented during construction (i.e., pre-, during, and post-construction) to reduce impacts to special-status plant and wildlife species:

- A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species and sensitive habitats that are known or may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the project site.
- Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
- Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species

and native erosion control seed mix, per the recommendations of a qualified biologist.

- Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms will be allowed on the project site at any time.
- All food-related and other trash will be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area.

MM BIO-1.2 Construction-Phase Monitoring

The applicant will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) of the project to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be determined in coordination with CDFW prior to any ground disturbing activities, and will be conducted by a qualified biologist with appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any special-status wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor must work through the State Inspector to cease construction contractor work and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction biological monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log will also include any special-status wildlife species observed and relocated.

MM BIO-1.3 Non-Native, Invasive Species Controls

The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:

- Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).

- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site.
- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.
- All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

MM BIO-1.4 Pre-Construction Surveys for Protected Avian Species

Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist will be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys will be determined by the qualified biologist based on review of the final construction plans and in coordination with the CDFW, as needed.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist will notify the project applicant and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

Mitigation Measures (For Segments 1-4 and 5th Street Station)

MM BIO-1.5 Pre-Construction Surveys for Monterey Dusky-Footed Woodrat

Not more than thirty (30) days prior to the start of construction of Segments 1-4 and the 5th Street Station (including vegetation removal), a qualified biologist shall conduct a survey of suitable habitat within the work site to locate existing Monterey dusky-footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be

provided to the construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures:

- Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere.
- Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible.
- If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for 2-3 weeks, after this time the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.

MM BIO-1.6 Pre-Construction Surveys for Townsend's Big-eared Bat

To avoid and reduce impacts to Townsend's big-eared bat, if the project construction is planned during the reproductive season (May 1 through September 15) MST will retain a qualified bat specialist or wildlife biologist to conduct site surveys to characterize bat utilization within and adjacent to the project site and potential species present (techniques utilized to be determined by the biologist) prior to construction. Based on the results of these initial surveys, one or more of the following will occur:

- If it is determined that bats are not present within or adjacent to the site, no additional mitigation is required.
- If it is determined that bats are utilizing the trees or abandoned buildings within or adjacent to the site and may be impacted by the proposed project, pre-construction surveys will be conducted within 50 feet of construction limits no more than 30 days prior to the start of construction. If, according to the bat specialist, no bats or bat signs are observed in the course of the pre-construction surveys, construction may proceed. If bats and/or bat signs are observed during the pre-construction surveys, the biologist will determine if disturbance will jeopardize the roost (i.e., maternity, foraging, day, or night).

Mitigation Measures (For Segments 1-4)

MM BIO-1.7 SBB Avoidance and Restoration

The host plant species for SBB (i.e. seacliff and dune buckwheat) shall be avoided to the greatest extent feasible. SBB habitat not scheduled for removal shall be protected prior to and during construction to the maximum possible extent through the use of exclusionary fencing or flagging, such as construction fencing or hay bales. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. An experienced biological monitor, trained by a qualified biologist will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

If avoidance is not feasible:

- The duff and/or associated soil and plant material underneath the presumed-occupied seacliff or dune buckwheat plants that will be impacted by the project will be removed by hand by a USFWS-approved biologist prior to disturbance, and will be placed as close as possible to, but not on, living seacliff or dune buckwheat plants not scheduled for removal, within the boundaries of exclusionary fencing/flagging.
- The number of plants removed will be quantified and shall be replaced at a 1:1 success ratio for the acreage or individuals impacted. A Restoration Plan shall be prepared by a qualified biologist and implemented. The plan shall include, but is not limited to, the following:
    - A description of the baseline conditions of the habitats within the work site, including the presence of any special-status species, their locations, and densities;
    - Procedures to control and/or eliminate non-native invasive species within the work site;
    - A detailed description of on-site and/or off-site restoration areas, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, which may include, but is not limited to, an increased planting ratio to ensure the 1:1 success ratio, if required by the USFWS; and
    - A monitoring program that describes annual monitoring efforts which incorporate success criteria and contingency plans if success criteria are not met.

MM BIO-1.8 Special-Status Plant Avoidance and Restoration

Rare plants (i.e. Hooker's manzanita, sandmat manzanita, Monterey spineflower, coast wallflower, and Kellogg's horkelia) shall be avoided to the greatest extent feasible. Rare plants not scheduled for removal shall be protected prior to and during construction to the maximum extent possible through the use of exclusionary fencing or flagging, such as construction fencing or hay bales. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

If avoidance is not feasible, the impacted area for each species shall be quantified during final design and each species shall be replaced at a 1:1 success ratio for the acreage or individuals impacted (depending on species impacted) and a Restoration Plan shall be prepared by a qualified biologist and implemented. The plan shall include, but is not limited to, the following:

- A description of the baseline conditions of the habitats within the work site, including the presence of any special-status species, their locations, and densities;
- Procedures to control and/or eliminate non-native invasive species within the work site;

- A detailed description of on-site and/or off-site restoration areas, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, which may include but is not limited to, an increased planting ratio to ensure the 1:1 success ratio; and
- A monitoring program that describes annual monitoring efforts which incorporate success criteria and contingency plans if success criteria are not met.

MM BIO-1.9 FESA Compliance

MST will comply with the Federal Endangered Species Act (FESA) and will obtain necessary authorization prior to construction of Segments 1-4.

Due to the presence and potential presence of federally listed species within the project site, including the SBB and Monterey spineflower, and Federal nexus (i.e., Federal funding), the Federal Transit Administration, acting as the NEPA lead agency for the proposed project, shall be required to initiate a Section 7 consultation with the USFWS and prepare a written analysis in the form of a Biological Assessment (BA) to determine whether their actions may affect a listed species. Based on the BA, the USFWS will issue a Biological Opinion (BO) regarding likely impacts as a result of implementing the project. Any further avoidance and minimization measures that may be required as a component of the BO will be implemented.

Mitigation Measures (For 5th Street Station)

MM BIO-1.10 Special-Status Plant Surveys and HMP Compliance

A qualified biologist shall be retained to conduct surveys for Monterey spineflower and Yadon's piperia within the 5th Street Station. The surveys shall be conducted during the appropriate identification period(s) to determine presence or absence, according to USFWS, CDFW, and CNPS protocol. The biologist shall prepare a report that provides the results of the survey, and, if found the number and locations of individuals/populations identified.

- If no Monterey spineflower or Yadon's piperia are found, no further mitigation is necessary.
- If Monterey spineflower or Yadon's piperia are found, salvage efforts for these species will be evaluated by a qualified biologist in coordination with the MST prior to construction to further reduce impacts per the requirements of the HMP and 2017 Programmatic BO. Where salvage is determined feasible and proposed, seed collection should occur from plants within the development site and/or topsoil should be salvaged within occupied areas to be disturbed. Seeds should be collected during the appropriate time of year for each species as determined by the qualified biologist. The collected seeds and topsoil should be used to revegetate temporarily disturbed construction areas and reseeding and restoration efforts on- or off-site, as determined appropriate by the qualified biologist and MST.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Potentially significant unless mitigation incorporated. The project could result in impacts to riparian habitat, waters of the U.S. and/or State. The project area lies within the California Coastal Zone (Coastal zone), specifically within the boundaries of the Marina, Sand City, and Seaside Local Coastal Plans, as well as California Coastal Commission's original jurisdiction. The LCPs from these agencies address coastal resources, including the protection of biological and wetland resources.

As noted above, some of these specific habitats include coastal scrub and dune scrub that occur along the California coast. Additional areas within the project site that may be considered ESHA include habitat for the Smith's blue butterfly. To avoid potential impacts associated with project construction to these sensitive habitats, mitigation measures MMs BIO-1.1 through BIO-1.4 and BIO-2.11 would be implemented to reduce impacts to dune scrub to a less-than-significant level. See **Appendix 7** for detailed discussions on riparian habitat within the project alignment.

Mitigation Measure/Project Conditions

MM BIO-2.11 Dune Scrub Restoration

Dune scrub shall be avoided to the greatest extent feasible. If avoidance is not feasible, dune scrub habitat shall be replaced at a 1:1 success ratio for the acreage impacted and a Restoration Plan shall be prepared by a qualified biologist and implemented. The plan shall include, but is not limited to, the following:

- A description of the baseline conditions of the habitat that will be impacted;
- A detailed description of on-site and/or off-site restoration areas, a planting palette, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, which may include, but is not limited to, an increased planting ratio to ensure the 1:1 success ratio;
- Procedures to control and/or eliminate non-native invasive species within the restoration site; and
- A monitoring program that describes annual monitoring efforts which incorporate success criteria and contingency plans if success criteria are not met.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological?

No impact. No State or federally protected wetlands are present within the project area. For these reasons, these topics are not discussed further in this document.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than significant impact. The project site is not located within any significant wildlife movement corridors or linkages. See **Appendix 7** for additional details. The majority of the project site is comprised of ruderal and/or developed areas and runs adjacent to existing roads, Highway 1, shopping centers, and other businesses, which in general isolates the project site from other undeveloped areas. As such, the project site provides little use as a corridor for wildlife movement. Therefore, the proposed project would not disconnect, fragment, or otherwise impeded wildlife movement in the primary, significant wildlife movement corridors in the area.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Potentially significant unless mitigation incorporated. Construction of the proposed project could result in permanent impacts to trees within the project site; however, the number or type of trees to be removed have not been identified at this time. However, based on the biological resource surveys conducted (see Appendix 7) it is conservatively estimated for planning purposes that 60 to 90 regulated trees may require removal along the alignment if they cannot be avoided through design. Removal of native and other important trees are protected under local tree removal ordinances and impacts are typically addressed and mitigated under CEQA. Implementation of MM BIO-4.12 requires that native trees be avoided and protected during construction to the greatest extent feasible and that native trees removed be replaced at a 1:1 mitigation ratio. Implementation of this measure will ensure compliance with local policies or ordinances protecting trees, reducing potential impacts to less-than-significant. See **Appendix 7** for detailed discussion.

Mitigation Measure

MM BIO-4.12 Native Tree Protection and Replacement Measures

To maximize native tree retention and protection, a forester, arborist, or other tree care professional shall be involved in the review and development of final grading and construction plans wherever trees occur within the site or at the grading margins. To avoid unintended impacts to native trees outside the construction area, the following native tree protection measures shall be implemented:

- Temporary construction fencing shall be placed at approximately 10 feet from the trunk, limiting work within the dripline (e.g. and no grading, trenching, or vegetative alteration shall occur within this environmental exclusion zone). Grading, vegetation removal, and other ground disturbing construction activities may not commence until the project forester has inspected and approved the protective fencing installed by the contractor. No equipment or materials, including soil, shall be stored within the established environmental exclusion zone. Prior to grading within 25 feet of retained trees, the project forester, arborist, or other tree care professional shall be consulted to determine whether pruning is necessary to protect limbs from grading equipment.
- To avoid soil compaction from damaging the roots, heavy equipment shall not be allowed to drive over the root area. If deemed necessary and approved by the forester, equipment may drive across one side of the tree. To reduce soil compaction,

wood chips shall be spread 6-12 inches deep to disperse the weight of equipment and plywood sheets shall be placed over the wood chips for added protection.

- Roots exposed by excavation must be pruned and recovered as quickly as possible to promote callusing, closure, and healthy regrowth.
- Retained trees shall be watered periodically in accordance with species need to promote tree health. Transplanted trees and their intended planting areas shall be pre-watered. Post planting watering shall be done as needed to assure establishment.
- When project design is completed, an estimate of the appropriate number of replacement trees shall be made based on available planting space. These replacement trees (minimum five-gallon specimens) shall be planted along boundaries and within landscape areas. Planting density for replacement trees shall be accurately detailed to allow for some unavoidable mortality over time.
- Transplants are encouraged and shall be credited on a 1:1 basis. Final replanting numbers may be modified by additional tree retention and should be made part of the final landscaping plan.

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?

Less than significant impact. The project site is not located within an approved Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) area. However, the 5th Street Station is located within the former Fort Ord and the plan area of the Fort Ord Habitat Management Plan (HMP). See **Appendix 7** for more detail regarding project's consistency with the approved Fort Ord HMP.

4.5 Cultural Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

Less than significant impact. Implementation of the proposed action would not result in operational-related impacts to historic architectural resources because the proposed action would not directly or indirectly affect any identified historic resource within or near the project alignment. While three historic era resources were identified – the MBL, Fort Ord loading platform and commercial structure on Del Monte Boulevard – these resources were determined in the historic resource evaluation to be ineligible for historic status or listing on any State, federal or local historic register. See **Appendix 8** for detailed discussion.

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

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Potentially significant Impact unless mitigation incorporated. While no prehistoric sites have been identified within or near the project alignment, the potential remains to uncover or disturb previously unknown resources during the construction phase of the project. To address this potential impact, the following standard mitigation measures are required.

Mitigation Measures/Project Conditions

MM CR-1 Preconstruction Archaeological and Paleontological Sensitivity Training

Prior to construction, all personnel directly involved in project related ground disturbance shall be provided archaeological and paleontological sensitivity training. The training will be conducted by a qualified Archaeologist who meets the Secretary of the Interior's standards for archaeology. The training will take place at a day and time to be determined in conjunction with the project construction foreman, and prior to any scheduled ground disturbance. The training will include: a discussion of applicable laws and penalties; samples or visual aids of artifacts and paleontological resources that could be encountered in the project vicinity, including what those artifacts and resources may look like partially buried, or wholly buried and freshly exposed; and instructions to halt work in the vicinity of any potential cultural resources discovery, and notify the archaeological monitor as necessary.

MM CR-2 Procedures for Inadvertent Discovery

Inadvertent Discovery of Archaeological or Tribal Cultural Resources
In the event archaeological resources are encountered during ground disturbing activities, contractor shall temporarily halt or divert excavations within a 100-foot radius of the find until it can be evaluated.

CEQA Guidelines requires that all potentially significant archaeological deposits be evaluated to demonstrate whether the resource is eligible for inclusion on the California Register of Historic Resources, even if discovered during construction. If archaeological deposits are encountered they will be evaluated and mitigated simultaneously in the timeliest manner practicable, allowing for recovery of materials and data by standard archaeological procedures. For prehistoric archaeological sites, this data recovery involves the hand-excavated recovery and non-destructive analysis of a small sample of the deposit. Historic resources are also sampled through hand excavation, though architectural features may require careful mechanical exposure and hand excavation.

Any previously undiscovered resources found during construction activities shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria by a qualified Archaeologist. Significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If the resource is determined significant under CEQA, a qualified Archaeologist shall prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the CEQA Guidelines.

If such resources or artifacts are determined to be of native tribal origin, any mitigation or recovery program shall include direction from Ohlone/Costanoan Esselen Nation (OCEN) tribal leadership for proper handling and treatment.

The Archaeologist shall also perform appropriate technical analyses, prepare a comprehensive report complete with methods, results, and recommendations, and provide for the permanent curation of the recovered resources. The report shall be

submitted to MST, TAMC, the NWIC, and the State Historic Preservation Office, as required.

Inadvertent Discovery of Paleontological Resources

In the event that fossils or fossil-bearing deposits are discovered during construction activities, the contractor shall temporarily halt or divert excavations within a 100-foot radius of the find until it can be evaluated. If the find is deemed significant, the applicant shall retain a qualified Paleontologist to document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The Paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the applicant determines that avoidance is not feasible, the Paleontologist shall prepare an Excavation Plan for mitigating the effect of construction activities on the discovery. The Excavation Plan shall be submitted to MST and TAMC for review and approval prior to implementation, and the applicant shall adhere to the recommendations in the Excavation Plan.

Inadvertent Discovery of Human Remains

In the event that human remains (or remains that may be human) are discovered at the project site, Public Resource Code Section 5097.98 must be followed. All grading or earthmoving activities shall immediately stop within a 100-foot radius of the find. The project proponent shall then inform the Monterey County Coroner and the respective city (e.g. City of Marina, Sand City, or Seaside) immediately, and the Coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).

Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the Coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Applicant shall comply with the state relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (Public Resource Code [PRC] § 5097). The Coroner shall contact the NAHC to determine the most likely descendant(s) (MLD). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD will determine the most appropriate means of treating the human remains and associated grave artifacts, and shall oversee the disposition of the remains.

In the event the NAHC is unable to identify an MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity within the project area in a location not subject to further subsurface disturbance.

4.6 Energy

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

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

Less than significant impact. The Pacific Gas & Electric Company (PG&E) provides electricity and natural gas service to the Project area. The proposed project would reduce congestion on Highway 1 from local and inter-regional commuter traffic by providing an accessible 100 percent zero emission transit alternative. The project would result in a nominal increase in electricity and natural gas demand. This nominal increase represents an insignificant percent increase compared to overall demand in PG&E's service area. Therefore, projected electrical and natural gas demand would not significantly impact PG&E's level of service.

During construction, transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Most construction equipment during demolition and grading would be gas-powered or diesel-powered, and the later construction phases would require electricity-powered equipment. Impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure; impacts would not be significant.

During operations, energy consumption associated with operation of the zero-emission busses would be nominal. Furthermore, the project site and surrounding areas are highly urbanized with numerous gasoline fuel facilities and infrastructure. Consequently, the proposed project would not result in a substantial demand for energy that would require expanded supplies or the construction of other

infrastructure or expansion of existing facilities. Additionally, fuel consumption associated with vehicle trips generated by the proposed project would not be considered inefficient, wasteful, or unnecessary. The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts are considered less than significant, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than significant impact. The project is a transit facility designed to carry passengers that would utilize almost no energy, except what may be required for low intensity safety lighting along the corridor. The project is not anticipated to require natural gas. The project would result in 7 MTCO2e/yr from energy consumption. See **Appendix 11** for discussion on the project's energy consumption during operations and project consistency with policies and actions identified in the City of Marina, Seaside, and Sand City's general plans.

4.7 Geology and Soils

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

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less than significant impact. The project site is not located within an Alquist-Priolo Earthquake Fault Zoning Map as mapped by the State Geologist. There are four faults that cross the project alignment: the Chupines Fault, Seaside Fault, Ord Terrace Fault, and Reliz Fault. However, these faults are not considered sufficiently active or well-defined. The potential is very low that the individual traces of these faults could generate an earthquake and result in surface fault rupture. See **Appendix 10** for additional details.

ii. Strong seismic ground shaking?

Less than significant impact. Four faults cross the project alignment, however, none of these faults are currently considered active and their potential for surface-rupture is considered very low to low. The largest ground motion would likely be the result of movement along the Monterey Bay-Tularcitos Fault. However, the project is primarily a roadway project, and would be required to be designed and constructed to withstand substantial ground shaking in order to minimize seismic impacts. Compliance with currently structural codes to address the potential for ground shaking and structure stability would reduce impacts to a less-than-significant level.

iii. Seismic-related ground failure, including liquefaction?

Less than significant impact. Liquefaction generally occurs as a “quicksand” type of ground failure caused by strong ground shaking. The primary factors influencing liquefaction potential include groundwater, soil type, relative density of the sandy soils, confining pressure, and the intensity and duration of ground shaking. As shown in Exhibit 4.4.3 of the Monterey County General Plan EIR, the potential for liquefaction to occur at the project site is low. See **Appendix 10** for additional discussion.

iv. Landslides?

Less than significant impact. The majority of the project alignment traverses relatively flat terrain on existing roadways or adjacent to existing railroad tracks, where landslides and slope instability are not a

concern. Based on a search of the California Department of Conservation Landslide Inventory, the project site has gentle to low slope gradients. The potential for deep seated land sliding to occur in the bedrock is low to nil.

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

Less than significant impact. The soils at the project site have a moderate to high soil erosion potential. The majority of the project site is on existing hardscaped railway and is surrounded by coastal vegetation. The southern end of the project site is surrounded by hardscape surfaces, limiting the potential for downstream/off-site erosion impacts on neighboring property. Because the project site is already in a developed area and surrounded by vegetation, there is a lower potential for off-site erosion impacts to occur during construction. Construction and water quality best practices as required by existing codes and regulations will limit erosion on the relatively small construction footprint of the project. Design features such as footing placement away from slopes and footing depths will minimize erosion during and following construction.

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?

Potentially significant unless mitigation incorporated. The project site is located on soils that are good for use as roadway fills and firm overburden soils that are suitable for foundation support. However, the potential for soil erosion is high in areas where younger and older dune sand deposits are, especially if not covered by vegetation. While the geologic unit below the project is very stable, the site is nonetheless subject to common risks associated with the local soils. With implementation of Mitigation Measure (MM) GEO-5 and adherence to local building and engineering standards, the site's geologic and soil constraints would be reduced to a less-than-significant level through construction-level geotechnical recommendations and compliance with all applicable codes and regulations. See **Appendix 10** for detailed discussion on the potential for landslides, liquefaction and subsidence, lateral spreading, collapse, and expansive soils as a result of the project.

Mitigation Measure/Project Conditions

MM GEO-5 Final Geotechnical Evaluation

A construction level geotechnical evaluation shall be prepared and implemented for the project based on the final engineering plans. The project shall be required to adhere to and incorporate all standards and recommended engineering measures to mitigate for liquefaction, expansive soils and other local soil constraints. The final geotechnical evaluation will be prepared by MST and provided to the affected land use agencies for review prior to the issuance of local building permits or related local approvals.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than significant impact. As discussed above, the subsurface profile of the site generally consists of Baywood sand and Oceano loamy sand. Based on a review of environmental databases, soils in the

project site, both Baywood and Ocean Series are composed of sand and have low water storage potential and a low potential for expansion. Thus, impacts would be less than significant. See **Appendix 10** for additional details.

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. The proposed project would not require the extension or installation of wastewater connections as this service is not essential to busway operations. However, should restrooms be required for the 5th Street Station in the future, MST would seek water and wastewater connections from the City of Marina.

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

Potentially significant unless mitigation incorporated. See **Appendix 8**. Based on the previous paleontological resource assessment covering the proposed project alignment, no paleontological resources were identified. The likelihood of encountering unique paleontological resources was determined to be low to high with increasing depth. Excavation depths for the project will be shallow. Because there is the potential to uncover paleontological resources in previously undisturbed portions of the project area, ground disturbing activities during construction could potentially result in significant impacts to paleontological resources. Implementation of MM CR-1 and MM CR-2 would require all construction personnel involved in project-related ground disturbances to be provided archaeological and paleontological sensitivity training and effectively mitigate potential effects to paleontological resources.

4.8 Greenhouse Gas Emissions

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

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact. For the purpose of this environmental analysis, the project's construction-related GHG emissions were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Project construction-related activities would generate approximately 1,088 $MTCO_2e$ of GHG emissions over the course of construction. However, project construction-related GHG emissions would be short term and would cease once construction is complete. This is less than the CARB Mandatory Reporting applicability level of 2,500 $MTCO_2e$ per year. See **Appendix 11** for a detailed discussion on construction-related impacts from GHG emissions.

Operational or long-term emissions would occur over the project's life. The project consists of approximately 6 linear miles of roadway surface and related improvements to provide dedicated express busway service that would ultimately be expected to reduce greenhouse gas emissions in the Monterey Bay region. The majority of project emissions (approximately 100 percent) would occur from mobile and energy sources. Although MBARD does not have adopted GHG emission significance thresholds, the project's estimated GHG emissions (about 219.19 MT/ CO_2e year) is well below the significance threshold of 1,100 $MTCO_2e$ per year used in neighboring air districts and the 2,000 MT of CO_2e/year threshold that had been under consideration by the MBARD. See **Appendix 11** for a detailed discussion on operational-related impacts from GHG emissions.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. As discussed above in Impact a), the project would not exceed significance thresholds for construction or operation of the project. The proposed BRT project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. See **Appendix 11** for a more detailed discussion.

4.9 Hazards and Hazardous Materials

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

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. The normal operation of the SURF! busway along the right of way will not involve the routine transport, use or disposal of hazardous materials other than may be required for routine maintenance. This project is a transit facility designed to carry passengers. Construction of the project would require staging, site preparation, grading and construction of the new busway and station. These activities may require the use of heavy equipment that would need refueling and/or limited maintenance on site, as well as the use of materials and chemical processes typical of roadway construction. However, as the project alignment is not in a heavily populated area and would not involve the routine transport or disposal of hazardous materials, construction effects are less than significant. See **Appendix 12** for detailed discussion.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. As discussed above, the busway project is a transit project that will transport people, not hazardous materials. For these reasons, normal project operations will not result in significant environmental hazards because the project will not use, transport, or expose people or property to such materials. However, based on the Phase I site investigations conducted along the alignment, hazardous wastes may be encountered during the construction process and hazardous materials may be used or generated during the construction process. Implementation of the following mitigation measures would reduce potential impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during project construction. See **Appendix 12** for additional details.

Mitigation Measures/Project Conditions

MM HAZ-2.1: Soil and Groundwater Management Plan

A Soil and Groundwater Management Plan shall be prepared prior to ground disturbance, identifying the methods and procedures required to handle, store, transport and dispose of chemically impacted soil and groundwater. If groundwater is encountered during construction, groundwater sampling shall be conducted to determine contaminants and contamination levels. If contamination is found, a work

plan shall be developed and implemented by the project geotechnical engineer consistent with the Management Plan to protect the health of construction workers.

MM HAZ-2.2: Work Plan

Once the construction plans showing the depth and extent of the excavation are completed for all project segments, a targeted soil and groundwater sampling shall be conducted in areas of known or suspected contamination prior to the start of disturbance in those areas. If contamination is found, a work plan shall be developed by the project geotechnical engineer to protect the health of construction workers.

MM HAZ-2.3: Asbestos and Lead Paint Survey

Any hazardous materials or wastes encountered before or during the demolition stage of the project shall be disposed of according to current regulatory guidelines. If any structures are to be removed or demolished, an asbestos and lead paint survey shall be conducted for compliance with National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations and air district rules.

MM HAZ-2.4 Worker Health and Safety Plan

A worker health and safety plan (HSP) that meets the provisions of California Code of Regulations (Title 22, Section 5192) shall be developed by the project contractor. HSP procedures will address the identification, excavation, handling, and disposal of hazardous wastes and materials that may be found in construction areas. The HSP shall include Best Management Practices (BMPs) that all contractors must employ during construction.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than significant impact. The nearest school within one-quarter mile of the busway is Seaside High School. However, any hazardous materials encountered during construction would be addressed at the site and be subject to all existing and applicable regulations regarding the handling and disposal of such materials. If the handling and disposal of contaminated soils is encountered, it may need to be transported on roadways near the high school. With the application of existing regulations, there is no acute risk associated with transport. See **Appendix 12** for additional discussion.

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?

Potentially significant unless mitigation incorporated. See **Appendix 12** for a list of cleanup sites within 500 feet of the project site. As a transportation project, the busway is not considered a sensitive land use that would be affected by these conditions while in operation. Implementation of mitigation measures MM HAZ HAZ-2.1, HAZ-2.2, HAZ-2.3, and HAZ-2.4 would address residual environmental concerns if encountered during construction. See **Appendix 12** for additional information.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less than significant impact. The project alignment through the City of Marina and Sand City is located within the Airport Influence Area (Zone 7) of the Marina Municipal Airport and the Monterey Regional Airport. However, the aircraft accident risk level is considered to be low within this AIA zone. Marina Municipal Airport is used for general aviation aircraft operations, and the busway project operations result in little to no risk from these operations. As such, impacts would be less than significant. See **Appendix 12** for additional information.

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

No impact. The busway project would create a dedicated bus lane running parallel to Highway 1 within the TAMC right-of-way. As one of the objectives of the project is to relieve highway congestion, such relief would be a benefit to any emergency response plan intended to quickly and efficiently move or evacuate people. Further, the project could potentially serve as an alternative travel corridor for emergency vehicles in the event that the highway is congested. For these reasons, the project could have beneficial impacts to locally adopted emergency response plans.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No impact. The entire length of the busway alignment contains only sparse vegetation in coastal dune habitat and is highly disturbed. The proposed project corridor is within a transportation corridor and not within a Very-High Fire Hazard Severity Zone as mapped by CALFIRE. Given this lack of fuel, the project would not be susceptible to wildland fires, nor would the project pose a risk as a source of fire. Because the project is not within an area identified as having a high potential for wildland fire, the project would have no impact related to exposing people or structures to a significant risk of loss, injury, or death from wildland fire, as per CEQA Guidelines.

4.10 Hydrology and Water Quality

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

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than significant impact. Construction associated with the project would include demolition, grading, excavation, and temporary land disturbance to bare areas which would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Construction-related effects to water quality would be addressed through compliance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). A Storm Water Pollutant Prevention Plan (SWPPP), which must include erosion-control and sediment-control BMPs for construction and post-construction conditions to control potential construction-related pollutants from migrating off site into the storm drain system and into or directly in receiving waters would be required to obtain coverage under the CGP. Compliance with these requirements would reduce potential impacts to water quality standards to a less-than-significant level. See **Appendix 13** for additional details.

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

No impact. The project would not require the use of nor withdraw groundwater for use in construction or operation of the site. With appropriately designed stormwater detention, the increase in impervious surfaces from the busway lanes would not interfere with groundwater recharge. Thus, the project would have no impact to existing groundwater supply.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than significant impact. See Threshold 4.10 (a) above regarding existing controls and regulations already in place to manage water quality from site construction activity and post construction runoff. As noted above, project construction will require some earth moving and excavation for construction of the busway alignment. However, the project will be required to incorporate several BMPs into the project plans and implement those measures during construction, as already required by the the local agencies' stringent stormwater measures. As discussed above, the project would be required to comply with the CGP during construction and PCRs during project operation, which means the project would not result in substantial erosion or siltation on- or offsite or increase the rate of flooding on- or offsite. Similarly, as stormwater runoff would be captured and infiltrated to the extent feasible, and new stormwater facilities would be sized to meet local standards. As such, the project would not exceed the capacity of existing or planned stormwater drainage systems. See **Appendix 13** for additional information.

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

No impact. The project site is located within Zone X, an Area of Minimal Flood Hazard. Thus, the project site is not located within the 100-year floodplain nor a special flood hazard area as defined by the Federal Emergency Management Agency and is not at risk from inundation.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. The project would not require groundwater use for project construction or operation thus would not conflict with groundwater supply. As identified above, the project will be subject to the stringent water quality control measures during construction and will have no effect on groundwater resources. See **Appendix 13** for additional information.

4.11 Land Use and Planning

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

a) Physically divide an established community?

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. The project is located within an existing transportation corridor and will not significantly disrupt or divide existing neighborhoods or communities. As the busway project is intended to improve overall mobility connections for residents and visitors traveling to and from the Monterey Peninsula, the project should result in beneficial impacts by providing a safe and reliable transit connection to employment, education, and health care centers along the corridor for visitors and residents, consistent with local land use policies. See **Appendix 9** for additional information regarding consistency with local policies.

4.12 Mineral Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No impact. The project location and nature of the improvements will result in no impacts with respect to mineral resources. There are no known mineral resources located within the area of ground disturbance.

4.13 Noise

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

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than significant impact. The project would involve construction activities which would be temporary and have a short duration resulting in periodic increases in the ambient noise environment. Primary construction activities associated with development of the project would include site preparation, grading, retaining wall installation and paving. During construction, exterior noise levels could affect the residential neighborhoods and adjacent commercial and industrial uses at the north and south ends the construction area. Project construction would occur approximately 65 feet from existing commercial and industrial uses, and approximately 90 feet from the nearest residential uses to the north of the project site. These sensitive uses may be exposed to elevated noise levels during project construction. However, it is noted that construction activities would occur throughout the project site and would not be concentrated at a single point near sensitive receptors for an extended period of time. Project construction would be required to comply with the allowable construction hours set forth in Seaside Municipal Code Section 9.12.030, Marina Municipal Code Section 9.24.040, and Chapter 10.60 of the Monterey County Code of Ordinances. In addition, all construction equipment would be equipped

with properly operating and maintained mufflers and other state required noise attenuation devices, helping to reduce noise at the source. See **Appendix 14** for additional details.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. Project construction can generate varying degrees of groundborne vibration depending on the construction procedure and type of construction equipment used. The effect on buildings located near a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver buildings. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations (i.e., 0.20 inch/second). Groundborne vibration decreases rapidly with distance. Based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.210 inches per second peak particle velocity (PPV) at approximately 25 feet from the source of activity. The nearest off-site structures are commercial buildings located approximately 25 feet from the active construction zone for the proposed project. At this distance, construction vibration levels would be approximately 0.089 in/sec PPV. Therefore, construction equipment vibration velocities would not exceed the FTA's 0.20 PPV threshold or Caltrans' human annoyance threshold of 0.1 in/sec PPV. In general, other construction activities would occur throughout the project site and would not be concentrated at the point closest to the nearest off-site structures. Therefore, vibration impacts associated with the project would be less than significant.

To determine potential project operational vibration impacts from the project, a General Vibration Assessment was prepared for project operational bus pass-bys, in accordance with the FTA Noise and Vibration Manual. The nearest off-site structure (a commercial building), and residence are located approximately 40 feet and 75 feet, respectively, from the proposed busway driving lane. At this distance and a maximum speed of 65 mph, vibration levels would be at a vibration velocity of approximately 72 VdB at the at the nearest commercial building and 66 VdB at the nearest residence, which would be below the FTA's 75 VdB ground-borne vibration impact level for Land Use Category 3 uses (commercial) and Land Use Category 2 (residential) uses for frequent events. As a result, vibration levels from bus pass-bys associated with the proposed project would not cause structural damage at off-site structures or create human annoyance. See **Appendix 14** for additional information.

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

No impact. The Monterey Regional Airport is located approximately 1.30 miles south of the project site and the Marina Municipal Airport is located approximately 1.90 miles east of the project site; there are no private airstrips in the project area. The project site lies outside the 65 dBA CNEL noise contour specified in the Monterey Regional Airport Land Use Compatibility Plan Update (May 2018). As a transportation project aircraft noise would have no adverse effects.

4.14 Population and Housing

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

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

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

No impact. The project, a linear busway facility located within TAMC's Monterey Branch Line right-of-way, will not displace people or housing along the alignment that would necessitate the building of housing elsewhere. No relocation or condemnation actions are required. Nor would the project induce substantial unplanned population growth along the alignment. The adopted general plans for the affected land use agencies provide for planned growth within their jurisdictional boundaries. As such, the project would provide needed transit service for the planned population.

4.15 Public Services

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
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:				
i) Fire protection?				X
ii) Police protection?				X
iii) Schools?				X
iv) Parks?				X
v) Other public facilities?				X

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:

i. Fire protection?

ii. Police protection?

iii. Schools?

iv. Parks?

v. Other public facilities?

No impact. The busway project is a transportation facility that will not generate new population that would require additional public services such as schools, parks or government facilities. The busway will be maintained by MST and would not require maintenance by Marina, Sand City, Seaside, or Monterey County public works departments. In terms of fire and police protection, the project may provide enhanced vehicle access and/or an emergency access route to better serve the coastline from Marina to Sand City. Given these benefits, and the fact that no new public service facilities would need to be constructed because of the busway project, no impacts would be expected.

4.16 Recreation

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than significant impact. The project would not generate additional population near existing parks and recreational facilities. An increase in people is typically what causes increased use and deterioration of existing facilities. As part of the busway project, there would be associated bicycle and pedestrian improvements that may allow for connections to the region's existing and planned recreational trail facilities, such as Fort Ord Dunes State Park, Fort Ord Regional Trail and Greenway, and the Monterey Bay Coastal Recreation Trail. These connections would allow pedestrians or cyclists to more easily access the recreational areas, but any increase in usage caused by the project would be incidental and less than significant. Operation of the proposed project would increase public access to park and recreational facilities located along the proposed action alignment and would result in a beneficial effect. The project when completed will increase the total length of bicycle/pedestrian facilities over existing conditions. Minor realignment of existing bicycle/pedestrian facilities and new connections will be planned to allow continued use of facilities during construction. The physical effects of constructing the project are addressed throughout this Initial Study.

4.17 Transportation

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

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No impact. One of the primary objectives of the project is to implement associated traffic, bicycle and pedestrian circulation improvements along the local network in conjunction with the dedicated busway. Safe and reliable transit connections along the corridor is consistent with the TAMC, MST, City of Marina, City of Sand City, City of Seaside, and Monterey County's planning documents, including the respective circulation elements of each jurisdiction's general plans. As such, the project will have no significant environmental impacts with respect to program or plan conflicts. See **Appendix 2** for more information.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No impact. CEQA Guidelines Section 15064.3 addresses new requirements for analyzing vehicle miles traveled (VMT). However, SB 743 guidance issued by the Office of Planning and Research (OPR) states that initiation of new transit service would be exempt from new VMT requirements under CEQA. Transit projects would be expected to reduce regional VMT and therefore result in beneficial impacts. See **Appendix 2** for additional information.

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

Less than significant impact. The project will introduce SURF! buses along a new route where bus traffic currently does not exist. Along Palm Avenue and Marina Drive in Marina (Segment 1) buses would be traveling at low speeds through this section as they approach and depart the new platforms. Pedestrian crossings of the bus lanes in this location (as well as the crossings at the 5th Street underpass and near the new California Avenue roundabout) have been designed for safety by installing stops and lighting infrastructure, and by placing the crossings in locations where buses are traveling at slow speeds. Gates and other infrastructure have been designed to prevent inadvertent access onto the bus lanes by private vehicles, and the roundabout has been designed to meet standards for bus movements. New signalization at Playa Avenue/California Avenue should also result in better and safer traffic flow compared to the existing stop controls. With these design and safety features, potential impacts are less than significant.

d) Result in inadequate emergency access?

No impact. Where the SURF! route accesses public roadways, the 10-minute headways will have little effect on traffic operations and will not impede emergency access at any location or emergency vehicle movements. Within the TAMC corridor, the project may provide an alternative access for emergency vehicles if Highway 1 is closed or heavily congested.

4.18 Tribal Cultural Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i)Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Potentially significant unless mitigation incorporated. Please see Section 4.5 of this Initial Study (Cultural Resources) and **Appendix 8**. While no prehistoric sites have been identified within or near the project alignment (with the exception of one recorded that has not been located by current studies and is assumed to be destroyed), the potential remains to uncover or disturb previously unknown resources during the construction phase of the project. Mitigation measures MM CR-1 and MM CR-2 are in place if such resources are discovered during construction. See **Appendix 8** for additional information.

4.19 Utilities and Service Systems

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

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than significant impact. Construction of the project will not require the extension or installation of traditional wet utility systems (water and wastewater) as those services are not essential to busway operations. However, the project will require street/busway/pedestrian lighting (primarily at the Palm/Del Monte bus stop, 5th Street Station and California Avenue Roundabout). As discussed in **Appendix 3**, restrooms could be desired at the 5th Street Station in the future. Should restrooms be pursued, MST would seek water and wastewater connections from the City of Marina.

Near the Palm/Del Monte location, an existing storm drain outlet discharging onto Marina Drive may be routed to an existing storm drain to avoid potential conflicts with busway/platform construction and to improve localized drainage in this immediate area. No other major existing utility systems or major infrastructure will require relocation to construct the project. The railroad tracks will remain in place.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

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

No impact. The project will not require a water supply or generate wastewater. As discussed in **Appendix 3**, restrooms could be preferred for the 5th Street Station in the future. Should restrooms be pursued, MST would seek water and wastewater connections from the City of Marina.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. The project will result in small amounts of solid construction waste but will not create a permanent waste stream. This temporary and limited amount of construction waste will not exceed standards, local infrastructure, or negatively impact solid waste reduction goals and regulations. The solid waste from construction activities will be properly disposed of according to current law. As discussed above, the busway project is a transit project that will transport people when in operation and would not generate significant amounts of solid waste. Solid waste from operations would be limited to trash receptacles at the stations and stops.

4.20 Wildfire

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

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. The busway project is located in an urbanized area and within the disturbed coastal dune environment parallel to Highway 1. The project is not located in a high fire hazard severity zone. With no significant sources of fuel – and the fact that the project will not introduce a permanent population – this issue has been removed from further analysis.

4.21 Mandatory Findings of Significance

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Does the project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact with mitigation incorporated. As addressed under Biological Resources the project is immediately adjacent to environmentally sensitive habitat areas (ESHA) that include coastal

scrub and dune scrub habitats that occur along the California coastal zone. The project would impact rare and endangered plant species and potentially effect special status animal species during construction. However, the project as designed and mitigated through the federal Section 7 permit process will fully mitigate these species impacts through habitat restoration and other measures.

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. The project is a busway and bus rapid transit project that is unique in terms of use and geography. The incremental effects as described in this Initial Study are largely site specific and will not combine with the effects of other related projects to create cumulatively considerable effects. Other nearby, related or reasonably foreseeable projects could include the North Fremont Street roadway improvements that have recently been constructed, and the FORTAG regional trail that will be near the project along Canyon Del Rey Boulevard. These projects provide some level of cumulative benefit as they provide opportunities for non-motorized travel, reductions in greenhouse gasses and vehicle miles travelled, and enhanced trail connections. In terms of construction, construction timelines are not concurrent with these projects, limiting the potential to combine to create a cumulatively considerable effect.

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

Less than significant impact. As evidenced within this initial study and appendices to the NOE, the project has little potential to cause adverse effects on human beings from environmental concerns such as air quality, noise or exposure to geologic or hazardous materials risks. The nature of the project will not generate a new or permanent population that will be exposed to environmental concerns, will not use or transport hazardous materials, or adversely affect emergency response plans.

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