North Fremont Street Casanova to Canyon Del Rey Sidewalk Gap Closure Environmental Initial Study and Mitigated Negative Declaration

> Prepared for: City of Monterey



Public Review Draft

August 2020

Prepared by:

**Kimley»Horn** 

This page intentionally left blank.

## Table of Contents

Draft N	λitigated Negative Declarationiii
1.0	Introduction & Purpose1
1.1	Purpose and Scope of the Initial Study1
1.2	Summary of Findings1
1.3	Initial Study Public Review and Outreach Process1
1.4	Report Organization2
2.0	Description of Proposed Project
2.1	Project Background, Location, and Setting3
Lo	ocation3
B	ackground and Purpose3
Si	te Conditions and Setting3
P	oject Characteristics4
3.0	Initial Study Checklist6
3.1	Project Information6
4.0	Environmental Analysis8
4.1	Aesthetics
4.2	Agriculture and Forestry Resources10
4.3	Air Quality12
4.4	Biological Resources16
4.5	Cultural Resources
4.6	Energy
4.7	Geology and Soils24
4.8	Greenhouse Gas Emissions
4.9	Hazards and Hazardous Materials29
4.10	Hydrology and Water Quality32
4.11	Land Use and Planning35
4.12	Mineral Resources
4.13	Noise
4.14	Population and Housing41
4.15	Public Services42
4.16	Recreation44
4.17	Transportation45

4.18	Tribal Cultural Resources	47
4.19	Utilities and Service Systems	49
4.20	Wildfire	51
4.21	Mandatory Findings of Significance	53
5.0	Report Preparers	55
6.0	References	56

# List of Tables

able 1: Project Construction Emissions13
--

# List of Figures

Note: All figures are at the end of the document. Figure 1: Project Location Figure 2: Site Plan Figure 3: Surrounding Land Uses Figure 4: Jurisdictional Boundaries Figure 5: Truss Bridge Concept Figure 6: Site Photographs Figure 7: Truss Bridge Rendering Figure 8: Vegetation Communities Figure 9: Tree Removal

# **Appendices**

Appendix A: CalEEMod Air Quality and Greenhouse Gas Emissions Modeling

- Appendix B: Biological Resources Memo
- Appendix C: Cultural Resources Report



# MITIGATED NEGATIVE DECLARATION

Project Title:	North Fremont Street Sidewalk Gap Closure Project
Project Location:	The components of the project footprint are located within the City of Monterey, California adjacent to the boundary line with the City of Seaside, California. The project limits extend along the north edge of North Fremont Street between Canyon Del Rey Boulevard on the east and Casanova Avenue on the west. The Project is located within the California Coastal Zone.
Assessor's Parcel No.	Portions of APN 013-142-004; 013-142-005; 013-142-006
Applicant:	City of Monterey

### **Initial Study:**

An Initial Study of this project was undertaken and prepared for the purpose of determining whether this project may have a significant effect on the environment. A copy of this study is available online at https://monterey.org/planning.

#### Findings and Reasons:

The Initial Study identified potentially significant effects on the environment. However, this project has been mitigated (see mitigation measures below which avoid or mitigate the effects) to a point where no significant effects would occur. There is no substantial evidence that the project may have a significant effect on the environment. The following reasons support these findings:

- The proposal is an improvement that has been previously addressed as part of the North Fremont Bicycle and Pedestrian Access and Safety Improvements project and Federal Aid Project No. ATPL-5086 (034), which included improvements on North Fremont Street between Casa Verde Way and Canyon Del Rey Boulevard. The proposal is consistent with the objectives of the City of Monterey General Plan, and would improve recreational opportunities, network connectivity, pedestrian safety, and opportunities for nonmotorized transportation.
- 2. Identified adverse impacts are proposed to be mitigated by construction best practices, pre-construction surveys and other standard conditions as identified in the Initial Study.
- 3. The proposed project is consistent with the adopted goals, policies and land uses of the City of Monterey General Plan and Municipal Code.
- 4. With the application of the following mitigation measures, the proposed project will not have any significant impacts on the environment:

### **MITIGATION MEASURES**

- MM 1 Fencing and Monitoring. Riparian habitat and potential waters of the U.S. and State shall be avoided during construction with protective fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that fencing remains intact and work crews are properly avoiding the habitat area. If all riparian areas and waters are avoided, no additional mitigation is necessary.
- MM 2 Construction Best Practices. To protect water quality and riparian vegetation during construction, the following measures shall be included on the construction specifications and documents:
  - Project contractor shall ensure that trenching, excavating, backfilling and other activities that involve substantial soil disturbance adjacent to riparian vegetation and Canyon Del Rey Creek are planned and implemented with a qualified hydrologist, engineer or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation near sensitive areas.
  - Stationary equipment such as motors, generators, and welders located within 100 feet of the creek shall be stored overnight at staging areas and shall be positioned over drip pans.
  - No debris, soil, silt, sand, oil, petroleum products, cement, concrete or washings thereof shall be allowed to enter, or be placed where they may be washed by rainfall or runoff, into riparian areas or Canyon Del Rey Creek.
  - All construction debris and associated materials shall be stored in staging areas and shall be removed from the work site upon completion of the project.
  - Cleaning or refueling of equipment shall take place within turnouts or staging areas at least 50 feet from riparian areas and Canyon Del Rey Creek.
  - All refueling shall be conducted over plastic bags filled with sawdust or other highly absorbent material. Clean-up materials for spill shall be kept on hand at all times. Any accidental spills of fuel or other contaminants shall be cleaned up immediately.
- MM 3 Preconstruction Bird Surveys. The applicant shall schedule all on-site tree removal and grading to occur between August 31th and March 1st of any given year to avoid the Central Coast bird nesting season. If this schedule is not practical, the project sponsor shall fund the engagement of a qualified biologist to conduct preconstruction nesting bird surveys no more than two weeks prior to removal of trees and grading. If no active bird nests are observed, no additional measures are required. If nesting birds are observed, the biologist will establish a buffer zone where no tree removal or grading will occur until the biologist confirms that all chicks have fledged.
- **MM 4 Tree Replacement.** Upon completion of construction, final site work shall include oak tree replacement at a 1:1 ratio, or as specified by local tree ordinances.
- **MM 5 Undiscovered Cultural Resources.** Prior to construction on the job site, construction personnel shall participate in cultural and tribal sensitivity training (conducted by a qualified archaeologist or tribal representative). During project construction, if any

archeological, paleontological or tribal resources (e.g., evidence of past human habitation or fossils) are found, the project applicant and/or its contractor shall cease all work within 50 feet of the discovery and notify the City of Monterey Planning Division immediately. The project applicant and/or its contractor shall retain a qualified archaeologist, paleontologist and Native American tribal representative to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered resources. The City and the applicant shall consider the mitigation recommendations and agree on implementation of the measure(s) that are feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures. (Health and Safety Code Section 7050.5). If the resource is Native American, the City give deference to tribal representatives regarding treatment.

- MM 6 Discovery of Human Remains. If human remains or cultural resources associated with a burial (i.e. grave goods) are discovered during construction, the project applicant and/or its contractor shall cease all work within 50 feet of the find and notify the City of Monterey Planning Division and the County Coroner, according to California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission and shall follow the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) regarding treatment and disposition of recovered cultural items. The Commission will designate a Most Likely Descendant (MLD) who will be authorized to provide recommendations for management of the Native American human remains and any associated materials or objects (Public Resourced Code Section 5097.98 and Health and Safety Code Section 7050.5).
- **MM 7:** Prior to the initiation of construction, the City of Monterey City Engineer shall ensure that all project plans and specifications stipulate that:
  - All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers;
  - Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible;
  - During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers;
  - During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors; and
  - Operate earthmoving equipment on the construction site, as far away from vibration sensitive sites as possible.
- **MM 8:** Prior to the issuance of a grading permit, the City's Building Division shall confirm that vibratory rollers capable of generating vibration levels above 0.2 inches per second PPV shall not be used within 20 feet of adjacent residences. If the contractor can demonstrate that vibratory rollers have vibration levels of less than 0.2 inches per second PPV, then they shall be allowed to operate within the 20-foot buffer zone.

# 1.0 **INTRODUCTION & PURPOSE**

# 1.1 Purpose and Scope of the Initial Study

This Initial Study has been prepared to determine and identify the potential environmental effects of construction and operation of the North Fremont Street Sidewalk Gap Closure Project ("Project") in the City of Monterey. This study has been prepared pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, Section 21000, et seq.).

As a bicycle/pedestrian facility designed to bridge an existing sidewalk gap and enhance bicycle and pedestrian connections at the boundary of the cities of Monterey and Seaside, the Project is expected to provide certain benefits in terms of non-motorized mobility and safety. As such, the scope of this Initial Study focuses on the physical environmental effects of constructing a short bridge structure adjacent to North Fremont Street on the edge of Laguna Grande Park. Primary issues studied are biology, cultural resources, and water quality; however, the Initial Study addresses all area of the standard checklist within CEQA Guidelines Appendix G.

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b) (1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on the criteria above, the City of Monterey (City) is the lead agency for the proposed project.

The conclusions herein are based on CEQA standards, professional judgement, field review and available public documents. This Initial Study constitutes substantial evidence supporting the conclusion that preparation of an EIR is not required prior to approval of the project by the City and provides the required documentation under CEQA.

# 1.2 Summary of Findings

The project would have beneficial impacts, less than significant impacts, or no impacts in all analysis categories except as identified below. Beneficial impacts of the project include improved recreational opportunities, network connectivity, improved pedestrian safety, and opportunities for non-motorized transportation.

Environmental issues that could have effects requiring mitigation include biological resources (protection and avoidance of Environmentally Sensitive Habitat Area) and tribal and cultural resources (protection of inadvertently discovered resources).

# 1.3 Initial Study Public Review and Outreach Process

This Project has been previously addressed as part of the North Fremont Bicycle and Pedestrian Access and Safety Improvements project, Federal Aid Project No. ATPL-5086 (034), which included improvements on North Fremont Street between Casa Verde Way and Canyon Del Rey Boulevard. The City held multiple public information meetings about the North Fremont Bicycle and Pedestrian Access

and Safety Improvements project, including the sidewalk gap component, at North Fremont Business District meetings in June 2015, March 2016, August 2016, May 2017, and March 2019; Transportation Agency for Monterey County Bicycle & Pedestrian Committee meetings in November 2015 and March 2017; Casanova Oak Knoll Neighborhood Association meetings in October 2016 and June 2018; and a North Fremont Open House in May 2018. City staff and consultants have also provided project information to responsible agencies regarding the environmental review process.

The Initial Study will be available for public review for no less than 30 days. At the close of public review, the City will consider public comments on the environmental document prior to making a decision on the Project.

# 1.4 Report Organization

This document has been organized into the following sections:

**Section 1.0** – Introduction. This section provides an introduction and overview describing the conclusions of the Initial Study.

**Section 2.0** – Project Description. This section identifies key project characteristics and includes a list of anticipated discretionary actions.

**Section 3.0** – Initial Study Checklist. The Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.

**Section 4.0** – Environmental Evaluation. This section contains an analysis of environmental impacts identified in the environmental checklist.

**Section 5.0** – Report Preparers.

**Section 6.0** – Report References. This section identifies resources used to prepare the Initial Study.

# 2.0 DESCRIPTION OF PROPOSED PROJECT

# 2.1 Project Background, Location, and Setting

#### **Location**

The North Fremont Street Sidewalk Gap Closure Project (Project) is located in the City of Monterey, California adjacent to the boundary line with the City of Seaside, California. The project limits extend along the north edge of North Fremont Street between Canyon Del Rey Boulevard on the east and Casanova Avenue on the west. See **Figure 1**. The Project is located within the California Coastal Zone.

#### Background and Purpose

There is currently a gap in the existing sidewalk along the north side of North Fremont Street, between Casanova Avenue and Canyon Del Rey Boulevard (also known as California State Route CA-218). The gap prevents continuous and safe pedestrian movement in this location, where pedestrians must either cross North Fremont Street to use the sidewalk, use the travel lane, or negotiate an uneven dirt path beyond a metal guardrail. The purpose of the Project is to connect/complete the sidewalk and provide a safe pathway for pedestrian and cyclist connectivity along the north side of North Fremont street with a Class I multi-use trail. See **Figure 2.** 

The gap closure was previously addressed as part of the North Fremont Bicycle and Pedestrian Access and Safety Improvements project, Federal Aid Project No. ATPL-5086 (034), which included improvements on North Fremont Street between Casa Verde Way and Canyon Del Rey Boulevard. The previous project included the design of a wall retaining the proposed embankment for sidewalk continuation, across a small intermittent creek, adjacent to the westbound lanes of North Fremont Street. The original wall design was proposed to be a cantilevered retaining wall founded on cast-in-drilled-hole (CIDH) piles and located very close to – and possibly encroaching into - an Environmentally Sensitive Habitat Area (ESHA).

Because of the contractor bids received for the construction of the wall under the previous project, the City opted to postpone awarding construction for the segment between Casanova Avenue and Canyon Del Rey Boulevard in order to study other design alternatives. As a separate project, the City studied the feasibility and comparative merits of the original retaining wall design and an alternative design using a pre-fabricated truss span. After reviewing both options and assessing cost and environmental issues, the City chose to pursue the truss span design.

## Site Conditions and Setting

North Fremont Street transitions from a four-lane street to a five-lane street at the intersection with Canyon Del Rey Boulevard. Southwest of the intersection, North Fremont has two

eastbound lanes and a left-turn lane separated by a raised median from the two westbound lanes. North Fremont Street traverses Canyon Del Rey (a northwest-southeast trending canyon), spanning over a partially culvertized intermittent creek. The creek located at the base of the canyon and flowing northwesterly towards Laguna Grande.

The site has limited sidewalk access for cyclists and pedestrians as the sidewalk extending from the west side of Canyon Del Rey Boulevard, along North Fremont Street, dead-ends approximately 160 feet southwest from the western corner of the North Fremont Street/Canyon Del Rey Boulevard intersection. Sidewalk and other improvements along the north side of North Fremont Street, extending from Casa Verde Way to approximately 30 feet northeast of the intersection with Casanova Avenue, have recently been completed as part of a previous project mentioned earlier. Current sidewalk discontinuity – the "gap" - is approximately 500 feet.

The existing project site on North Fremont Street between Casanova Avenue and Canyon Del Rey Boulevard consists of a sloped terrain with an approximate maximum elevation difference of 30 feet from the top of the roadway to the base of the canyon within the ESHA. As previously mentioned, the ESHA exists downslope Canyon Del Rey and downslope from North Fremont Street's northern edge. North Fremont Street appears to have been built by bridging over an existing intermittent creek with a culvert, and filling Canyon Del Rey. Similarly, south of North Fremont Street, the canyon is thought to have been filled and the creek culvertized, to develop the land for what is now an existing Safeway retail center. A Pacific Gas & Electric (PG&E) power substation is located west of the canyon, with a driveway extending north from North Fremont Street. See **Figure 3**. Just east of the sidewalk gap, approximately 30 feet from the end of sidewalk is a bus stop made up of a concrete slab extending beyond the sidewalk and bus stop sign.

The Project is located where City of Monterey, City of Seaside, and Caltrans ROW interface. See **Figure 4**. The Project spans outside of City of Monterey ROW into City of Seaside ROW. In addition, the project affects parcel APN 013-142-005 owned by the City of Seaside within the City of Monterey. The Project will be located outside of Caltrans ROW.

#### Project Characteristics

The Project consists of a prefabricated steel truss bridge with concrete abutments at either end. See **Figure 5**. Construction for the Project would begin with excavating to the bottom of abutment footing/pile cap elevation. If in design, CIDH pile are determined to be needed, then a similar CIDH pile construction sequence as described above, would need to take place. Rebar placement for the abutment footing/pile cap, abutment stem, backwall, and wingwall would follow. Forming of abutment components, pouring concrete, and allowing it to cure would then take place, proceeded by backfilling operations. Simultaneously, while all the on-site work is being done, the steel truss bridge can be fabricated. The steel truss bridge would be prefabricated off-site and shipped in two or three segments to the site, to be assembled and erected into place. To complete bridge construction, the walkway deck would need to be installed. The walkway deck would be a steel grate design to allow water and natural light to pass through. The structure will consist of painted (black) steel, and low-profile lighting is proposed for safety.

The truss would span 130 feet, connecting to improved Class I trail approaches at both ends. Curb and gutter would be replaced along a portion of the road frontage, and two oak trees would require removal. The resulting project, approximately 500 feet in total length, would connect Casanova Avenue to Laguna Grande Park and Canyon Del Rey Boulevard. All work would be performed outside of the riparian/ESHA limits.

Periodic maintenance would be required for the bridge structure. Vegetation would need to be controlled and topped so that it does not overgrow and impact the bridge from below. In addition, occasional repainting of the bridge would be necessary to prolong its lifespan.

# 3.0 INITIAL STUDY CHECKLIST

## 3.1 Project Information

#### 1. Project title:

North Fremont Sidewalk Gap Closure Project

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

City of Monterey, 580 Pacific Street, Monterey, CA 93940

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

Andrea Renny, P.E., P.T.O.E, City Traffic Engineer 831.646-3921

#### 4. Project location:

East edge of North Fremont Street, between Casanova Avenue and Canyon Del Rey Blvd (SR 218) Portions of APN 013-142-004; 013-142-005; 013-142-006; and public right of way in the cities of Monterey and Seaside

5. Project sponsor's name and address:

Same as above.

## 6. General plan designation:

City of Monterey: Parks and Open Space; City of Seaside: Parks and Open Space

7. Zoning:

City of Monterey: Open Space (OS); City of Seaside: Open Space and Recreation (OSR)

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.)

Construction of an approximately 130' prefabricated bicycle and pedestrian bridge to connect an existing gap in the sidewalk along North Fremont Street on the border of the City of Seaside and City of Monterey. The project involves limited ground disturbance and fill for the span's abutments, curb and gutter improvements, paved sidewalk/trail approaches on each side of the span, and removal of up to four existing oak trees.

- 9. Surrounding land uses and setting: Briefly describe the project's surroundings: Active roadway (North Fremont), PG&E substation, Canyon Del Rey Boulevard; single family residence; Laguna Grande Park
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.) City of Seaside
- 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.? No formal consultation requested.

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

	VIRONMENTAL IMPACTS ues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Exc	cept as provided in Public Resources Code Section 2	1099, would the	e 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?			х	
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?			х	
c)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			х	

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

**No impact.** The Project is located along a heavily traveled roadway (North Fremont Street) with no nearby scenic vistas. There are no elevated, publicly accessible vantage points toward the site that would be considered scenic vistas.

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

**Less than significant impact**. North Fremont Street is not a state scenic highway, and there are no historic buildings or rock outcroppings on or adjacent to the immediate Project area. The only potentially scenic resource in the immediate vicinity of the Project are the trees and brush associated with the oak woodland and riparian habitat adjacent to North Fremont Street.

The construction of the truss bridge will require minor grading for abutments and will require the removal of up to four oak trees within the project alignment (see Section 4.4, Biology). The bridge will also span the existing Canyon Del Rey drainage channel, over a stand of riparian vegetation. However, the introduction of the bridge structure will not substantially alter or damage these resources from a visual or aesthetic perspective. The truss bridge is a pedestrian and bicycle facility designed to be compatible with park and open space settings.

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 Project is located on the interface of an urban environment and public park/undeveloped land near the intersection of two major thoroughfares, North Fremont Street and Canyon Del Rey Boulevard. Photographs of the site from these public viewpoints (roadways) are shown in **Figure 6**. An additional vantage point is shown from the Laguna Grande Court neighborhood, where a parcel owned by the City of Seaside is fenced and gated from public access. Two private single-family homes accessed from a shared driveway off Laguna Grande Court are the closest structures to the project location and have the clearest, albeit private, view of the Project location.

Based on the existing visual character of the sight and relatively low quality of public views and viewing experience in this location, implementation of the Project will not significantly degrade the existing condition. **Figure 7** shows a before and after visualization of the site after implementation. The most prominent visual feature, a bicycle/pedestrian truss span designed to complement the park setting, will be consistent with the existing setting and could be considered a visual enhancement to the immediate area.

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

**Less than significant impact**. The truss bridge and access points would have low intensity lighting for nighttime safety. However, this light source will not be substantial, create glare, or affect day or nighttime views in the area.

# 4.2 Agriculture and Forestry Resources

	VIRONMENTAL IMPACTS Jes	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
ma Cal	determining whether impacts to agricultural resour y refer to the California Agricultural Land Evaluation ifornia Department of Conservation as an optional mland. Would the project:	on and Site Asses	sment Model (1	.997) prepared l	by the
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?				х
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				х
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?				х
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?				х

- 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**. The Project location is an urban area along an existing roadway. The strip of right of way affected by the Project is not classified as farmland, has no forest land value, would not conflict with agricultural zoning, nor result in other changes that could result in the conversion of farmland.

# 4.3 Air Quality

	VIRONMENTAL IMPACTS Les	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
	nere available, the significance criteria established lution control district may be relied upon to make				
a)	Conflict with or obstruct implementation of the applicable air quality plan?			Х	
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?			х	
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			х	

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

**Less than significant impact**. The Air Quality Plan focuses on reduction of ozone levels within the NCCAB. As identified by the MBARD, emissions of ozone precursors (i.e., nitrogen oxides  $[NO_x]$ ) that conflict with the population projections on which the Air Quality Plan is based, are not accommodated in the Air Quality Plan for ozone and would have a significant cumulative impact unless offset.

The proposed Project would result in the construction and operation of a new trail connection. The Project would not generate additional population, add additional traffic, or add jobs or housing. Therefore, implementation of the proposed Project would not result in conflicts with or obstruction of implementation of the Air Quality Plan. MBARD guidance for analysis of air quality impacts of planning documents consists of assessing consistency with the Air Quality Plan. This analysis is presented below and indicates no impact for ozone and ozone precursors, such as NO<sub>x</sub>.

In addition, the proposed Project's construction and operation emissions would not exceed MBARD thresholds as noted below. The NCCAB is currently in non-attainment for State ozone and  $PM_{10}$  standards which represents an existing cumulatively significant impact within the NCCAB. Ozone precursors include reactive organic gases (ROG) and NO<sub>X</sub>. The Project would not exceed quantitative thresholds for either of these ozone precursors. Similarly,  $PM_{10}$  thresholds also would not be exceeded

for construction or operation of the Project. Therefore, the Project would not make a considerable contribution to this existing, cumulatively significant impact. Impacts would be less than significant.

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

**Less than significant impact**. Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include ozone-precursor pollutants (i.e., ROG and  $NO_X$ ) and  $PM_{10}$  and  $PM_{2.5}$ . Construction-generated emissions are short term and temporary.

The regional construction emissions associated with development of the proposed Project were calculated using Sacramento Metropolitan Air Quality Management District (SMAQMD)'s Road Construction Emissions Model (Version 9.0.0). For the purposes of the air quality analysis, site disturbance would be approximately 0.2 acres and construction is estimated to be approximately eight months. Total earthwork would include approximately 500 cubic yard (cy) of total fill and 90 cy of total cut including excavation. This would result in approximately 410 cy of import. Typical construction detail equipment includes cement and mortar mixers, graders, scrapers, rollers, pavers, tractors, loaders, and air compressors. The MBARD employs only one quantitative threshold in connection with the above-referenced criteria air pollutants to determine construction-related air quality impacts: it uses a threshold of 82 lbs/day of PM<sub>10</sub> for determining significance of construction-related emissions. **Table 1: Project Construction Emissions**, shows construction emission

Emissions Source			Pollutant (p	ounds/day)		
Emissions Source	ROG	NO <sub>x</sub>	со	SO2	PM <sub>10</sub> Total	PM <sub>2.5</sub> Total
2021	9.91	113.65	71.52	0.18	6.49	4.48
Threshold					82	
Exceed Threshold	NA	NA	NA	NA	No	NA

#### **Table 1: Project Construction Emissions**

Source: SMAQMD Road Construction Emissions Model v. 9.0.0 and Appendix A

1. The reduction/credits for construction emission mitigations are based on mitigation included in CalEEMod and as typically required by the MBARD (Basic Control Measures). The mitigation includes the following: replace ground cover on disturbed areas quickly, water exposed surfaces twice daily, and proper loading/unloading of mobile and other construction equipment.

As shown in **Table 1**, construction of the proposed Project would result in a maximum of 6.49 lbs/day of  $PM_{10}$ , which is below the MBARD threshold of 82 lbs/day of  $PM_{10}$ . Further, the proposed Project would be required to comply with MBARD's dust control rules. Therefore, impacts would be less than significant, and no mitigation would be required.

Long-term operational emissions are typically attributed to vehicle trips (mobile emissions), the use of natural gas (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). Implementation of the proposed Project would result in a new trail connection. The Project would not generate additional population, add additional traffic,

add stationary sources, or add jobs or housing. Therefore, operational emissions are less than significant and no mitigation is required.

#### c) Expose sensitive receptors to substantial pollutant concentrations?

**Less than significant impact**. The Project will result in no mobile source emissions. Temporary emissions form construction equipment and construction methods will be limited in scope. The nearest homes, in the Casanova neighborhood, will not experience substantial concentrations during work hours.

Under CEQA, residences, schools, daycare centers, and healthcare facilities, such as hospitals, or retirement and nursing homes, are considered sensitive receptors. The nearest sensitive receptor to the Project site is located approximately 25 feet north of the site. The proposed Project would result in the construction and operation of a new trail connection. The Project would not generate additional population, add additional traffic, or add jobs or housing. Therefore, the Project would not result in a substantial increase in traffic-related pollutant concentrations that could affect sensitive receptors. Further, the dust and equipment exhaust emissions during construction would be minimal and would be controlled by compliance with MBARD Rule 400 (Visible Emissions). Rule 400 limits discharge of visible air pollutant emissions into the atmosphere from any emission source for a period or periods aggregating more than three minutes in any one hour, as observed using an appropriate test method, prohibited.

#### Construction and Operation Period Toxic Air Contaminant Impacts

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The health risk associated with high concentrations of diesel exhaust PM<sub>10</sub> from construction equipment has a carcinogenic and chronic effect, but no short-term acute effect is currently recognized. The Project could potentially expose sensitive receptors to temporary health hazards associated with TACs due to the operation of construction equipment. However, concentrations of mobile source diesel particulate matter would only be present during temporary construction activities, and as previously shown in **Table 1**, PM<sub>10</sub> emissions associated with construction emissions were negligible; therefore, no operational TAC impacts would occur. Compliance with MBARD recommended dust control measures would further reduce PM<sub>10</sub> emissions. The health risk associated with construction emissions would be less than significant and no mitigation is required.

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

**No 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. The nature of the Project as a trail gap closure would not result in other odors that would affect people in the area. Therefore, no impacts would occur.

#### **Standard Conditions and Requirements**

- AQ SC-1: MBARD Rule 400 Visible Emissions. Project applicants shall not discharge of visible air pollutant emissions into the atmosphere from any emission source for a period or periods aggregating more than three minutes in any one hour, as observed using an appropriate test method, is prohibited.
- AQ SC-2: MBARD Fugitive Dust Control. Although the Project would not exceed thresholds of significance for PM<sub>10</sub>, MBARD recommends the use of the following Best Management Practices for the control of short-term construction generated emissions in any event:
  - Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
  - Prohibit all grading activities during periods of high wind (over 15 mph).
  - Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
  - Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.
  - Haul trucks shall maintain at least 2'0" of freeboard.
  - Cover all trucks hauling dirt, sand, or loose materials.
  - Plant vegetative ground cover in disturbed areas as soon as possible.
  - Cover inactive storage piles.
  - Install wheel washers at the entrance to construction sites for all exiting trucks.
  - Pave all roads on construction sites. Sweep streets if visible soil material is carried out from the construction site.
  - Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District shall be visible to ensure compliance with Rule 402 (Nuisance).
  - Limit the area under construction at any one time.

# 4.4 Biological Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
<ul> <li>a) Have a substantial adverse effect, either directly or through habitat modifications, or any species identified as a candidate, sensitive, or special status species in local o regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</li> </ul>			х	
<ul> <li>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?</li> </ul>		x		
<ul> <li>c) Have a substantial adverse effect on state o federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</li> </ul>			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 ordinance protecting biological resources, such as a tree preservation policy or ordinance?	5	x		
<ul> <li>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?</li> </ul>			х	

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?

**Less than significant impact**. The project is located on the edge of Laguna Grande Park. Some portions of the park have high biological value; however, the portion immediately adjacent to North Fremont Street is highly disturbed and regularly maintained. <sup>1</sup> Much of this area is denuded or sparsely vegetated with weedy plant species. The remainder of the area consists of degraded riparian and oak woodland communities and a horticultural garden planted with native and non-native plants, shrubs and trees. See **Figure 8**, Vegetation Communities.

Canyon Del Rey Creek runs through the project site and supports a highly degraded riparian corridor. The riparian area within the project site has been significantly disturbed as a result of adjacent development, stormwater infrastructure maintenance, and on-going management efforts specific to homeless encampments. Riparian vegetation comprises about 0.37 acres near the project site.

The oak woodland community near the project site is dominated by coast live oak trees and acacia trees, with an understory of blackberry and English ivy. The Acacia, a non-native species, has recently invaded the oak woodland community and is co-dominant with coast live oak. Approximately 1.3 acres of oak woodland was documented near the project site; however, this community is north of and not affected by the project's impact area.

The horticultural garden near the project site (located at the corner of North Fremont Street and Canyon Del Rey Boulevard is planted with species such as coast live oak, sage, and two buckwheat species. These buckwheat species are the host plants of the federally Endangered Smith's blue butterfly (SBB). However, these buckwheat plants were planted in an urban landscape and are isolated from other populations of suitable habitat for SBB. Additionally, the nearest occurrence of SBB is nearly on mile from this population (CDFW, 2019), and dispersal data from capture-recapture studies indicate that most adults have a home range of no more than a few acres. As such, SBB is unlikely to utilize the nearby buckwheat population.

No other special status species were identified within the project site or are expected to occur within the site due to lack of suitable habitat and the urbanized and degraded nature of the site. For these reasons, the project will not significantly degrade habitat that supports such species and impacts would be less than significant based on CEQA thresholds.

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), including portions of the Seaside Coastal Zone's Laguna Grande Subarea and the Monterey Coastal Zone. Currently, the City of Seaside has a certified Local Coastal Program (LCP) while the City of

<sup>&</sup>lt;sup>1</sup> Denise Duffy & Associates, August 2019

Monterey's LCP is currently undergoing a comprehensive update. The LCPs from both agencies address coastal resources, including the protection of biological and wetland resources.

Riparian habitat is regulated by the California Department of Fish and Wildlife (CDFW) under the Lake and Streamed Alteration Program and is also potentially and Environmental Sensitive Habitat Area (ESHA) where it occurs within the Coastal Zone. Oak woodland habitat is also potentially EHSA under the Seaside Land Use Plan and is protected under both cities' tree removal ordinances.

Canyon Del Rey Creek is potentially a water of the U.S. and/or waters of the state, which are regulated under the Clean Water Act by the Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB), respectively. Within the Coastal Zone, waters of the U.S. and state are also potentially ESHA. No wetlands were identified within the project site.

Although the project design avoids the riparian habitat and Canyon Del Rey Creek, the following mitigation measure will ensure that adequate safeguards are in place to protect these resources during construction.

- MM 1 Fencing and Monitoring. Riparian habitat and potential waters of the U.S. and State shall be avoided during construction with protective fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that fencing remains intact and work crews are properly avoiding the habitat area. If all riparian areas and waters are avoided, no additional mitigation is necessary.
- MM 2 Construction Best Practices. To protect water quality and riparian vegetation during construction, the following measures shall be included on the construction specifications and documents:
  - Project contractor shall ensure that trenching, excavating, backfilling and other activities that involve substantial soil disturbance adjacent to riparian vegetation and Canyon Del Rey Creek are planned and implemented with a qualified hydrologist, engineer or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation near sensitive areas.
  - Stationary equipment such as motors, generators, and welders located within 100 feet of the creek shall be stored overnight at staging areas and shall be positioned over drip pans.
  - No debris, soil, silt, sand, oil, petroleum products, cement, concrete or washings thereof shall be allowed to enter, or be placed where they may be washed by rainfall or runoff, into riparian areas or Canyon Del Rey Creek.
  - All construction debris and associated materials shall be stored in staging areas and shall be removed from the work site upon completion of the project.
  - Cleaning or refueling of equipment shall take place within turnouts or staging areas at least 50 feet from riparian areas and Canyon Del Rey Creek.
  - All refueling shall be conducted over plastic bags filled with sawdust or other highly absorbent material. Clean-up materials for spill shall be kept on hand at all times. Any accidental spills of fuel or other contaminants shall be cleaned up immediately.

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?

**Less than significant impact**. Canyon Del Rey Creek is a potential water of the U.S. and is addressed under b) above. No other wetlands were identified in the project area.

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?

**Potentially significant unless mitigation incorporated**. The project could interfere with the movement of migratory wildlife (avian) species during construction, but would not interfere with native terrestrial species or wildlife corridors. Individual oak trees that would be removed for the project are close to the roadway, isolated specimens, and not within denser oak woodland habitat nearby. Nonetheless, these trees could provide foraging and roosting opportunities for migratory birds. To ensure that impacts to nesting birds are avoided, the project shall implement the following mitigation measure. Trees to be removed are shown in **Figure 9**.

- MM 3 Preconstruction Bird Surveys. The applicant shall schedule all on-site tree removal and grading to occur between August 31th and March 1st of any given year to avoid the Central Coast bird nesting season. If this schedule is not practical, the project sponsor shall fund the engagement of a qualified biologist to conduct preconstruction nesting bird surveys no more than two weeks prior to removal of trees and grading. If no active bird nests are observed, no additional measures are required. If nesting birds are observed, the biologist will establish a buffer zone where no tree removal or grading will occur until the biologist confirms that all chicks have fledged.
- *e)* Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**Potentially significant unless mitigation incorporated**. The project will require the removal of up to four mature live oak trees, located in the City of Monterey and City of Seaside. Removal oak trees is regulated by the ordinances of both cities.

- MM 4Tree Replacement. Upon completion of construction, final site work shall include oak<br/>tree replacement at a 1:1 ratio, or as specified by local tree ordinances.
- *f)* Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No impact**. The project site is not subject to any such adopted plans. While the City of Seaside LCP and Implementation Plan identifies a 50-foot setback of development from ESHA areas, this requirement does not apply if such a setback is infeasible, and/or if "development" is a public recreational facility such as trail. Both of these exemptions apply.

# 4.5 Cultural Resources

lss	VIRONMENTAL IMPACTS ues puld the project:	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		х		
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?		х		

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

**No impact**. A Phase I Archaeological Survey was conducted for the North Fremont Pedestrian, Bicycle, and Transit Project (Archaeological Consulting, December 2014). The area containing the "sidewalk gap" was part of that project, and therefore was reviewed by this assessment. The 2014 assessment concluded that no historical resources were present and site conditions have not substantially changed. As a result, there would be no impact or substantial adverse change to a historical resource.

- *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**. The Phase I Archaeological Survey concluded that the project area of potential effect (APE) contains no evidence of significant cultural resources, and that the project should not be delayed for archaeological resources. (See also Section 4.18, Tribal Cultural Resources). However, because the possibility of unidentified (buried) cultural resources can be found during any earth disturbance, the following standard mitigation measures have been provided:

MM 5 Undiscovered Cultural Resources. Prior to construction on the job site, construction personnel shall participate in cultural and tribal sensitivity training (conducted by a qualified archaeologist or tribal representative). During project construction, if any archeological, paleontological or tribal resources (e.g., evidence of past human habitation

or fossils) are found, the project applicant and/or its contractor shall cease all work within 50 feet of the discovery and notify the City of Monterey Planning Division immediately. The project applicant and/or its contractor shall retain a qualified archaeologist, paleontologist and Native American tribal representative to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered resources. The City and the applicant shall consider the mitigation recommendations and agree on implementation of the measure(s) that are feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures. (Health and Safety Code Section 7050.5). If the resource is Native American, the City give deference to tribal representatives regarding treatment.

MM 6 Discovery of Human Remains. If human remains or cultural resources associated with a burial (i.e. grave goods) are discovered during construction, the project applicant and/or its contractor shall cease all work within 50 feet of the find and notify the City of Monterey Planning Division and the County Coroner, according to California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission and shall follow the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) regarding treatment and disposition of recovered cultural items. The Commission will designate a Most Likely Descendant (MLD) who will be authorized to provide recommendations for management of the Native American human remains and any associated materials or objects (Public Resourced Code Section 5097.98 and Health and Safety Code Section 7050.5).

## 4.6 Energy

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

# 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 enhance pedestrian and bicycle safety, and increase connectivity and mobility. 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 the sidewalk gap closure 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 an infrastructure improvement that would utilize almost no energy, except what may be required for low intensity safety lighting. The Project would not generate any new automobile traffic or require energy use. Additionally, as discussed further in Threshold 4.8 (b), the proposed Project would be consistent with the California Air Resources Board (CARB) Scoping Plan measures as well as the overall goals of the Monterey Climate Action Plan (2016). AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of EOs 5-03-05 and B-30-15. The levels of fuel consumption and GHG partly result from the region's reliance on petroleum-based gasoline and diesel fuels, as well as the average fuel efficiency of vehicles. The Project is consistent with regional strategies to reduce passenger vehicle miles traveled (VMT). The proposed Project is a trail connection, which would not generate new trips in the Project area, thus reducing congestion and energy consumption. The Project would not conflict with the stated goals of the MTP/SCS. Therefore, the Project would not interfere with AMBAG's ability to achieve the region's post-2020 mobile source GHG reduction targets (and thus reduce energy consumption) outlined in the 2040 MTP/SCS. Potential impacts are considered less than significant, and no mitigation is required.

# 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:				
<ul> <li>a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</li> </ul>				
<ul> <li>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.</li> </ul>				x
ii) Strong seismic ground shaking?			Х	
iii) Seismic-related ground failure, including liquefaction?			х	
iv) Landslides?			Х	
b) Result in substantial soil erosion or the loss of topsoil?			х	
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?			х	
<ul> <li>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?</li> </ul>			х	
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
<ul> <li>f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</li> </ul>			х	

- 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.

**No impact**. According to readily available fault zone mapping, the Project location is not subject to rupture of a known earthquake fault.

ii. Strong seismic ground shaking?

**Less than significant impact**. The Project is an infrastructure facility that is not occupied. Although the structure (and surroundings) could be subject to seismic ground shaking during an earthquake, the Project will not directly or indirectly cause adverse effects (such as injury or death) due to shaking. The structure will need to be designed to current structural codes to address the potential for ground shaking and structure stability.

*iii.* Seismic-related ground failure, including liquefaction?

**Less than significant impact**. According to a geotechnical evaluation conducted for North Fremont improvements (North Fremont Street Improvements, Monterey, CA, Geotechnical Exploration, ENGEO, November 2016), local soils in the vicinity of the Project consist of non-engineered fill associated with the filling of Canyon Del Rey when the area was developed. However, based on the exploration findings, ENGEO found the probability of seismic hazards, such as ground failure, liquefaction and lateral spreading, to be low. ENGEO also provides the opinion that the proposed improvements will not be affected by expansive soils.

iv. Landslides?

**Less than significant impact**. While the project will span a hillside below, its abutments will be engineered and anchored. The presence of a bridge structure in this location will not cause potential significant adverse effects to people or property.

v. Result in substantial soil erosion or the loss of topsoil?

**Less than significant impact**. The Project will require 500 cy of total fill and 90 cy of total cut including excavation (approximately 410 cy of import) of material for surface grading and structure footings. 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.

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

**Less than significant impact.** As discussed above, 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. All abutments will be engineered and anchored. Design features such as footing placement away from slopes and footing depths will minimize erosion during and following construction. Also, since the Project is not on agricultural lands, loss of topsoil at the site is less of a concern.

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

### Less than significant impact. See a) iii above.

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. See a) iii above.

*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 Project will not generate or dispose of wastewater.

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

**Less than significant impact**. According to ENGEO, the local soils are primarily non-engineered fill material. There are no rock outcroppings or geologic features that will be disturbed or destroyed by the construction footprint, and thus the risk of impact is considered less than significant.

# 4.8 Greenhouse Gas Emissions

lss	VIRONMENTAL IMPACTS ues ould the project:	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a)				x	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			х	

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

**Less than significant impact**. Similar to the findings under Air Quality, the Project will have no operational impacts. Construction impacts will be of short duration and will not directly or indirectly trigger any greenhouse gas emission thresholds.

Construction GHG emissions were estimated using Sacramento Metropolitan Air Quality Management District (SMAQMD)'s Road Construction Emissions Model (Version 9.0.0). For the purpose of this environmental analysis, Project construction is expected to occur over an approximately eight-month period. Construction activities would include land clearing, grading, drainage/utilities, and paving.

Although neither the City of Monterey nor the MBARD has adopted GHG emission significance thresholds, the Project's estimated GHG emissions (about 821.10 MT/ CO<sub>2</sub>e year) are well below the significance threshold of 1,100 MTCO<sub>2</sub>e per year used in neighboring air districts and the 2,000 MT of CO<sub>2</sub>e/year threshold that had been under consideration by the MBARD. Further, annual construction would total 27.4 MTCO<sub>2</sub>e per year when amortized over a project lifetime of 30 years. The proposed Project's GHG emissions would be below the 2,000 MTCO<sub>2</sub>e/year threshold currently being considered by MBARD, therefore impacts would be less than significant. Construction GHG emissions would be less than significant and no mitigation is required.

Implementation of the proposed Project would result in a new trail connection. The Project would not generate additional population, add additional traffic, add stationary sources, or add jobs or housing. Operationally, the Project would have no GHG emissions. Therefore, impacts would be less than significant. Operational GHG emissions would be less than significant and no mitigation is required.

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

**Less than significant impact**. The Project would provide an important bicycle and pedestrian connection not only to the adjacent sidewalks but also to the future FORTAG trail nearby. Encouraging non-motorized transportation and enhancing opportunities for access to trail networks is consistent with the Coastal Act, local city circulation plans, and MBARD polices. The proposed Project would comply with all MBARD applicable rules and regulations during construction and would not interfere with the State's goals of reducing GHG emission to 1990 levels by 2020 as stated in AB 32; a 40 percent reduction below 1990 levels by 2030 as noted in SB 32; and, an 80 percent reduction in GHG emissions below 1990 levels by 2050 as stated in EO S-3-05. Therefore, the proposed Project would have a less than significant impact on GHG emissions.

# 4.9 Hazards and Hazardous Materials

	VIRONMENTAL IMPACTS ues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact			
Wo	Would the project:							
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			Х				
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?			Х				
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?				х			
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?				х			
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
<ul> <li>g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</li> </ul>			х	

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

**Less than significant impact**. The sidewalk gap closure project will result in the incidental use of hazardous materials (such as fuels for construction equipment) to construct the truss bridge and abutments. However, the construction and installation of this structure will not result in significant risk due to the transport of hazardous materials and will not result in the disposal or routine use of such materials. As a static bridge structure, the project will no create upset conditions or risk of accidental releases of hazardous materials.

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

**No impact**. The project will not emit or handle hazardous or acutely hazardous materials or substances, and is not located within one-quarter mile of a school (Google Maps, 2019).

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

# **No impact**. A search of the Envirostor database concluded that the Project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

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?

**No impact**. The Project is located within two miles of Monterey Regional Airport; however, it is a bridge structure and pathway that will not result in people working or residing in the area that could create a safety hazard.

#### **City of Monterey**

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

**No impact**. The project is a bridge structure and pathway that could not interfere with any emergency response or evacuation plans. The project would likely provide increased safety and pedestrian mobility off of the roadway if there were a local emergency.

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

**Less than significant impact**. The Project is located at the south edge of Laguna Grande Park. The land area immediately adjacent to the truss bridge and pathway is currently undeveloped, consisting of grassland and sparse oak woodland. It is possible for these grasslands and park lands could be subject to wildland fire. The project would not expose people to a significant risk of loss, injury or death; however, the truss bridge structure itself, once constructed, could sustain losses in such a fire. This risk reflects the existing environmental condition, and the project would not cause any significant impacts upon construction.

# 4.10 Hydrology and Water Quality

-	VIRON ues	IMENTAL IMPACTS	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould th	ne project:				
a)	wast subs	ate any water quality standards or the discharge requirements or otherwise tantially degrade surface or ground er quality?			х	
b)	supp grou may	tantially decrease groundwater lies or interfere substantially with ndwater recharge such that the project impede sustainable groundwater agement of the basin?				x
c)	patte thro strea	tantially alter the existing drainage ern of the site or area, including ugh the alteration of the course of a am or river or through the addition of ervious surfaces, in a manner which Id:			Х	
	i.	Result in substantial erosion or siltation on- or off-site?			Х	
	ii.	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			х	
	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?			Х	
	iv.	Impede or redirect flood flows?				x
d)	risk ı	ood hazard, tsunami, or seiche zones, release of pollutants due to project dation?				x

#### **City of Monterey**

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?			х	

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

**Less than significant impact**. The project will require a small area of ground disturbance for construction of abutments, and approximately 5,560 square feet of additional impervious surface at each bridge approach where it connects to the existing sidewalk system and the new bridge. The quantity of surface area is above the threshold for stormwater treatment, however the project is exempt from the stormwater permit per section B.1.b.ii since stormwater flows from the new impervious areas will drain to a landscaped area on North Fremont, and project construction will require a range of typical BMPs to prevent impacts to surface water quality consisting of inlet protection, hydroseeding disturbed slopes, fiber rolls, and silt fences to protect sensitive areas.

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 will result in no water demand and therefore will not decrease groundwater supplies.

- 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?

**Less than significant impact**. As noted above, project construction will require some earth moving and excavation for the bridge abutments and connection. 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 City's stringent stormwater measures.

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

**Less than significant impact**. The Project will result in an incidental increase in impervious surface that will be controlled by storm drain infrastructure constructed as part of the larger North Fremont roadway

improvements. Changes to the rate and amount of surface runoff will be negligible, and certainly will not increase to the point of causing flooding.

*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**. Existing storm drain facilities have been constructed in the immediate vicinity of the bridge project. As a bicycle and pedestrian bridge, the Project will not result in substantial sources of polluted runoff or exceed the capacity of exiting storm drain systems.

*iv.* Impede or redirect flood flows?

**No impact**. The nearest drainage is Canyon Del Rey, directly below the proposed span, which receives flows from upstream through a culvert under North Fremont Boulevard. The Project will span this existing facility and will not impede or redirect existing flows in any way.

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

**No impact**. The site is not in a flood hazard, tsunami or seiche zone, and any inundation – if it occurred – would not release pollutants from the project.

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

**Less than significant impact**. As identified above, the Project will be subject to the city's stringent water quality control measures during construction, and will have no effect on groundwater resources.

# 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?				х
<ul> <li>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?</li> </ul>				х

#### 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**. As a trail and truss structure intended to bridge an existing gap in connectivity, the Project will not physically divide the community and in fact should result in beneficial impacts by providing a safe route for non-motorized travel between the Casanova neighborhood and nearby commercial areas.

Completing the Project and connecting the sidewalk gap in this location is consistent with the circulation elements of both the City of Seaside and City of Monterey general plans, as the Project will improve safety and connectivity. Recognizing the policies of the City of Seaside Local Coastal Program for the Laguna Grande sub area, the project has identified and avoids the small area of potential coastal Environmentally Sensitive Habitat Areas (ESHA) below the truss bridge. Consistent with LCP policy and provisions of the Coastal Act, environmental conditions have been verified on the ground to determine the location and quality of resources, and those resources have been avoided to the greatest extent feasible through project design (NCR-CZ 1.2.B).

The Seaside LCP contains specific policies for the Laguna Grande Area relative to protection of visual resources, vegetation management, water quality management, and public access and recreation. The Project is wholly consistent with public access and recreation policies (PAR-LG 1.1.A, B, and C), which seek to enhance pedestrian and bicycle connectivity to existing recreational and open space areas within the Coastal Zone. Visual resource policies (NCR-LG 2.1.A and B) address "building height" and bulk, viewshed improvements around the park, and call for local "gateway guidelines" along the Fremont Corridor adjacent to Laguna Grande Park. As a pathway and truss bridge, the Project will be consistent with these policies. The Project will serve as a visually inviting structure that calls attention to pathways

and recreational opportunities, and may also serve as a visual "gateway" feature for southern end of the park. The project will also provide residents a better connection to the regional FORTAG trail system.

The City of Monterey is currently preparing a comprehensive update to its Local Coastal Program. Until that plan is completed and adopted, projects within the City's coastal zone are regulated by the existing (1980s) LCP as periodically amended, and the California Coastal Act. As a project that avoids environmentally sensitive areas, will not affect water quality, provides enhanced coastal access and will not affect visual resources, the Project is consistent with the City's LCP and Coastal Act. The Project will have no impact with the relevant provisions of these plans.

# 4.12 Mineral Resources

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
<ul> <li>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?</li> </ul>				х
<ul> <li>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?</li> </ul>				х

- 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

	VIRONMENTAL IMPACTS ues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
W	ould 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?		х		
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 with mitigation**. The Project would involve construction activities which would be temporary and have a short duration resulting in periodic increases in the ambient noise environment. Construction would begin in early-2021 and last approximately eight months, with the noisiest construction phases (earth moving and construction of abutments) estimated at four months or less. Construction activities would require the use of graders, scrapers, tractors, bulldozers, backhoes, dozers, air compressors and other typical equipment. At a distance of 25 feet, construction noise levels would range between 82 dBA and 94 dBA<sup>2</sup>. The loudest equipment at 94 dBA at 25 feet would be a crane and jack hammer. Additionally, the crane would be used for only an estimated two days to place the bridge. The remaining construction equipment is an average of 88 dBA at 25 feet. Construction activities would not produce excessive levels of noise with implementation of standard conditions and measures (i.e., replacing construction machinery to be equipped with properly

<sup>&</sup>lt;sup>2</sup> Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

operating noise attenuation devices, designating haul routes away from sensitive receptors, and locating staging areas away from receptors).

The City prohibits construction noise between 7:00 p.m. and 7:00 a.m. Monday to Friday, and 6:00 p.m. to 8:00 a.m. Saturday and 5:00 p.m. to 10:00 a.m. Sunday. The permitted hours of construction recognize that construction activities undertaken during daytime hours are a typical part of living in an urban environment and do not cause a significant disruption. Adherence to the City's allowable hours of construction would ensure construction noise would be less than significant. Implementation of **Mitigation Measure 7** which requires best practices, such as placing construction equipment as far as possible from sensitive receptors and using mufflers, would reduce construction noise impacts on adjacent noise-sensitive land uses to a less than significant level.

Operationally, the Project would include a trail and therefore would not generate new vehicle trips. Therefore, the Project would not result in a traffic-related noise increase, thus, potential impacts associated with mobile source noise would be less than significant. Additionally, the Project would not introduce new stationary noise sources into the area. Impacts would be less than significant and mitigation measures are not required for operation of the bridge.

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

Less than significant impact with mitigation. 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 sensitive receptors to the Project site is approximately 25 feet north of the Project site. Vibration from construction activities experienced at the nearest sensitive residential uses (25 feet) would range between 0.003 and 0.21 inches per second PPV for nonpile driving equipment. The maximum vibration from construction equipment would be the vibratory roller at 0.21 inches per PPV at 25 feet. This would exceed the 0.20 inches per second PPV threshold from the FTA. Implementation of Mitigation Measure 8 would require vibratory rollers to operate more than 20 feet from structures. With implementation of Mitigation Measure 8, vibration from construction activities experiences at the nearest adjacent building would be reduced below the 0.2 inches per second PPV threshold. Impacts would be less than significant.

Operations of the trail would not generate groundborne vibration that could be felt at surrounding uses. The Project would not involve railroads or heavy truck operations, and therefore would not result in vibration impacts at surrounding uses. The Project would not generate excessive groundborne vibration during construction or operations. Impacts would be less than significant and mitigation measures are not required.

#### **City of Monterey**

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 0.4 miles south of the proposed Project site. The Project is located outside the 65, 70 and 75 dBA CNEL contours for aircraft activities associated with Airport. Therefore, the proposed Project would not be exposed to aircraft overflight noise that exceeds the City's exterior noise exposure thresholds. There are no private airstrips within the Project site vicinity, thus, no impact would occur in this regard.

#### **Mitigation Measures**

**MM 7:** Prior to the initiation of construction, the City of Monterey City Engineer shall ensure that all project plans and specifications stipulate that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers;
- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible;
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers;
- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors; and
- Operate earthmoving equipment on the construction site, as far away from vibration sensitive sites as possible.
- **MM 8:** Prior to the issuance of a grading permit, the City's Building Division shall confirm that vibratory rollers capable of generating vibration levels above 0.2 inches per second PPV shall not be used within 20 feet of adjacent residences. If the contractor can demonstrate that vibratory rollers have vibration levels of less than 0.2 inches per second PPV, then they shall be allowed to operate within the 20-foot buffer zone.

# 4.14 Population and Housing

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

- 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 is an infrastructure improvement that will not result in population growth or displace existing housing.

# 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?				Х
ii) Police protection?				х
iii) Schools?				х
iv) Parks?				х
v) Other public facilities?				х

- 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 Project is an infrastructure improvement that will not generate additional demand or affect performance standards for fire protection, police protection, schools or other public facilities. Even though the pathway and truss bridge are adjacent to Laguna Grande Park, the Project will not result in the need for new or physically altered park facilities elsewhere. For these reasons, the Project will have no environmental effect on existing public services.

## 4.16 Recreation

ENVIRONMENTAL IMPACTS Issues Would the project:	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul> <li>a) Would the project increase the use of existing neighborhood and regional or other recreational facilities such t substantial physical deterioration of facility would occur or be accelerate</li> </ul>	oarks hat the		x	
<ul> <li>b) Does the project include recreational facilities or require the construction expansion of recreational facilities w might have an adverse physical effect the environment?</li> </ul>	or hich		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 such as Laguna Grande Park. An increase in people is typically what causes increased use and deterioration of existing facilities. Connecting the sidewalk gap in this location may allow pedestrians or cyclists to more easily access the park, but any increase in usage would be incidental and less than significant.

The Project is a trail segment and truss bridge which may be used for recreational purposes. The physical effects of constructing the project are addressed throughout this Initial Study.

# 4.17 Transportation

Iss	VIRONMENTAL IMPACTS ues buld the project:	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				x
b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			Х	
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?				Х

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 provide a safe pathway for cyclists and pedestrians to travel along the north side of North Fremont Street. Safe, non-motorized travel along a dedicated pathway in this location is consistent City of Monterey and City of Seaside 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.

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

**Less than significant impact**. CEQA Guidelines Section 15064.3 addresses new requirements for analyzing vehicle miles traveled (VMT). Subdivision (b)(2) notes that transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact. That is the case for this Project.

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

#### **City of Monterey**

**Less than significant impact**. One of the primary objectives of the Project is to improve safety along North Fremont by providing a safe pathway for pedestrians and cyclists. The Project will not alter the geometry or operation of North Fremont Street along the right of way and will remove existing dangerous conditions caused by pedestrians and cyclists who currently traverse the "gap" in an unsafe manner immediately adjacent to travel lanes. The pathway will cross in front of the entrance to the PG&E substantiation; however, this driveway is not regularly used and does not pose a significant safety hazard to users of the Project.

d) Result in inadequate emergency access?

**No impact**. The pathway and truss bridge structure will not require emergency access, and actually may provide enhanced access along North Fremont to emergency responders in the event of a local emergency.

# 4.18 Tribal Cultural Resources

	VIRONMENTAL IMPACTS ues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
W	ould 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 Resoruces). The 2014 Phase 1 Archaeological Survey that included the project site resulted in negative findings for archaeological or cultural resources, including tribal resources. However, the City recognizes the potential to uncover buried or previously unidentified resources, and mitigation measures MM 5 and **MM 6** are in place if such resources are discovered during construction.

Regarding tribal consultation, the City of Monterey and their consultant team conducted an outreach effort in November 2014, as the sidewalk gap project was part of a larger package of North Fremont Street roadway improvements that underwent separate CEQA review. According to this documentation (Archaeological Consultants, 2014, Appendix C) representatives from several tribes were contacted and informed of the project. These tribes included the Amah Mutsun Tribe, Aman Mutsun Tribal Band of Mission San Juan Bautista, Esselen Nation, Coastanoan Rumsen Carmel Tribe, Trina Marine Ruano Family, Indian Canyon Band of Coastanoan, and the Ohlone Coastanoan Esselen Nation (OCEN).

Representatives requested information on any findings that might occur during construction, and recommended that construction crews be trained in cultural sensitivity. These requests are reflected in Mitigation Measures **MM 5** and **MM 6**. This process satisfies the consultation requirements of AB 52. No further mitigation is required.

# 4.19 Utilities and Service Systems

	VIRONMENTAL IMPACTS ues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould 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?			Х	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			х	

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?

#### **City of Monterey**

**Less than significant impact**. Construction of the Project along the edge of right of way on North Fremont involves minor relocation and configuration of drainage facilities associated with the pathway (see Section 4.10, Hydrology and Water Quality). The Project will have no impact on electric power, natural gas, or telecommunications systems. The PG&E substation is immediately adjacent to the site but will not be affected by the Project.

- *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.

- 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.

### 4.20 Wildfire

	VIRONMENTAL IMPACTS ues	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?				х				
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?				х				
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 Project, a pathway and truss bridge structure, is not located in a state responsibility area or a very high fire severity zone. The Project does not create a source of fire, or exacerbate wildfire risk.

# 4.21 Mandatory Findings of Significance

	VIRONMENTAL IMPACTS ues	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)?			Х			
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 City acknowledges that the project is immediately adjacent to an environmentally sensitive habitat area

(ESHA) consisting of a riparian drainage in the coastal zone. However, the Project as designed and mitigated will avoid direct or indirect effects to this area, and therefore will not affect habitat values for fish, wildlife or endangered plant species.

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 unique bridge facility. The incremental effects as described in this Initial Study are largely site specific and will not combine with the effects of other projects to create cumulatively considerable effects. Other nearby or related 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. 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, the Project has little potential 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, and the Project will actually improve safety along this portion of North Fremont Street.

Laguna Grande Park, immediately adjacent to the Project, is intermittently occupied by homeless individuals or groups, some of whom camp near the project area. Construction activity in this immediate area could potentially affect encampments or cause some homeless individuals or groups to relocate due to the presence of construction workers and equipment. However, any such activity or interface would not be expected to result in adverse effects to this population, and camping in the park is prohibited.

# 5.0 **REPORT PREPARERS**

# Lead Agency

#### City of Monterey

Andrea Renny, P.E., P.T.O.E., City Traffic Engineer

Fernanda Roveri, AICP, Principal Planner

# Consultants

#### Kimley-Horn and Associates, Inc.

10 Almaden Boulevard, Suite 1250 San Jose, CA 95113

Frederik Venter, P.E., Vice President/Traffic Engineer Tad Stearn, CEQA Project Manager Ace Malisos, Technical Manager Sophia Lai, Environmental Analyst Noemi Wyss, Environmental Analyst

#### Denise Duffy & Associates

Josh Harwayne, Consulting Biologist

# 6.0 **REFERENCES**

- Archaeological Consulting. *Phase I Archaeological Survey for the North Fremont Pedestrian, Bicycle, and Transit Project*. December 2014.
- California Geological Survey (CGS). 2020. Earthquake Zones of Required Investigation. Available at: <u>https://maps.conservation.ca.gov/cgs/EQZApp/app/</u>. Accessed on April 14, 2020.

California Department of Toxic Substances Control (DTSC). 2020. Envirostor. Available at: https://www.envirostor.dtsc.ca.gov/public/.

Denise Duffy & Associates, Biological Resources Memorandum for North Fremont Street. April 2020.

ENGEO. North Fremont Street Improvements, Monterey, CA, Geotechnical Exploration. November 2016.

City of Monterey. General Plan. 2016.

City of Monterey. *Municipal Code*.

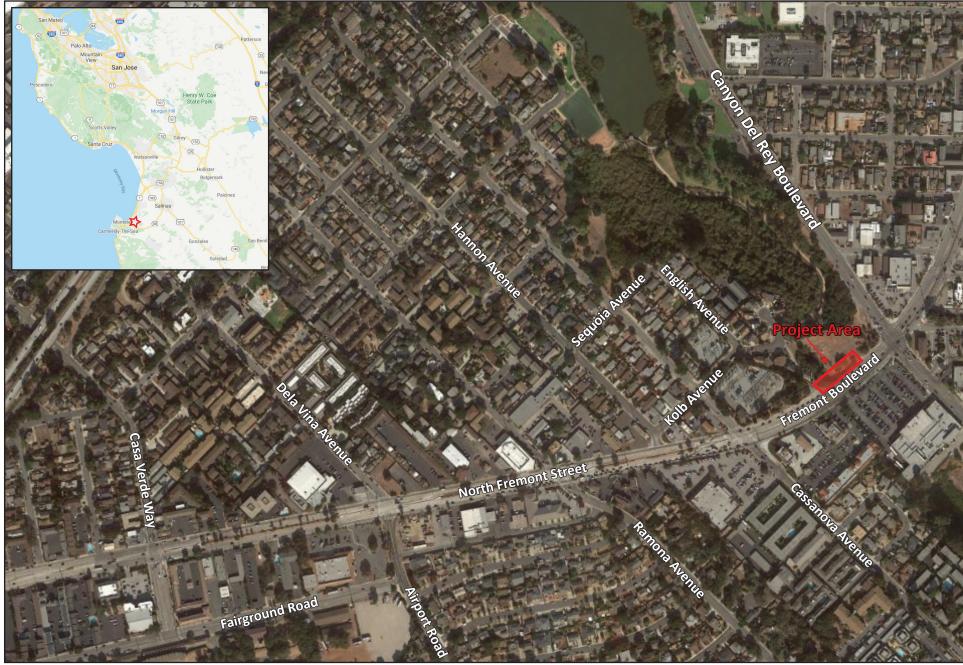
City of Seaside. General Plan. 2003.

City of Seaside. General Plan EIR. 2004.

City of Seaside. Local Coastal Program. 2013.

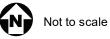
City of Seaside. *Municipal Code*.

Google. 2019. Google Maps.

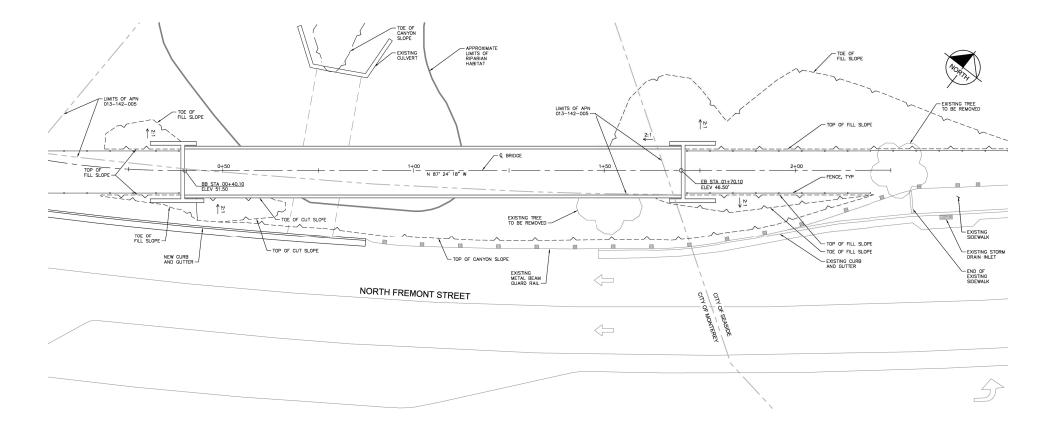


Source: Google Earth, 2020

# Figure 1: Project Location



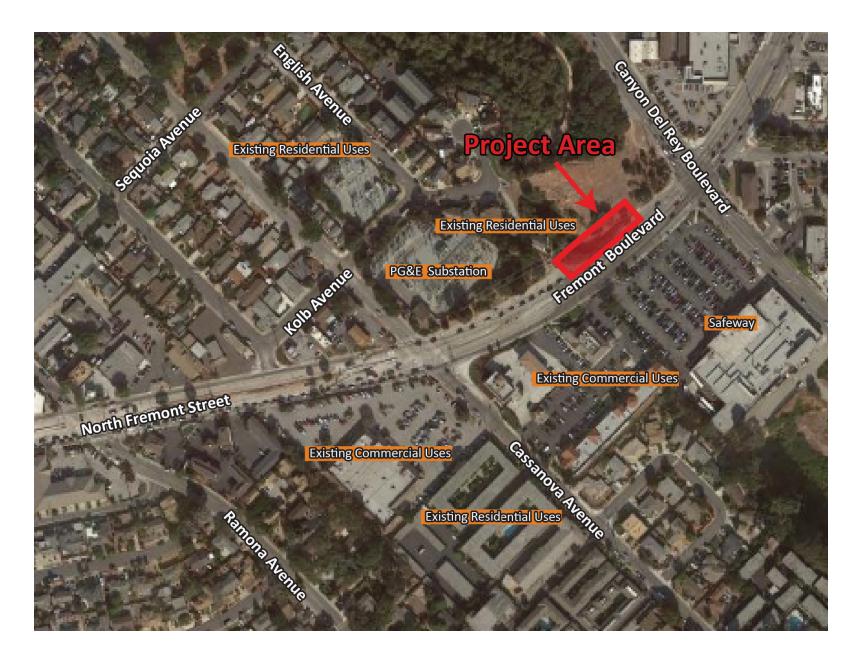




Source: Kimley-Horn, 2020

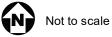
Figure 2: Site Plan



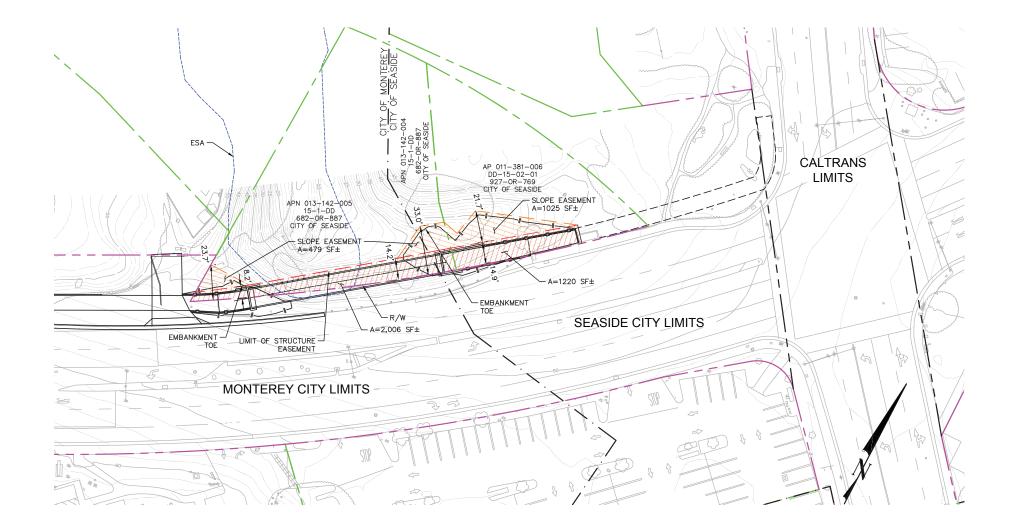


Source: Google Earth, 2020

Figure 3: Surrounding Land Uses

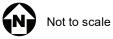




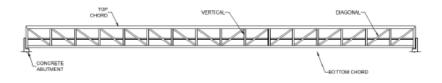


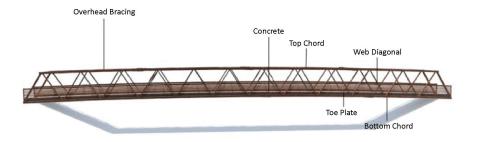
Source: Kimley-Horn, 2020

#### **Figure 4: Jurisdictional Boundaries**









Source: Kimley-Horn, 2020; Short Span Steel Bridge Alliance, 2012

Note: Bridge shown in image colored for graphic purposes. Actual bridge steel may be painted black.

Figure 5: Truss Bridge Concept









Source: Kimley-Horn, 2020









Source: Kimley-Horn, 2020

Note: Bridge shown in image colored for graphic purposes. Actual bridge steel may be painted black.

# Figure 7: Truss Bridge Rendering

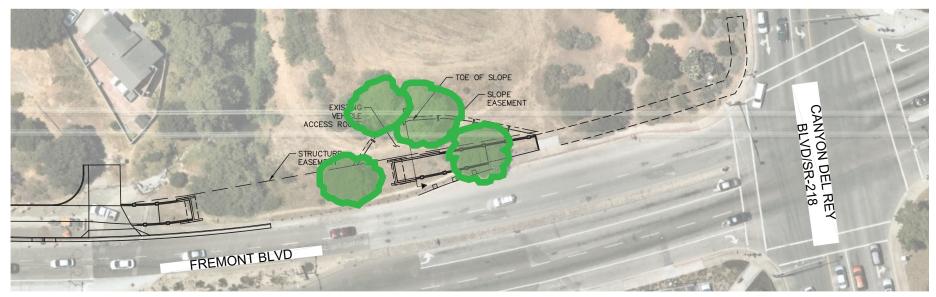




Source: Denise Duffy & Associates, Inc., 2019

**Figure 8: Vegetation Communities** North Fremont Sidewalk Gap Closure Project *Initial Study/Mitigated Negative Declaration* 



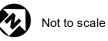


Legend

Trees to be removed

Source: Kimley-Horn, 2020

### Figure 9: Trees to be Removed





Appendix A CalEEMod Air Quality and Greenhouse Gas Emissions Model Outputs

Khuss@airquality.org jgrant@ramboll.com	Welcome to the Road Construction Emissions N User Instructions	Iodel, Version 9.0.0	
<list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item>	This spreadsheet system contains the following individual works	sheets:	
<list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item>			
	2 Updates		SACRAMENTO METROPOLITAN
	3 Emission Estimates		
<ul> <li>PLANCE IN TRANSPORT PARE PARE PARE PARE PARE PARE PARE PARE</li></ul>	4 Data Entry		
<text><text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text></text>	5 Non-default Off-road Equipment		
	6 EMFAC2017		
	7 On-road Mitigation EF		ALP QUALITY
	-		
<ul> <li>1 OF REDAID IF a LF 1 a location is a location in the location is location in the location in the location is location in the location in the location in the location is location in the location in the location in the location is location in the location in the location in the location is location in the location in the location in the location is location in the location in the location in the location in the location is location in the loc</li></ul>			MANAGEMENT DISTRICT
1 1 OF FROAD DE 1 2 Hold II 1 2 Hold II 2 Hold II 3 Hol			
12 stafe           The Entites Extingties workneet calculates as protocits writesions in councils per day (and only by project phase and to council uction paties): <ul> <li>as insplicit methodology involving estimates of the maximum area (arcraga) of land disturbed day). Detailed taylity day the estimate by dayle days. The methodology used to estimate laylity day the estimates and the data information and the insplicit directly (i), ii is a protocol advolywine by estimates worksheet cannot be modified directly, ii is a protocol advolywine by estimates and the data information of the model.       Weight and the protocol advolution is the protocol advolution in the protocol advolution in the protocol advolution in the protocol advolution in the advolution in the protocol advolution in the advolution in the protocol advolution in the protocol advolution in the protocol advolution in the protocol advolution in the advolution in the advolution in the protocol advolution in the advolution in the protocol advolution in the protocol advolution in the protocol advolutin the protocol advolutin the protocol advo</li></ul>			
The Emission Estimates worksheet calculates a projects emissions in pounds per day (and tons) by project plase and tons over the emite construction period. The simplified methodology involving estimates of the ansatum area (acreage) of land disturbed with 400. Delated diguide dust ensistences in a simplified methodology involving estimates of the simplified methodology involving estimates worksheet cannot be modified directly, it is a produced worksheet. It can only be modified indirectly by intervine of these worksheets. The NMAC2017, Ohnore Midgited DF, OFFROAD DF and X-ef L, OFFROAD DF and X-ef L annot be modified by the user. The Data Entry worksheet is a produced worksheets. It can only be modified indirectly by intervine of these worksheets. The NMAC2017, Ohnore Midgited DF, OFFROAD DF and X-ef L, OFFROAD DF and X-ef L annot be modified by the user. The Data Entry worksheet is an orbited by the norksheet is a model of anothol to the model. The model is a second to be indirectly by indived by indived by the soft and the model of the worksheet. The ansature of the worksheet is a second to be indirectly and a second to be of produce specific information is a samplified method. The user can compared to the second by the user is an encouraged to the second by the soft and the second by the orbit of the model by the user is a compared to the second by the second be not on the orbit of the second by the second by the produce base of the produce data. This button is found just at the top of and to be night of the second by the second by the produce base of the second by th			
The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions estimates is a simplified methodology involving estimates of the market is a second work why vehicle types cannot be conducted with his version of the model. The finiscing fugitive dust emission estimates is a second work why vehicle types cannot be conducted with his version of the model. The project is second areas of the Data Entry worksheet. It can only be modified indirectly by entry are protected vorksheets. Even the project is second areas of the Data Entry worksheet is based on diversel worksheet. The data from vorksheet is a second areas that can be modified by the user. The Data Entry worksheet is also several worksheet is and the modified by the user. The Data Entry worksheet is also several worksheet is also several worksheet. The activation is a sequel in the data from vorksheet is also several worksheet. The activate is a several of the everal by the vorksheet is a several of the everal by the vorksheet is also everal worksheet. The activate is a several of the event is bloc exciption calculate data values for the project on a several worksheet. The activate by the vorksheet is also event worksheet is also event worksheet is also event worksheet is a several of the data worksheet. The activate bloc exciption and the several of the data is the used is the vorksheet is a several of the data walues for the project on a several worksheet. The activate bioxet several worksheet is also project for the vorksheet is also event worksheet is also event workshee	12 X-161		
The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions estimates is a simplified methodology involving estimates of the market is a second work why vehicle types cannot be conducted with his version of the model. The finiscing fugitive dust emission estimates is a second work why vehicle types cannot be conducted with his version of the model. The project is second areas of the Data Entry worksheet. It can only be modified indirectly by entry are protected vorksheets. Even the project is second areas of the Data Entry worksheet is based on diversel worksheet. The data from vorksheet is a second areas that can be modified by the user. The Data Entry worksheet is also several worksheet is and the modified by the user. The Data Entry worksheet is also several worksheet is also several worksheet. The activation is a sequel in the data from vorksheet is also several worksheet. The activate is a several of the everal by the vorksheet is a several of the everal by the vorksheet is also everal worksheet. The activate is a several of the event is bloc exciption calculate data values for the project on a several worksheet. The activate by the vorksheet is also event worksheet is also event worksheet is also event worksheet is a several of the data worksheet. The activate bloc exciption and the several of the data is the used is the vorksheet is a several of the data walues for the project on a several worksheet. The activate bioxet several worksheet is also project for the vorksheet is also event worksheet is also event workshee	The Emission Estimates worksheet calculates a project's emis	sions in pounds per day (and tons) by project phas	e and tons over the entire construction period.
is a singlified methodology involving estimates of the maximum area (acreage) of fund disturbed daity. Detailed fugitive data emails: associated with involving entity and on a divigivality worksheet. It can only be modified indirectly by entering information for the project is selected areas of the Data Entry worksheet. It can only be modified indirectly by entering information for the project is selected areas of the Data Entry worksheet. It can only be modified indirectly by entering information for the project is selected areas of the Data Entry worksheet. ENFAC2017. On-cad Mitigation EF_OFFROAD Convert. Off-road Tier 4 EF, OFFROAD EF and x-ref - cannot be modified by the user. The selected worksheet are protected, the individual formulas used in the calculations can be seen by the user. The induced and is then used by the worksheet to calculate data and optional data. Required data is entered in the data input sector (selected). That required data is then used by the worksheet to calculate data and optional data. Required data is entered in the data input sector (selected). That required data is then used by the worksheet to calculate data and optional data. Required data is entered in the data input sector (selected). That required data is then used by target of the of the office offic			
asociated with individual materials funding operations and/or activity/which is byse cannot be conducted with this version of the model. The Finissine Fideback on the hording of the Data Entry worksheet. It can only be modified indirectly by entering information for the project in selected areas of the Data Entry worksheet. The basis served worksheets. EMFAC2017, On-read Mitigation EP, OFFROAD Convert, Off-road Tier 4 EF, OFFROAD HP & LP, OFFROAD EF and xref - cannot be modified by the user. The Data Entry worksheet in cludes serveral areas that can be modified by the work. The Data Entry worksheet in the Data Entry worksheet are projected due to modified by the user. The Data Entry worksheet in the Data Entry worksheet are indigibiled in real of the Data Entry worksheet in the worksheet is a project data required data and optional data. Required data is encurred to do serveral areas that can due to enclude by the project. The user can onvertifie the digitul values (lucu cells) activitated for an project ing analyzed. The Data Entry worksheet, the user can be modified by the user. The Data Entry worksheet is used to activitate of rando project tare available. Due to the difficulty in developing reliable default values for the project going analyzed. The Data Entry Worksheet are user must make adjustments to the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to aclaude a difficulty analysis. Consequently, to erase values entered in the spreadsheets, use the delete key instead of the space bard Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th enditing Usalam anumeric value. California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th enditing Usalam and election of Walker's Building Entry Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private i			-
The Emission Estimates worksheet aamote be modified directly, is a protected worksheet. Tentering information for the project in balae Entry worksheet. The last seven of these worksheets - EMFAC2017, On-road Mitgaion EF, OFFROAD Convert, Off-road Ter 4 EF, OFFROAD DF & LP, OFFROAD EF and x-ref - cannot be modified by the user. The seven and all options of several worksheets are protected, the individual formulas used in the calculations can be seen by the user. The Data Entry worksheet includes several areas that can be modified by the user. The individual for worksheet in the data film used by the worksheet calculated data is entreed of addition of the project data. The data Entry worksheet is entreed data is the used to calculate default values for the project. The user can override the default values (blue cells) calculated for a project and is anouraged to do soft project specific information is available. Due to the difficulty in developing reliable default values for the project being analyzed. The bala Entry worksheet range and uses the user to calculate default values (brue cells) calculated for a project and is incouraged to an site available for the project being analyzed. The balae Entry worksheet is away courd using use of the spreadsheets. This botton is found just at the top of and to the right of the date netry portion of the worksheet. When projects are discontinuous, the user must ake adjustments to the spreadsheets. This botton is found just at the top of and to the right of the date netry portion diver message may courd using use of the spreadsheets. This occurs wherever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets. This occurs wherever the user enters an on numeric value, including a space character, into a cell that is used to calculate a numeric value. Calculate A Resources Board, the U.S. EPA, and private industry involved in road constru			-
entering information for the project in selected areas of the Data Entry worksheet. The last seven of these worksheets - EMFAC2017, On-road Mitgalon EF, OFFROAD Convert, Off-road Tier 4 EF, OFFROAD HP & LP, OFFROAD EF and x-ref - cannot be modified by the user. The Data Entry worksheet is user worksheets are protected, the individual formulas used in the calculations can be seen by the user. The Data Entry worksheet is user that can be modified by the user. User individuel individuel formulas used in the calculations of an energy project data: required data and optional data. Required data is entered in the data input sector upellow cells). That required data is the used by the worksheet to calculate default values for the project. The user can orweride the default values (pluc edital calculated for a project data: required data. The project data: The vorksheet to calculate data and optional data. Required data is entered in the data input sector upellow cells). That required data is the used by the worksheet to calculate default values for the project. The user can orweride the default values (pluc edital calculated for a project being analyzet. The data entry profin of the worksheet subo includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry profin of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheets. This occurs whenever the user enters an on numeric value, including a space character, into a cell that is used to calculate data any project data. The data is provided at the spreadsheet, worksheet is busching Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TixX LLC and Rambol Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Propartment of Transportation,			
They are protected worksheet. Even though all or portions of several worksheets are protected, the individual formulas used in the calculations can be seen by the user. The Data Entry worksheet includes several areas that can be modified by the user. User instructions in the Data Entry worksheet includes areas that can be modified by the user. User instructions in the Data Entry worksheet includes areas that can be modified by the user. The User can worksheet includes several areas that can be modified by the user. User instructions in the Data Entry worksheet includes areas that can be modified by the user. The user can worksheet includes a several areas that can be modified by the user. The user can worksheet includes a button that allows the to calculate defaul values for the orgides the efficient formation is available. Due to the difficulty in developing reliable default values for road construction projects. The user can worksheet allow includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheet. This occurs whenever the user enters an on numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets. This occurs whenever the user enters an on numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, its week to delete key be individual at the Sacramento Metropolitan AF Qualty Management Distric, the California Department of Transportation, the California AF Resurces Board, the USE PPA and private inducity involved pable in card construction. Allo, the Zasramento Metropolitan AF Qualty Management Distric, the California Department of Transportation, Allo, the Zasramento Metropolitan AF Qualty Manageme			
Even though all or portions of several avoishheets are protected, the individual formulas used in the calculations can be seen by the user. The Data Entry worksheet in cludes several areas that can be modified by the user. The Data Entry worksheet the user has two options for entering project data: required data and optional data. Required data is entered in the data input sector reguleworksheet the user has two options for entering project data: required data and optional data. Required data is entered in the data input sector reguleworksheet the user has two options for entering project data: required data and optional data. Required data is entered in the data input sector reguleworksheet the user has two options for entering project data: required data and optional data. Required data is entered in the data input sector reguleworksheet data is thre used to calculate default values for the project. The user an override the default values for due option of the accouraged to do so if project specific information is available. Due to the difficult of default values for due construction projects. The user is encouraged to enter as much site specific information as is available for the project data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheet. This occurs whenever the user enters a non numeric value, individual g space character, into a cell that is use to calculate default values. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bard Sectement values. Individual space character, into acell that is use to calculate default values. The cellifornia Department of Transportation, the Calfornia Air Resurces Board, the U.S. EPA. and private indukty invoked enable invokroit. As the default values (prive the development of the spreadsheet. This spreadsheet was prepared by ones & Stokes, TAX LLC and Ramboll Environ wi	The last seven of these worksheets - EMFAC2017, On-road N		F, OFFROAD HP & LP, OFFROAD EF and x-ref - cannot be modified by the user.
The Date Entry worksheet includes several areas that can be modified by the user: User instructions in the Date Entry worksheet area highlighted in red. On the Date Entry worksheet, the user has two options for entering project date: required data and optional date. Required data is entered in the data input section (yellow cells). That required data is then used by the worksheet to calculate default values for the project. The User can override the default values (bue cells) calculated for a project and is incorride to the difficulty in developing reliable default values for road construction projects, the user is encouraged to entre an usual his genedic information as is available for the project being analyzed. The Date Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheets manually, since the program cannot be setup to anticipate unexpected project delays. #fVLUEI This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar! Note information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Matropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 28th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones '\$ Stokes, THX LLC and Rambol Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. Mi		ed, the individual formulas used in the calculations	can be seen by the user.
Use instructions in the Date Entry worksheet are highlighted inted.           On the Data Entry worksheet, the user has two options for entering project data: required data and optional data. Required data is entered in the data input section (yellow cells). That required data is then used by the worksheet to calculate default values for the project.           The user can override the default values (blue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficult in developing reliable default values (bro default values for the project being analyzed.           The Data Entry Worksheet also includes a button that allows the user to dear previously entered data. This button is found just at the top of and to the right of the data.           What Projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays.           #VALUE!         - This error message may occur during use of the spreadsheets. This occurs whenever the user enters an on numeric value, including a space character, into a cell that is used to calculate a numeric value.           Consequently, to erase values entered into the spreadsheets. we the delete key instead of the space bar?           Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in cad construction. Also, the 28h edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet was prepared by Jones & Stokes, TAX LLC and Rambol Environ wit			
on the bata Entry worksheet, the user has two options for entering project data: required data and optional data. Required data is entered in the data input section (replewo cells). That required data is then used by the worksheet to calculate default values for ear operate and to be endfault values for ear operate data is encouraged to do so if project specific information is available. Due to the difficulty in developing reliable default values for read construction projects. The user can overrise the default values for can construction projects. The user can overrise the obtinuity is a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data input worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data input worksheet, into a cell that is used to calculate a numeric value. Consequently, to erase values entered in the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered in the spreadsheets, use the delete key instead of the space bart Note: Information in this worksheet is based on conversators with know/edgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. <b>EXERCENTENT METROPOLITAN EXERCENTENT METROPOLITAN EXERCENTENT METROPOLITAN EXERCENTENT METROPOLITAN EXERCENTENT METROPOLITAN EXERCENTENT METROPOLITAN EXERCENTENT EXERCENTENT EXERCENTENT EXERCENTENT EXERCENTENT</b> </td <td>•</td> <td>•</td> <td></td>	•	•	
become cells). That required data is then used by the worksheet to calculate default values for the project. The user can override the default values (blue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficult in developing reliable default values for road construction projects. The bate Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheets. This occurs whenever the user enters a non-more value, including a space character, into a cell that is used to calculate a numeror value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar! Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of his spreadsheet. This spreadsheet was prepared by Jones & Stokes. THX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of his spreadsheet. This spreadsheet was prepared by Jones & Stokes. THX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.  Mutual to the the spreadsheet manually correction of the Sacramento Metropolitan Air Qualit			Required data is entered in the data input
The user can override the default values (plue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficulty in developing reliable default values for road construction projects, the user is encouraged to enter as much istle specific information as is available for the project being analyzed. The bate Entty Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays. #VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart efformation in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Boart, the U.S. EPA, and private industry involved in road construction. Also, the 28th edition of Walker's Building Estimator's Reference Book (1999) was used in the development District. #California Air Resources Boart, the U.S. EPA, and private industry biologe Estimatories and the copolitan Air Quality Management District. #California Air Resources Boart, the U.S. EPA, and private industry biologe Estimatories and the copolitan Air Quality Management District. #District Metropolitan Air Quality Management District. #District Metropoliti			
available. Due to the difficulty in developing reliable default values for road construction projects, the user is encouraged to enter as much site specific information as is available for the project being analyzed. The Data Entry Vorksheet allow includes a buttom that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays. #VALUE1 <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space definated, into a calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart Note: information in this worksheet is based on conversalenes with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 28th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet was prepared by Jones & Stokes, TAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. MEDICONSTRUCTION Karen Huss Kruen Huss Kruen Huss Kruen Huss			
the user is encouraged to enter as much site specific information as is available for the project being analyzed. The Data Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart california Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboil Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. <b>SACRAMENTO METROPOLITAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b> <b>MEDICIDENTIAN</b>		• • • • • • • • • • • • • • • • • • • •	
The Data Entry Worksheet also includes a bution that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays. #VALUEI <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate an numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar! Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 28th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. <b>SACRAMENTO METROPOLITAN</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEXPINE</b> <b>MEX</b>			
the date entry portion of the worksheet. When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays. #VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in read construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENTINE</b> <b>EXERCISENT</b>	÷ .		on is found just at the ton of and to the right of
When projects are discontinuous, the user must make adjustments to the spreadsheets manually, since the program cannot be setup to anticipate unexpected project delays. #VALUE! -< This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.			
#VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value.         Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar!         Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.         SACRAMENTO METROPOLITAN       Image: Consequently or the spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.         MEXPINE_METROPOLITAN       Image: Consequently or the spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.         MEMBULCE       Image: Consequently or the spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.         Manage: Consequently or the spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll.com/ John Grant John Grant John Grant <th></th> <th>nents to the spreadsheet manually since the progr</th> <th>am cannot be setup to anticipate unexpected project delays</th>		nents to the spreadsheet manually since the progr	am cannot be setup to anticipate unexpected project delays
enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. <b>SACRAMENTO METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b>		ients to the spreadsheet mandally, since the progr	
enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bart Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District. <b>SACRAMENTO METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b> <b>METROPOLITAN</b>	#VALUE! <- This error message may occur during use of th	e spreadsheets. This occurs whenever the user	
Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar! Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.			
Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Rambol Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.	• •		
California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.			
California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.			
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT http://www.airquality.org Karen Huss Khuss@airquality.org	Note: Information in this worksheet is based on conversations w	vith knowledgeable individuals at the Sacramento N	Arropolitan Air Quality Management District, the California Department of Transportation, the
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT http://www.airquality.org Karen Huss Khuss@airquality.org Khuss@airquality.org			
AIR QUALITY       RAMBOLL         MANAGEMENT DISTRICT       http://www.ramboll.com/         http://www.airquality.org       http://www.ramboll.com/         Karen Huss       John Grant         Khuss@airquality.org       jgrant@ramboll.com	this spreadsheet. This spreadsheet was prepared by Jones & S	tokes, TIAX LLC and Ramboll Environ with the fina	ncial support and direction of the Sacramento Metropolitan Air Quality Management District.
AIR QUALITY       RAMBOLL         MANAGEMENT DISTRICT       http://www.ramboll.com/         http://www.airquality.org       http://www.ramboll.com/         Karen Huss       John Grant         Khuss@airquality.org       jgrant@ramboll.com			
AIR QUALITY       RAMBOLL         MANAGEMENT DISTRICT       http://www.ramboll.com/         http://www.airquality.org       http://www.ramboll.com/         Karen Huss       John Grant         Khuss@airquality.org       jgrant@ramboll.com			
AIR QUALITY       RAMBOLL         MANAGEMENT DISTRICT       http://www.ramboll.com/         http://www.airquality.org       http://www.ramboll.com/         Karen Huss       John Grant         Khuss@airquality.org       jgrant@ramboll.com			
AIR QUALITY       RAMBOLL         MANAGEMENT DISTRICT       http://www.ramboll.com/         http://www.airquality.org       http://www.ramboll.com/         Karen Huss       John Grant         Khuss@airquality.org       jgrant@ramboll.com			
AIR QUALITY       RAMBOLL         MANAGEMENT DISTRICT       http://www.ramboll.com/         http://www.airquality.org       http://www.ramboll.com/         Karen Huss       John Grant         Khuss@airquality.org       jgrant@ramboll.com			
MANAGEMENT DISTRICT       http://www.airquality.org     http://www.ramboll.com/       Karen Huss     John Grant       Khuss@airquality.org     jgrant@ramboll.com	SACRAMENTO METROPOLITAN		
MANAGEMENT DISTRICT       http://www.airquality.org     http://www.ramboll.com/       Karen Huss     John Grant       Khuss@airquality.org     jgrant@ramboll.com			
MANAGEMENT DISTRICT       http://www.airquality.org     http://www.ramboll.com/       Karen Huss     John Grant       Khuss@airquality.org     jgrant@ramboll.com			
MANAGEMENT DISTRICT       http://www.airquality.org     http://www.ramboll.com/       Karen Huss     John Grant       Khuss@airquality.org     jgrant@ramboll.com	ALD OUTALLEY	PAMBOLL	
http://www.airquality.org     http://www.ramboll.com/       Karen Huss     John Grant       Khuss@airquality.org     jgrant@ramboll.com		NAMBOEL	
Karen Huss John Grant Khuss@airquality.org jgrant@ramboll.com			
Khuss@airquality.org jgrant@ramboll.com			
	Karen Huss		
916/874-4881 415/899-0706			
	916/874-4881	415/899-0706	

Road Construction Emissions Model, Version 9.0.0 Updates Log Changes from previous version of Road Construction Emissions Model (Version 8.1.0 to 9.0.0) (updated by SMAQMD 04/22/18 with assistance from Ramboll) 1) Project length changed to include calendar years 2014 through 2040. 2) On-road vehicle emission factors have been updated to EMFAC2017 version 1.0.2. Off-road emission rates updated to include calendar years 2014 through 2040. 4) Average Offroad HP by Equipment Type updated to be consistent with CalEEMod (version 2016.3.2) 5) Modified 'Data Entry' tab to calculate NOx start emissions form heavy duty trucks in "soil hauling", "asphalt hauling" and "water truck" section (Version 7.1.5 to 8.1.0) (updated by SMAQMD 05/09/16 with assistance from Ramboll ENVIRON US Corporation) 1) Project length changed to include calendar years 2014 through 2025. 2) Added a new project type: Type 4: Other Linear Project Type. Note that there are no default vehicle or equipment activities available for the Project Type 4. 3) Emissions estimates were extended to include SOx\_CH4\_N2O and CO2e 4) Updated off-road equipment emission factors and default average horsepower by equipment type to be consistent with CalEEMod (version 2013.2.2). 5) On-road vehicle emission factors have been updated to EMFAC2014. 6) Revised pollutant order for consistency throughout the calculator Added flexibility for users to specify a non-default number of working days per month. 8) Modified soil hauling import and export quantity and haul truck capacity data requests to allow users to specify soil hauling activity by phase. 🗆 9) Soil hauling emissions are now estimated separately for each construction phase. 10) Added a new feature to allow users to provide asphalt hauling guantities by phase in the "Data Entry" tab. 11) New component added where the user can specify construction start date and duration by phase 12) The maximum daily emissions calculation was modified to sum emissions from overlapping construction phases. 13) Water truck activity can be specified and emissions estimated for the paving phase. 14) Mitigation options were added for on-road vehicles and off-road equipment. Emissions calculations include the effects of mitigations if a mitigation option is selected by the user. 15) Model allows user to estimate emissions from non-default off-road equipment for all phases and for all project types. Non-default off-road equipment specification must be included by equipment type for horsepower, number of equipment, load factor, hours of operation and emission factors in the "Non-default Off-road Equipment" tab. 16) New table of total project emissions with units of tons/phase was added in the "Emission Estimates" tab 17) Removed table of daily emissions in metric units from the "Emission Estimates" tab 18) Removed unnecessary data from all tabs. (Version 7.1.4 to 7.1.5) (updated by SMAQMD 12/11/13 with assistance from ENVIRON Corporation) Grubbing and Land Clearing Phase calculation of active months in 2007, 2017, 2019 fixed. Soil Hauling Emissions calculation to select override if it exists for round trips/day. 3) Worker Commute Emissions calculation of starting and hot soak emissions; drainage phase PM<sub>10</sub> emission rate. 4) Water Truck Emissions calculation to select number of months for Grubbing and Land Clearing Phase; maximum acreage/day after 2025. (Version 6.3.2 to Version 7.1.0, 7.1.1, 7.1.2, 7.1.3 & 7.1.4) (updated by SMAQMD 8/2/13) 1) EMFAC2011 emission factors added (previous EMFAC versions dropped) 2) OFFROAD2011 emission factors added (and fixed error). 3) OFFROAD2007 for categories not in OFFROAD2011 (and fixed error) 4) Project length changed to include calendar years 2009 through 2025. 5) Average Offroad HP by Equipment Type calculation updated and corrected 6) Load Factor Adjustment deactivated (default load factors already incorporated in ARB's calculation of emission factors) Crawler Tractor equipment added to model 8) Air Compressors ROG & Default Excavators calculation on Data Entry sheet corrected. Default equipment list updated 10) Corrections to Worker Commute Emissions calculations

#### Road Construction Emissions Model, Version 9.0.0

	<ul> <li>N. Fremont Sidewalk</li> </ul>	Gap Closure		Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/da
Grubbing/Land Clearing	1.14	9.93	12.30	2.42	0.52	1.90	0.86	0.47	0.40	0.02	2,125.50	0.58	0.05	2,153.83
Grading/Excavation	9.91	71.52	113.65	6.49	4.59	1.90	4.48	4.09	0.40	0.18	18,059.41	4.72	0.59	18,352.1
Drainage/Utilities/Sub-Grade	3.85	33.66	39.59	3.73	1.83	1.90	2.07	1.68	0.40	0.07	6,519.29	1.44	0.09	6,582.5
Paving	1.29	13.51	13.49	0.70	0.70	0.00	0.61	0.61	0.00	0.03	2,776.03	0.57	0.15	2,833.5
Maximum (pounds/day)	9.91	71.52	113.65	6.49	4.59	1.90	4.48	4.09	0.40	0.18	18,059.41	4.72	0.59	18,352.
Total (tons/construction project)	0.49	3.82	5.51	0.37	0.23	0.14	0.24	0.21	0.03	0.01	891.83	0.22	0.03	905.09
Notes: Project Start Year -	> 2021													
Project Length (months) -	> 8													
Total Project Area (acres) -	> 0													
Maximum Area Disturbed/Day (acres) -	> 0													
Water Truck Used? -	> Yes													
		nported/Exported (yd <sup>3</sup> /day)		Daily VMT	(miles/day)									
Phas	e Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck								
Grubbing/Land Clearin	g 0	0	0	0	200	40	Ī							
Grading/Excavatio	n 410	0	630	0	1,120	40								
Drainage/Utilities/Sub-Grade	0	0	0	0	720	40								
Pavin	0	100	0	150	320	40								
Pavin	y v													
Pavin PM10 and PM2.5 estimates assume 50% control of fugitive dust from wat		dust control measure	s if a minimum num	ber of water trucks ar	e specified.		-							
	ering and associated					f exhaust and fugitiv	e dust emissions sho	wn in columns J and	К.					
PM10 and PM2.5 estimates assume 50% control of fugitive dust from wat Fotal PM10 emissions shown in column F are the sum of exhaust and fugi	ering and associated tive dust emissions sh	own in columns G a	nd H. Total PM2.5 er	missions shown in Co	lumn I are the sum o	•								
PM10 and PM2.5 estimates assume 50% control of fugitive dust from wat Total PM10 emissions shown in column F are the sum of exhaust and fugi CO2e emissions are estimated by multiplying mass emissions for each GP Total Emission Estimates by Phase for ->	ering and associated tive dust emissions sh IG by its global warm	own in columns G ai ing potential (GWP),	nd H. Total PM2.5 er	missions shown in Co	lumn I are the sum o	•								
M10 and PM2.5 estimates assume 50% control of fugitive dust from wat otal PM10 emissions shown in column F are the sum of exhaust and fugi CO2e emissions are estimated by multiplying mass emissions for each GH Total Emission Estimates by Phase for -> roject Phases	ering and associated tive dust emissions sh IG by its global warm	own in columns G ai ing potential (GWP),	nd H. Total PM2.5 er	nissions shown in Co O2, CH4 and N2O, r	lumn I are the sum o respectively. Total CO	D2e is then estimate	d by summing CO2e Total	estimates over all G	HGs.	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/p
2M10 and PM2.5 estimates assume 50% control of fugitive dust from wat otal PM10 emissions shown in column F are the sum of exhaust and fugi CO2e emissions are estimated by multiplying mass emissions for each GH	<ul> <li>ering and associated tive dust emissions sh</li> <li>HG by its global warm</li> <li>N. Fremont Sidewalk</li> </ul>	own in columns G ai ing potential (GWP), Gap Closure	nd H. Total PM2.5 er 1 , 25 and 298 for C	nissions shown in Co O2, CH4 and N2O, r Total	lumn I are the sum o espectively. Total Co Exhaust	D2e is then estimate	d by summing CO2e Total	estimates over all G Exhaust	HGs. Fugitive Dust	SOx (tons/phase)	CO2 (tons/phase) 18.70	CH4 (tons/phase) 0.01	N2O (tons/phase)	CO2e (MT/pi 17.19
M10 and PM2.5 estimates assume 50% control of fugitive dust from wat otal PM10 emissions shown in column F are the sum of exhaust and fugi co2e emissions are estimated by multiplying mass emissions for each GH Total Emission Estimates by Phase for -> troject Phases Tons for all except CO2e. Metric tonnes for CO2e) Grubbing/Land Clearing	<ul> <li>ering and associated tive dust emissions sh</li> <li>HG by its global warm</li> <li>N. Fremont Sidewalk</li> <li>ROG (tons/phase)</li> </ul>	own in columns G ai ing potential (GWP), Gap Closure CO (tons/phase)	nd H. Total PM2.5 er 1 , 25 and 298 for C NOx (tons/phase)	nissions shown in Co :O2, CH4 and N2O, r Total PM10 (tons/phase)	lumn I are the sum o espectively. Total C( Exhaust PM10 (tons/phase)	D2e is then estimate Fugitive Dust PM10 (tons/phase)	d by summing CO2e Total PM2.5 (tons/phase)	estimates over all G Exhaust PM2.5 (tons/phase)	HGs. Fugitive Dust PM2.5 (tons/phase)			1		
M10 and PM2.5 estimates assume 50% control of fugitive dust from wat total PM10 emissions shown in column F are the sum of exhaust and fugi code emissions are estimated by multiplying mass emissions for each GH Total Emission Estimates by Phase for -> trogect Phases Tons for all except CO2e. Metric tonnes for CO2e) Strabbing/Land Clearing Grading/Excavation	ering and associated tive dust emissions sh IG by its global warm N. Fremont Sidewalk ROG (tons/phase) 0.01	own in columns G ar ing potential (GWP), Gap Closure CO (tons/phase) 0.09	nd H. Total PM2.5 er 1 , 25 and 298 for C NOx (tons/phase) 0.11	nissions shown in Co O2, CH4 and N2O, r Total PM10 (tons/phase) 0.02	lumn I are the sum of espectively. Total Co Exhaust PM10 (tons/phase) 0.00	D2e is then estimate Fugitive Dust PM10 (tons/phase) 0.02	d by summing CO2e Total PM2.5 (tons/phase) 0.01	estimates over all G Exhaust PM2.5 (tons/phase) 0.00	HGs. Fugitive Dust PM2.5 (tons/phase) 0.00	0.00	18.70	0.01	0.00	17.19
2M10 and PM2.5 estimates assume 50% control of fugitive dust from wat Total PM10 emissions shown in column F are the sum of exhaust and fugi CO2e emissions are estimated by multiplying mass emissions for each GH Total Emission Estimates by Phase for -> Project Phases Tons for all except CO2e. Metric tonnes for CO2e)	ering and associated tive dust emissions sh IG by its global warm N. Fremont Sidewalk ROG (tons/phase) 0.01 0.35	own in columns G ai ing potential (GWP), Gap Closure CO (tons/phase) 0.09 2.52	nd H. Total PM2.5 er 1 , 25 and 298 for C NOx (tons/phase) 0.11 4.00	nissions shown in Co O2, CH4 and N2O, r Total PM10 (tons/phase) 0.02 0.23	Exhaust 0.00 0.16	D2e is then estimate Fugitive Dust PM10 (tons/phase) 0.02 0.07	d by summing CO2e Total PM2.5 (tons/phase) 0.01 0.16	estimates over all G Exhaust PM2.5 (tons/phase) 0.00 0.14	HGs. Fugitive Dust PM2.5 (tons/phase) 0.00 0.01	0.00 0.01	18.70 635.69	0.01 0.17	0.00 0.02	17.19 586.0
2M10 and PM2.5 estimates assume 50% control of fugitive dust from wat ortal PM10 emissions shown in column F are the sum of exhaust and fugi CO2e emissions are estimated by multiplying mass emissions for each GH Total Emission Estimates by Phase for	<ul> <li>reing and associated tive dust emissions sh</li> <li>IG by its global warm</li> <li>N. Fremont Sidewalk</li> <li>ROG (tons/phase)</li> <li>0.01</li> <li>0.35</li> <li>0.12</li> </ul>	own in columns G ai ing potential (GWP), Gap Closure CO (tons/phase) 0.09 2.52 1.04	nd H. Total PM2.5 er 1 , 25 and 298 for C NOx (tons/phase) 0.11 4.00 1.22	nissions shown in Co (O2, CH4 and N2O, r Total PM10 (tons/phase) 0.02 0.23 0.11	Exhaust 0.00 0.16 0.06	Fugitive Dust PM10 (tons/phase) 0.02 0.07 0.06	d by summing CO2e Total PM2.5 (tons/phase) 0.01 0.16 0.06	estimates over all G Exhaust PM2.5 (tons/phase) 0.00 0.14 0.05	HGs. Fugitive Dust PM2.5 (tons/phase) 0.00 0.01 0.01	0.00 0.01 0.00	18.70 635.69 200.79	0.01 0.17 0.04	0.00 0.02 0.00	17.19 586.0 183.9

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is the negative data through the data warming content and the data warming c

4

Road Construction Emissions Model		Version 9.0.0					
Data Entry Worksheet						SACRAMENTO METRO	BOULTAN
Note: Required data input sections have a yellow background.				To begin a new project, clic	k this button to	SAGRAMENTO METRO	POLITAN
Optional data input sections have a blue background. Only areas with	ha			clear data previously entere			
yellow or blue background can be modified. Program defaults have a	white background.			will only work if you opted n	not to disable		
The user is required to enter information in cells D10 through D24, E2	28 through G35, and D38 throu	gh D41 for all project types.		macros when loading this s	preadsheet.	AIR QUA	
Please use "Clear Data Input & User Overrides" button first before cha	anging the Project Type or begi	n a new project.				MANAGEMENT D	
Input Type						MANAGEMENT	arrier
	N. Fremont Sidewalk Gap Clo	sure					
Construction Start Year	2021	Enter a Year between 2014 and 2040 (inclusive)					
Project Type		1) New Road Construction : Pr	roject to build a roadway from bare	ground, which generally require	s more site preparati	ion than widening an exis	ing roadway⊡
	3	<ol> <li>Bridge/Overpass Constructi</li> </ol>	add a new lane to an existing road ion : Project to build an elevated ro ion-roadway project such as a pion	adway, which generally requires		pment than a new roadwa	y, such as a crane⊡
Project Construction Time	8.00	months					
Working Days per Month	22.00	days (assume 22 if unknown)					
Predominant Soil/Site Type: Enter 1, 2, or 3		1) Sand Gravel : Use for quate	mary deposits (Delta/West Count	0			Please note that the soil type instructions provided in cells E18 to
(for project within "Sacramento County", follow soil type selection	1						E20 are specific to Sacramento County. Maps available from the
instructions in cells E18 to E20 otherwise see instructions provided in		<ol><li>Weathered Rock-Earth : Us</li></ol>	e for Laguna formation (Jackson H	lignway area) or the ione formati	ion (Scott Road, Ran	cno Murieta)	California Geologic Survey (see weblink below) can be used to
cells J18 to J22)		3) Blasted Rock : Lise for Salt	Springs Slate or Copper Hill Volca	nics (Folsom South of Highway)	50 Rencho Murieta)		determine soil type outside Sacramento County.
Project Length	0.11	miles	opinings onlice of copper rain voice		oo, ramono maneta)		
Total Project Area	0.19	acres					
Maximum Area Disturbed/Dav	0.19	acres					http://www.conservation.ca.gov/cgs/information/geologic_mapping/P
Maximum Area Distorbeurbay	0.18	1. Yes					ages/googlemaps.aspx#regionalseries
Water Trucks Used?	1	2. No					
Material Hauling Quantity Input							
Material Type	Phase	Haul Truck Capacity (yd3) (assume 20 if	Import Volume (vd <sup>3</sup> /dav)	Export Volume (vd <sup>3</sup> /dav)			
Material Type		unknown)	import volume (yd /day)	Export volume (yd /day)			
	Grubbing/Land Clearing						
Soil	Grading/Excavation	20.00	410.00				
	Drainage/Utilities/Sub-Grade						
	Paving						
	Grubbing/Land Clearing						
Asphalt	Grading/Excavation Drainage/Utilities/Sub-Grade						
	Paving	20.00	100.00				
	Paving	20.00	100.00		1		
Mitigation Options							
	N- Minatian						
On-road Fleet Emissions Mitigation	No Mitigation						e project will be limited to vehicles of model year 2010 or newer⊡
Off-road Equipment Emissions Mitigation	No Mitigation		Calculator can be used		mitigation measure	(http://www.airquality.org/	emitting off-road construction fleet. The SMAQMD Construction Mitigation Businesses/CEQA-Land-Use-Planning/Mitigation). ier 4 Standard

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

#### Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

		Program		Program
	User Override of	Calculated	User Override of	Default
Construction Periods	Construction Months	Months	Phase Starting Date	Phase Starting Date
Grubbing/Land Clearing		0.80		1/1/2021
Grading/Excavation		3.20		1/26/2021
Drainage/Utilities/Sub-Grade		2.80		5/4/2021
Paving		1.20		7/29/2021
Totals (Months)		8		

#### Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of	Program Estimate of	User Override of Truck	Default Values	Calculated					
User Input	Miles/Round Trip	Miles/Round Trip	Round Trips/Day	Round Trips/Dav	Daily VMT					
/iles/round trip: Grubbing/Land Clearing	mico/round mp	30.00	riound importaty		0.00					
/iles/round trip: Grading/Excavation		30.00		21	630.00					
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00					
Miles/round trip: Paving		30.00		0	0.00					
										ļ
Emission Rates	ROG	со	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Grading/Excavation (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Draining/Utilities/Sub-Grade (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Paving (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	ROG	co	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.59	1.58	9.18	0.30	0.20	0.02	2,583.08	0.03	0.41	2,704.76
Tons per const. Period - Grading/Excavation	0.02	0.06	0.32	0.01	0.01	0.00	90.92	0.00	0.01	95.21
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.02	0.06	0.32	0.01	0.01	0.00	90.92	0.00	0.01	95.21

#### Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions	User Override of	Program Estimate of	User Override of Truck	Default Values	Calculated					
User Input	Miles/Round Trip	Miles/Round Trip	Round Trips/Day	Round Trips/Day	Daily VMT					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00					
Miles/round trip: Grading/Excavation		30.00		0	0.00					
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00					
Miles/round trip: Paving		30.00		5	150.00					
Emission Rates	ROG	со	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Grading/Excavation (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Draining/Utilities/Sub-Grade (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Paving (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.14	0.38	2.19	0.07	0.05	0.01	615.02	0.01	0.10	643.99
Tons per const. Period - Paving	0.00	0.00	0.03	0.00	0.00	0.00	8.12	0.00	0.00	8.50
Total tons per construction project	0.00	0.00	0.03	0.00	0.00	0.00	8.12	0.00	0.00	8.50

#### Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions	User Override of Worker									
User Input	Commute Default Values	Default Values								
Miles/ one-way trip		20	Calculated	Calculated						
One-way trips/day		2	Daily Trips	Daily VMT						
No. of employees: Grubbing/Land Clearing		5	10	200.00						
No. of employees: Grading/Excavation		28	56	1,120.00						
No. of employees: Drainage/Utilities/Sub-Grade		18	36	720.00						
No. of employees: Paving		8	16	320.00						
Emission Rates	ROG	со	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.02	1.10	0.10	0.05	0.02	0.00	339.80	0.00	0.01	342.28
Grading/Excavation (grams/mile)	0.02	1.10	0.10	0.05	0.02	0.00	339.80	0.00	0.01	342.28
Draining/Utilities/Sub-Grade (grams/mile)	0.02	1.10	0.10	0.05	0.02	0.00	339.80	0.00	0.01	342.28
Paving (grams/mile)	0.02	1.10	0.10	0.05	0.02	0.00	339.80	0.00	0.01	342.28
Grubbing/Land Clearing (grams/trip)	1.18	2.95	0.34	0.00	0.00	0.00	72.81	0.08	0.04	85.39
Grading/Excavation (grams/trip)	1.18	2.95	0.34	0.00	0.00	0.00	72.81	0.08	0.04	85.39
Draining/Utilities/Sub-Grade (grams/trip)	1.18	2.95	0.34	0.00	0.00	0.00	72.81	0.08	0.04	85.39
Paving (grams/trip)	1.18	2.95	0.34	0.00	0.00	0.00	72.81	0.08	0.04	85.39
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.03	0.55	0.05	0.02	0.01	0.00	151.43	0.00	0.00	152.80
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.00	0.00	1.34
Pounds per day - Grading/Excavation	0.20	3.08	0.28	0.11	0.05	0.01	848.01	0.02	0.02	855.69
Tons per const. Period - Grading/Excavation	0.01	0.11	0.01	0.00	0.00	0.00	29.85	0.00	0.00	30.12
Pounds per day - Drainage/Utilities/Sub-Grade	0.13	1.98	0.18	0.07	0.03	0.01	545.15	0.01	0.02	550.09
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.06	0.01	0.00	0.00	0.00	16.79	0.00	0.00	16.94
Pounds per day - Paving	0.06	0.88	0.08	0.03	0.01	0.00	242.29	0.01	0.01	244.48
Tons per const. Period - Paving	0.00	0.01	0.00	0.00	0.00	0.00	3.20	0.00	0.00	3.23
Total tons per construction project	0.01	0.19	0.02	0.01	0.00	0.00	51.17	0.00	0.00	51.63

#### Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions	User Override of	Program Estimate of	User Override of Truck	Default Values	Calculated	User Override of	Default Values	Calculated		
User Input	Default # Water Trucks	Number of Water Trucks	Round Trips/Vehicle/Day	Round Trips/Vehicle/Day	Trips/day	Miles/Round Trip	Miles/Round Trip	Daily VMT		
Grubbing/Land Clearing - Exhaust		1		5	5		8.00	40.00		
Grading/Excavation - Exhaust		1		5	5		8.00	40.00		
Drainage/Utilities/Subgrade		1		5	5		8.00	40.00		
Paving		1		5	5		8.00	40.00		
Emission Rates	ROG	co	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Grading/Excavation (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Draining/Utilities/Sub-Grade (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Paving (grams/mile)	0.43	1.14	6.49	0.21	0.15	0.02	1,859.78	0.02	0.29	1,947.39
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	ROG	co	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.04	0.10	0.61	0.02	0.01	0.00	164.00	0.00	0.03	171.73
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.01	0.00	0.00	0.00	1.44	0.00	0.00	1.51
Pounds per day - Grading/Excavation	0.04	0.10	0.61	0.02	0.01	0.00	164.00	0.00	0.03	171.73
Tons per const. Period - Grading/Excavation	0.00	0.00	0.02	0.00	0.00	0.00	5.77	0.00	0.00	6.04
Pounds per day - Drainage/Utilities/Sub-Grade	0.04	0.10	0.61	0.02	0.01	0.00	164.00	0.00	0.03	171.73
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.02	0.00	0.00	0.00	5.05	0.00	0.00	5.29
Pounds per day - Paving	0.04	0.10	0.61	0.02	0.01	0.00	164.00	0.00	0.03	171.73
Tons per const. Period - Paving	0.00	0.00	0.01	0.00	0.00	0.00	2.16	0.00	0.00	2.27
Total tons per construction project	0.00	0.01	0.05	0.00	0.00	0.00	14.43	0.00	0.00	15.11

#### Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		0.19	1.90	0.02	0.40	0.00
Fugitive Dust - Grading/Excavation		0.19	1.90	0.07	0.40	0.01
Fugitive Dust - Drainage/Utilities/Subgrade		0.19	1.90	0.06	0.40	0.01

Off-Road Equipment Emissions														
	Default	Mitigation Option	00											
bbing/Land Clearing	Number of Vehicles	Override of	Default		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	
boling-cand orcaning	Number of Vehicles	Default Equipment Tier (applicable only	Bolduk		1100	00	HOX		1 1112.0	001	002	0114	1420	
Override of Default Number of Vehicles	Program-estimate	when "Tier 4 Mitigation" Option Selected)	Equipment Tier	Type	pounds/dav	pounds/dav	pounds/dav	pounds/dav	pounds/day	ounds/dav	pounds/dav	pounds/day	pounds/dav	DOUL
		inter the second s	Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	1		Model Default Tier	Crawler Tractors	0.55	2.44	6.97	0.26	0.24	0.01	760.36	0.25	0.01	
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	2		Model Default Tier	Excavators	0.46	6.54	4.31	0.21	0.19	0.01	1,000.38	0.32	0.01	
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Other General Industrial Equip:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Other Material Handling Equipr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	0.00	
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5 100 IE I					ROG	со	NOx	PM10	PM2.5	SOx		CH4	N20	
Number of Vehicles	if non-default vehicles are us	sed, please provide information in 'Non-default ( Equipment Tie		Туре	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day			CO2 pounds/day		N2O pounds/day	p
		Equipment Tie	ər	i ype										р
0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00		N/A N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00		N/A N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00		N/A N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				ů						0.00		0.00		
0.00		N/A N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	1	N/A		U	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Grubbing/Land Clearing				1.07	9.28	11.63	0.49	0.45	0.02	1.810.06	0.57	0.02	
				pounds per day										

\_

	Default	Mitigation Opt												
Grading/Excavation	Number of Vehicles	Override of	Default		ROG	со	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2
Grading/Excavation	Number of vehicles	Default Equipment Tier (applicable only	Delault		ROG	00	NUX	PMID	PM2.5	301	002	CH4	N2O	002
			- · · · · · ·	-										
Override of Default Number of Vehicles	Program-estimate	when "Tier 4 Mitigation" Option Selected)	Equipment Tier Model Default Tier	Type Aerial Lifts	pounds/day	pounds/day	pounds/day	pounds/day		pounds/day	pounds/day		pounds/day	pounds/da
					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	4		Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0 564.7
	2		Model Default Tier	Cranes	0.41	1.98	4.85	0.20	0.18	0.01	558.74	0.18	0.01	
	2		Model Default Tier	Crawler Tractors	1.10	4.87	13.94	0.52	0.48	0.02	1,520.73	0.49	0.01	1,537.1
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	4		Model Default Tier	Excavators	0.92	13.09	8.61	0.42	0.38	0.02	2,000.77	0.65	0.02	2,022.3
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	2		Model Default Tier	Graders	0.91	3.53	11.85	0.38	0.35	0.01	1,283.37	0.42	0.01	1,297.1
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Other Construction Equipmen		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Other General Industrial Equip		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Other Material Handling Equip		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	3		Model Default Tier	Rollers	0.57	5.64	5.77	0.35	0.32	0.01	762.27	0.25	0.01	770.4
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	3		Model Default Tier	Rubber Tired Loaders	1.03	4.80	11.59	0.39	0.36	0.02	1,815.68	0.59	0.02	1,835.2
	4		Model Default Tier	Scrapers	3.72	28.02	42.81	1.67	1.53	0.06	5,871.65	1.90	0.05	5,934.9
	1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	0.00	49.5
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	2		Model Default Tier	Tractors/Loaders/Backhoes	0.37	4.52	3.79	0.22	0.21	0.01	601.80	0.19	0.01	608.2
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
User-Defined Off-road Equipment	If non-default vehicles are use	ed, please provide information in 'Non-default	Off-road Equipment' tab		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2
Number of Vehicles		Equipment Ti		Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/dav	pounds/dav	pounds/day	pounds/day	pounds/da
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
0.00		N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
0.00		N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
0.00		N/A			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
0.00		N/A		-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
0.00		N/A		-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
0.00		N/A		-	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.0
0.00					. 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1
	Grading/Excavation			pounds per day	9.09	66.75	103.57	4.16	3.83	0.15	14.464.32	4.67	0.13	14,619.9
	Grading/Excavation			tons per phase	0.32	2.35	3.65	0.15		0.01	509.14	0.16	0.00	514.6
					0.02	2.00	3.03	<i>v</i> . IJ	v. IJ	0.01	000.14	0.10	0.00	514.0

\_

Default         Default         Origination Option           DramageUtilities/Subgrade         Default Equipment Tier (regione or Tier Kings)         Figure Tier (regione or Tier Kings)         Nox         PND	CO2 pounds/de 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Definit Equipment Ther (applicable only           Override of Default Rumber of Velicies         Program estimate         provide intermediation of the State Sta	pounds/da 0.0 376:7 0.0 0.0 564.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
Override of Default Number of Vehicles         Program-estimate         when Tier's Mitigation" Option Selecter)         Equipment Tier         proundsiday         poundsiday	0.0 376.7 0.0 564.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
Image: Constraint of the second sec	0.0 376.7 0.0 0.0 564.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
Image: 1         Model Default Ter         Ar Compresson         2.29         2.42         2.04         0.13         0.00         375.26         0.03         0.00           Image: 100 control         Model Default Ter         Bore Different Mers         0.00 <t< th=""><th>376. 0.( 0.( 564.) 0.( 0.( 0.( 0.( 0.( 0.( 0.( 0.( 0.( 0.(</th></t<>	376. 0.( 0.( 564.) 0.( 0.( 0.( 0.( 0.( 0.( 0.( 0.( 0.( 0.(
Image: Control of Model Default Ter         Bore/Drill Rigs         0.00         0	0.0 0.0 564.7 0.0 0.0 0.0 625.5 648.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
Image: Constraint of Model Default Tier         Comment and Model Default Tier <t< th=""><th>0.0 564.7 0.0 0.0 0.0 0.0 648.6 0.0 0.0</th></t<>	0.0 564.7 0.0 0.0 0.0 0.0 648.6 0.0 0.0
Image: Concrete/Industrial Savas         0.00	0.0 564.7 0.0 0.0 0.0 625.2 648.6 0.0 0.0
1.00         Model Default Ter         Cranes         0.41         1.98         4.85         0.20         0.18         0.11         558.74         0.18         0.01           Model Default Ter         Cranisri Model Default Ter         Cranisri Cranisri Model Default Ter         Cranisri Cranisri Ter         Cranisri Cranisri Cranisri Model Default Ter         Other         0.00	564.7 0.0 0.0 0.0 625.2 648.6 0.0
Image: Caravier Tractors         0.00         0	0.0 0.0 0.0 625.2 648.6 0.0 0.0
Image: Charling Proc. Explored:         0.00	0.0 0.0 625.2 648.6 0.0 0.0
Image: Constraint of the second of	0.0 0.0 625.2 648.6 0.0 0.0
Image: Constraint of the state of	0.0 625.2 648.6 0.0 0.0
1         Model Default Tier         Generator Sets         0.36         3.68         3.17         5.17         0.17         0.11         62.04         0.03         0.00           1.00         2         Model Default Tier         Grantary         6.45         1.77         5.72         0.17         0.11         62.04         0.03         0.00           1.00         2         Model Default Tier         Grantary         0.00	625.2 648.6 0.0 0.0
100         2         Model Default Ter         Graders         0.45         1.77         5.92         0.19         0.11         641.88         0.21         0.01           0         Model Default Ter         OfH-Highway Tractors         0.00 </th <th>648.6 0.0 0.0</th>	648.6 0.0 0.0
Image: Constraint of the start for the start of	0.0
Image: Constraint of the state of	0.0
Model Default Tier         OfH-Highway-Tracks         0.00	0.0
Model Default Tier         Other Construction Equipment         0.00<	
Model Default Tier Other Material Handling Equipr 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.0
Model Default Tier Other Material Handling Equipr 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.0
	0.0
Model Default Tier Pavers 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.0
Model Default Tier Paving Equipment 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.0
1 Model Defaul Tier Plate Comparison 0.04 0.21 0.25 0.01 0.01 0.00 34.48 0.00 0.00	34.6
	34.6 0.0
1 Model Detain Tier Provide 3 0.3 0.74 3.21 0.18 0.01 623.04 0.03 0.00	625.2
	0.0
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	337.3
	0.0
	0.0
100 4 Model Feduli Tier Scrapers 0,93 7,00 1070 0,42 0,38 0,02 1,467,91 0,47 0,01	1,483.7
1.00 v model cetatin res Case 0.06 0.30 0.36 0.01 0.01 0.00 v 0.00 0.01 0.00 0.00 0.	49.5
1.00 1 000 2000 100 000 000 000 000 000 00	202.3
100 000 20020 0.00 0.00 0.00 0.00 0.00 0	202.3
Mode Detail 11et         Suiteding supprient         0.00	0.0
3.00 2 Model Detaul if et Sweeperson doubles 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	912.4
300         2         woode Default Ther         Theodes/subset/solution         0.76         549         0.74         0.31         0.01         92.70         0.29         0.01           Model Default Ther         Theodes/subset/solution         0.50         0.76         549         0.04         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.01         92.07         0.02         0.00         0.	912.4
Contraction of the second	0.0
Mödel Default Tier Welders 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.0
User-Defined Off-road Equipment If non-default vehicles are used, please provide information in Non-default Off-road Equipment tab ROG CO NOx PM10 PM2.5 SOx CO2 CH4 N20	CO2
Number of Vehicles Equipment Tier Type pounds/day	pounds/da
000 NA 0 000 000 000 000 000 000 000 000	0.0
000 000 000 000 000 000 000 000 000 00	0.0
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.0
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.0
<u>0.00 NA</u> 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0
0.00 N/A 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0
0.00 N/A 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0
Drainage/Utilities/Sub-Grade pounds per day 3.68 31.58 38.80 1.73 1.64 0.06 5,810.13 1.43 0.05	5,860.7
Drainage/Utilities/Sub-Grade tons per phase 0.11 0.97 1.20 0.05 0.00 178.95 0.04 0.00	180.5

\_

	1	Default	Mitigation Op	ation											
Determine         Determine <t< td=""><td>Paving</td><td></td><td></td><td></td><td></td><td>ROG</td><td>00</td><td>NOv</td><td>PM10</td><td>PM2 5</td><td>SOx</td><td>CO2</td><td>CH4</td><td>N2O</td><td>CO2e</td></t<>	Paving					ROG	00	NOv	PM10	PM2 5	SOx	CO2	CH4	N2O	CO2e
	. comg	Number of Vehicles		Doldan		100	00	1102	1 1110	11112.0	001	002	0.14	1120	0020
Image: Control in the second in the	Override of Default Number of Vehicles	Program-estimate		Equipment Tier	Type	nounds/day	nounds/day	nounds/day	nounds/day	pounds/day	nounds/day	nounds/day	nounde/dev	nounde/dev	pounds/day
Image: state	Overhee of Beldar Namber of Verhees	r logram countrie	men ner i magatori optori celetica)												0.00
															0.00
				Model Default Tier		0.00	0.00	0.00	0.00		0.00				0.00
				Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Image: Control in the second of the				Model Default Tier											0.00
Image: Control in the second of the				Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Image: Control in the second of the					Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Image: Control in the second of the				Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Image: Constraint of the second sec				Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Image: Constraint of the second sec				Model Default Tier	Forklifts				0.00			0.00	0.00		0.00
Image: Constraint of the second sec															0.00
Image: Constraint of the second sec															0.00
Image: Constraint of the second sec															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											0.00				0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
Image: Constraint of the serie of															459.97
Image: Note:         Image: Note:         Image: Note:         N		1													398.71
Image: Note:         Image: Note:         Image: Note:         N															0.00
Image: Note:         Image: Note:         Image: Note:         N															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1													0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1													256.83
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											0.00				0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1													40.66
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1													49.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$															0.00
Image: Constraint of Model Period Int Constraint of Model Period Interiod Interint of Model Period Int Constraint of Model Period In		2													608.28
Import of Vieto         Mode Default Tier         Weders         0.00		-													0.00
User-Defined Off-road Equipment         If non-default whicles are used, please provide information in Non-default Off-road Equipment'abo         RGG         CO         NOX         PM10         PM2.5         SOX         CO2         CH4         NO2         CO2           Number of Whicles         Equipment Tier         Top         poundsider				Model Default Tier											0.00
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			1	Woder Deidalt Her	Heidele	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	User-Defined Off-road Equipment	If non-default vehicles are us	ed, please provide information in 'Non-defaul	It Off-road Equipment' tab		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Number of Vehicles				Type		pounds/day	pounds/day	pounds/dav	pounds/day	pounds/day		pounds/dav	pounds/day	pounds/day
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $					ō										0.00
0.0         N/A         0         0.00					0	0.00									0.00
0.0         N/A         0         0.00	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving         pounds per day         1.06         12.15         10.61         0.58         0.53         0.02         1.773.3           Paving         tons per phase         0.01         0.16         0.14         0.01         0.00         23.16         0.01         0.00         23.46					0										0.00
Paving         pounds per day         1.06         12.15         10.61         0.58         0.53         0.02         1.773.3           Paving         tons per phase         0.01         0.16         0.14         0.01         0.00         23.16         0.01         0.00         23.46					0									0.00	0.00
Paving tons per phase 0.01 0.16 0.14 0.01 0.00 23.16 0.01 0.00 23.26 0.01 0.01 0.00 23.26 0.01 0.01 0.00 23.26 0.01 0.01 0.00 23.26 0.01 0.01 0.01 0.00 23.26 0.01 0.01 0.01 0.00 23.26 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving tons per phase 0.01 0.16 0.14 0.01 0.00 23.16 0.01 0.00 23.26 0.01 0.01 0.00 23.26 0.01 0.01 0.00 23.26 0.01 0.01 0.00 23.26 0.01 0.01 0.01 0.00 23.26 0.01 0.01 0.01 0.00 23.26 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0															
						1.06								0.02	1,773.35
Total Emissions all Phases (tons per construction period) ⇒         0.46         3.56         5.08         0.21         0.01         734.6		Paving			tons per phase	0.01	0.16	0.14	0.01	0.01	0.00	23.16	0.01	0.00	23.41
Total Emissions all Phases (tons per construction period) => 0.46 3.56 5.08 0.21 0.20 0.01 727.19 0.22 0.01 734.0															
	Total Emissions all Phases (tons per construction period) =>					0.46	3.56	5.08	0.21	0.20	0.01	727.19	0.22	0.01	734.64

#### Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

1	User Override of	Default Values	User Override of	Default Values
Equipment	Horsepower	Horsepower	Hours/day	Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors	-	124		8
Off-Highway Trucks	-	402		8
Other Construction Equipment	-	172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers	-	247		8
Rubber Tired Loaders	-	203		8
Scrapers	-	367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

Appendix B Biological Resources Memo



## Denise Duffy & Associates, Inc.

PLANNING AND ENVIRONMENTAL CONSULTING

April 9, 2020

Tad Stearn Kimley-Horn | 824 Bay Avenue, Suite 10, Capitola, CA 95010

RE: North Fremont Street Transit Project

Dear Ms. Stern,

DENISE DUFFY & ASSOCIATES, Inc. (DD&A) was contracted to identify sensitive habitats and special status plant and wildlife species including potential environmentally sensitive habitat areas (ESHA) under the California Coastal Act within or adjacent to the North Fremont Street Transit Project (project) site. This assessment is a requirement of the Preliminary Environmental Study (PES) form provided to the City of Monterey (City) by the California Department of Transportation (Caltrans) on September 2, 2014. The project is located between Casa Verde Way in the City of Monterey and Kimball Avenue in the City of Seaside, California. A portion of the project site is located in the California Coastal Zone (Coastal Zone). This area is located near the intersection of North Fremont Street and Canyon Del Rey Boulevard and includes portions of the Seaside Coastal Zone's Laguna Grande Subarea and the Monterey Coastal Zone. Currently the City of Seaside has a certified Local Coastal Plan that is applicable to the project and the City of Monterey does not.

The project consists of the improvement to the roadway to increase bicyclist safety and provides a designated bus lane. Attached to this memo is a graphic which shows the extent and distribution of biological resources that have the potential to be impacted by the project and a project site plan. The project employs a pedestrian bridge to span all sensitive habitats and avoids impacts to biological resources, including potential ESHA.

#### **METHODS**

A biological survey was conducted by DD&A Associate Environmental Scientist, Jami Davis, on September 17, 2014. The purpose of the survey was to assess the environmental conditions, general habitat features, potential sensitive habitat features, any potential for special status species at the site and within the local vicinity, in order to inform the design of the project. Prior to the site visit, special status plant and wildlife species occurrence records in the United States Geological Survey Monterey quadrangle from the California Natural Diversity Data Base (CNDDB) (California Department of Fish and Wildlife, 2014) and information regarding biological resources in the Seaside Land Use Plan were reviewed. Habitats within the project site were characterized in the field. An additional survey was conducted on April 6<sup>th</sup> to confirm the site conditions were consistent with the earlier survey.

## RESULTS

The project site is located within an urbanized area in the City of Monterey and a small portion of the City of Seaside. Because the vast majority of the project site is developed, the field survey focused on the open space areas located near the intersection of North Fremont Street and Canyon Del Rey Boulevard. This area is part of the Laguna Grande Park. While portions of the park have high biological values, the portion immediately adjacent to North Fremont Street is highly disturbed and regularly maintained. A

large portion of the area is denuded or covered with large piles of woodchips from trees that were removed on-site or from other locations. The remainder of this area is a maintained garden and horticultural setting, planted with native and non-native plants, shrubs and trees; disturbed riparian; and oak woodland.

The native plant garden is present at the corner of North Fremont Street and Canyon Del Rey Boulevard, which includes species such as coast live oak (*Quercus agrifolia*), black sage (*Salvia mellifera*), and two buckwheat species (*Eriogonum* sp.). No special status plants were identified within the garden. One species present, dune buckwheat (*E. parvifolium*), is the host plant for the federally listed Smith's blue butterfly (*Euphilotes enoptes smithi*); however, these individuals are horticultural plantings in an urban horticultural setting, and as such are unlikely to support the Smith's blue butterfly (Arnold, 1983). No other habitat for special-status wildlife species is present within the garden.

Riparian vegetation is present adjacent to the Canyon Del Rey Creek channel and includes Arroyo willow (*Salix lasiolepis*) and blackberry (*Rubus* sp.) (Figure 1). The portion of the riparian habitat on the north and east slopes of the channel has been significantly disturbed as a result of adjacent development and ongoing management specific to homeless encampments. The oak woodland area<sup>1</sup> is dominated by coast live oak trees with an understory of blackberry and non-native English ivy (*Hedera helix*) and periwinkle (*Vinca* sp.).

Canyon Del Rey Creek runs through the project site. The creek runs into a culvert just south of Safeway, which daylights just north of North Fremont Street. The open channel begins approximately 50 feet from the edge of the roadway. The channel is approximately 15 feet wide at the culvert, but quickly narrows to approximately six feet wide. The creek runs in the open channel for about 140 feet before entering another culvert, and again daylighting closer to Laguna Grande Lake.

## CONCLUSION

Sensitive resources within the area evaluated include riparian and oak woodland habitats, and Canyon Del Rey Creek (Figure 1). Riparian habitat is regulated by the California Department of Fish and Wildlife (Department) under their Lake and Streambed Alteration Program and is also potentially an Environmentally Sensitive Habitat Area (ESHA) where it occurs within the Coastal Zone. Oak woodland habitat is identified in the Seaside Land Use Plan as potential ESHA. Canyon Del Rey Creek is potentially waters of the U.S. and/or waters of the state, which are regulated under the Clean Water Act by the Army Corps of Engineers (ACOE) and Regional Water Quality Control Board, respectively. Within the Coastal Zone, waters of the U.S. and state are also potentially ESHA. No wetlands or special status plants or wildlife were identified within the project site or vicinity and none are expected to occur based on lack of vegetation and the urbanized and disturbed nature of the area.

Figure 1 identifies the location of the potential ESHA within the vicinity of the project site. The current site plan shows avoidance of any impacts to these resources. As a result, there are no impacts to biological resources and no regulatory permitting required. It is recommended that the following avoidance measures are made project conditions to ensure total avoidance of biological resources during construction:

- 1. A qualified biological monitor shall supervise the installation of protective fencing for all sensitive biological resources adjacent to the project site prior to the initiation of construction.
- 2. A qualified biological monitor shall continue to monitor the site through construction as, necessary to ensure the contractor is maintaining the fencing and containing all project activities outside of fenced biological resources.

If you have any questions of comments please feel free to contact me.

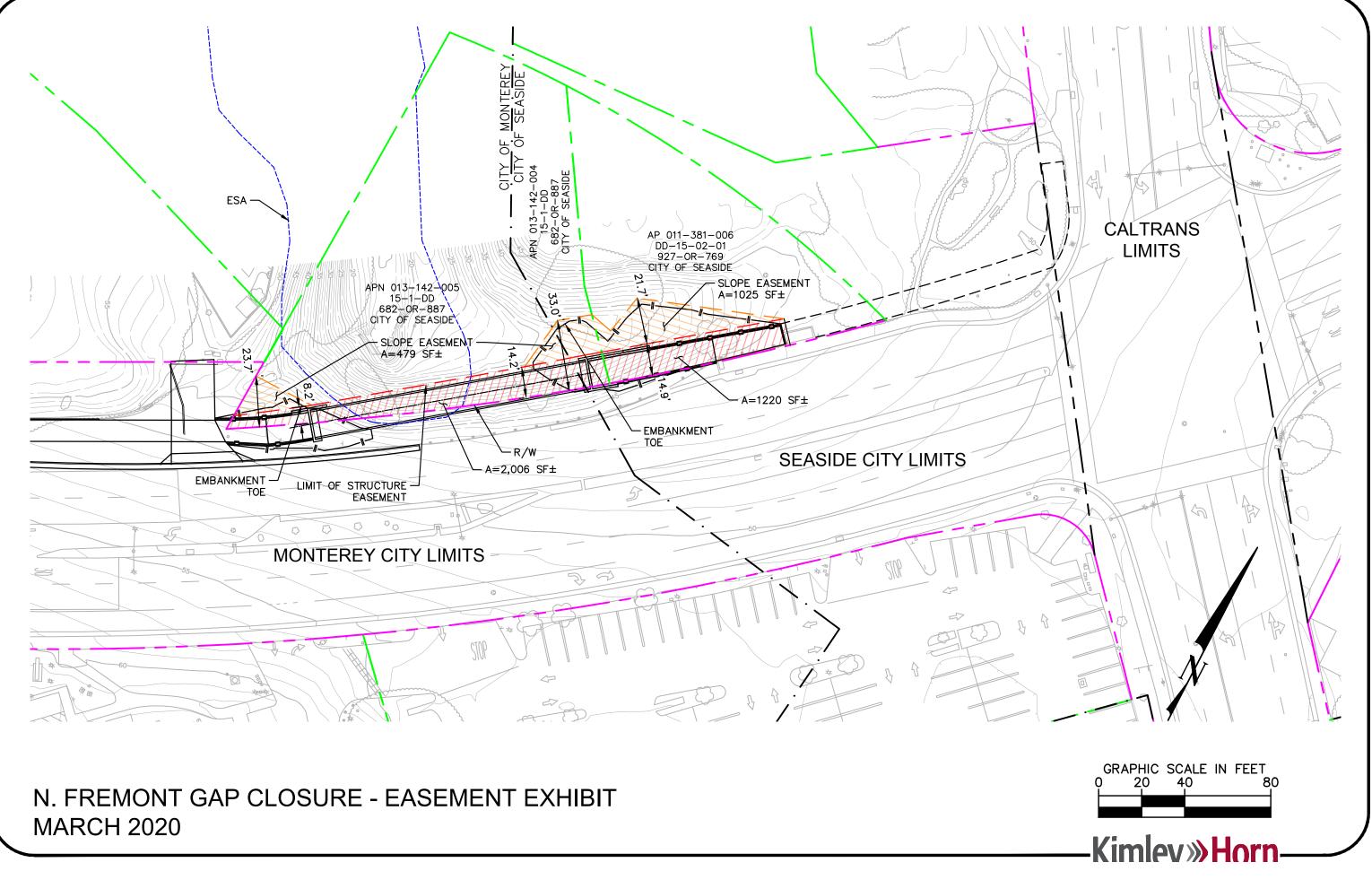
Sincerely,

3

Jahi Davis Associate Environmental Scientist <u>jdavis@ddaplanning.com</u>

#### **REFERENCES CITED:**

- Arnold, R.A., 1983. Ecological studies of six endangered butterflies (Lepidoptera: Lycaenidae): Island biogeography, patch dynamics, and design of habitat preserves. Univ. Calif. Publ. Entomology 99: 1-161.
- California Department of Fish and Wildlife. 2014. California Natural Diversity Data Base. Available online at: <u>https://www.dfg.ca.gov/biogeodata/cnddb/</u>



Appendix C Cultural Resources Report

# ARCHAEOLOGICAL CONSULTING P.O. BOX 3377 SALINAS, CA 93912 (831) 422-4912

# PHASE 1 ARCHAEOLOGICAL SURVEY FOR THE NORTH FREMONT BOULEVARD PEDESTRIAN, BICYCLE, AND TRANSIT PROJECT, MONTEREY AND SEASIDE, MONTEREY COUNTY, CALIFORNIA

by

Mary Doane, B.A., and Gary S. Breschini, Ph.D., RPA

December 5, 2014

Prepared for

Denise Duffy & Associates

SUMMARY: PROJECT 5035 RESULTS: NEGATIVE LINEAR: <1 MILE SITES: NONE UTMG: NE 6.0292/40.5090 TO SW 6.0181/40.5050 MAP: USGS 7.5 MINUTE SEASIDE QUADRANGLE

For Planning	Yes	No	N/A	See text	
Evidence of:	Sacred/Religious site Native American Remains Anything of Archaeological Significance Findings of Historical Significance		$\frac{X}{X}$		

#### **INTRODUCTION**

In October 2014 Archaeological Consulting was authorized by Josh Harwayne of Denise Duffy & Associates to prepare a Phase 1 Archaeological Survey report for a project on North Fremont Boulevard in Monterey and Seaside, Monterey County, California.

As part of our methodology in the preparation of this report, we have conducted: 1) a background records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS), located at Sonoma State University; 2) A Sacred Lands File Search with the Native American Heritage Commission and consultation with locally affiliated Native Americans, and 3) a field survey of the project area. The following report contains the results of these investigations as well as our conclusions and recommendations.

#### **PROJECT LOCATION AND DESCRIPTION**

The project proposes Pedestrian, Bicycle and Transit improvements to North Fremont Boulevard, in the Cities of Monterey and Seaside, Monterey County, California (see Maps 1 and 2, and APE Maps 1-8). The Universal Transverse Mercator Grid (UTMG) coordinates for the approximate ends of the project area are as follows: NE 6.0292/40.5090 to SW 6.0181/40.5050 on the USGS 7.5 minute Seaside Quadrangle (1947; photo-revised 1983).

At the time of the field assessment, the project APE was paved. Soil was visible adjacent to the pavements adjacent to many parts of the APE. Overall, soil visibility was considered adequate for the purposes of this survey.

### **PROJECT METHODOLOGY**

The methodology used in the preparation of this report included three primary steps, as follows:

#### **Background Research**

The background research for this project included an examination of the archaeological site records, maps, and project files of the Northwest Information Center of the California Historical Resources Information System, located at Sonoma State University. In addition, our extensive files and maps were examined for supplemental information, such as mention of historic or prehistoric resources in the general area. These literature searches are undertaken to determine the locations and nature of any recorded archaeological resources in and near to the project area, and the scope and findings of any previous archaeological research or reconnaissance projects.

Established by the California Office of Historic Preservation, the regional Information Centers are the local repository for all archaeological reports prepared under cultural resource management regulations. A background literature search at the appropriate regional Information Center is required by state guidelines and current professional standards. Following completion of a project, a copy of the report must be deposited with that organization.

#### **Native American Consultation**

A Sacred Lands search was initiated with the Native American Heritage Commission on October 3, 2014. The search was completed on November 14, 2014. The commission recommended consultation with locally affiliated Native Americans and provided a list of individuals from several bands to contact for such consultation. Initial contact was made by mail or email, followed by telephone if a timely response was not received.

#### **Field Survey**

The field survey, conducted by Mary Doane and Gina Kay on October 9, 2014, consisted of a "general surface reconnaissance" of all areas adjacent to the paved APE which could reasonably be expected to contain visible cultural resources and which could be viewed without major vegetation removal or excavation.

#### **RESULTS OF THE ASSESSMENT**

#### **Background Research**

The project area lies within the currently recognized ethnographic territory of the Costanoan (often called Ohlone) linguistic group. Discussions of this group and their territorial boundaries can be found in Breschini, Haversat, and Hampson (1983), Kroeber (1925), Levy (1978), Margolin (1978), and other sources. In brief, the group followed a general hunting and gathering subsistence pattern with partial dependence on the natural acorn crop. Habitation is considered to have been semi-sedentary and occupation sites can be expected most often at the confluence of streams, other areas of similar topography along streams, or in the vicinity of springs. These original sources of water may no longer be present or adequate. Also, resource gathering and processing areas and associated temporary campsites are frequently found on the coast and in other locations containing resources utilized by the group. Factors, which may influence the locations of these sites, include the presence of suitable exposures of rock for bedrock mortars or other milling activities, ecotones, the presence of specific resources (oak groves, marshes, quarries, game trails, trade routes, etc.), proximity to water, and the availability of shelter. Temporary camps or other activity areas can also be found along ridges or other travel corridors.

Research of the files at the Northwest Information Center and the review of our records and maps found no prehistoric archaeological sites and seven historic cultural resources recorded within one kilometer of the project area. These resources include several structures within the Naval Postgraduate School as well as the Old Del Monte Hotel historic district within the Naval Postgraduate School. The Southern Pacific Railroad and the Del Rey Oaks PG&E transmission tower are also recorded as historic resources.

The Fremont Boulevard alignment appears on the 1913 USGS Monterey Quadrangle. The 1941 USGS Monterey Quadrangle depicts structures, mostly along the north side of the alignment, bordering the current project APE.

Several previous studies have included or touched on the project area (Sawyer et al. 2000; Doane and Haversat 2006; Doane and Breschini 2006, 2007, and 2009; Holm, Chao and Holson 2011). No resources were found in the project APE during previous surveys.

## Native American Consultation

A Sacred Lands File Search was initiated on October 3, 2014. The response was not received until November 14. On November 17 consultation requests were sent to the various Native Americans on the list provided by the NAHC. Three consultants responded by email. We called and talked to several more and left voice mail messages with the rest on December 4, 2014. No new information was provided by the several consultants.

## **Field Research**

None of the materials frequently associated with prehistoric cultural resources in this area (dark midden soil containing fragments of weathered marine shell, flaked or ground stone, bone fragments, fire-affected rock, etc.) were observed during the field survey.

There was no surface evidence of potentially significant historic period archaeological resources seen within the project APE

The small areas of visible soil adjacent to pavements were tan to white sand that contained many imported rocks and other fill materials.

## CONCLUSIONS AND RECOMMENDATIONS

Based upon the background research and the field assessment, we have concluded that the project APE contains no evidence of significant cultural resources. For this reason we make the following recommendation:

• The proposed North Fremont Boulevard project should not be delayed for archaeological reasons.

Because of the possibility of unidentified (e.g., buried) cultural resources being found during any earth disturbance, we recommend that the following standard language, or the equivalent, be included in any permits issued for the project:

• If potentially significant archaeological or historic resources are accidentally discovered during construction, work shall be halted until the find is evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated, with the approval of the lead agency, and implemented.

### REFERENCES

#### Breschini, G. S., T. Haversat, and R. P. Hampson

## 1983 A Cultural Resources Overview of the Coast and Coast-Valley Study Areas [California]. Coyote Press, Salinas.

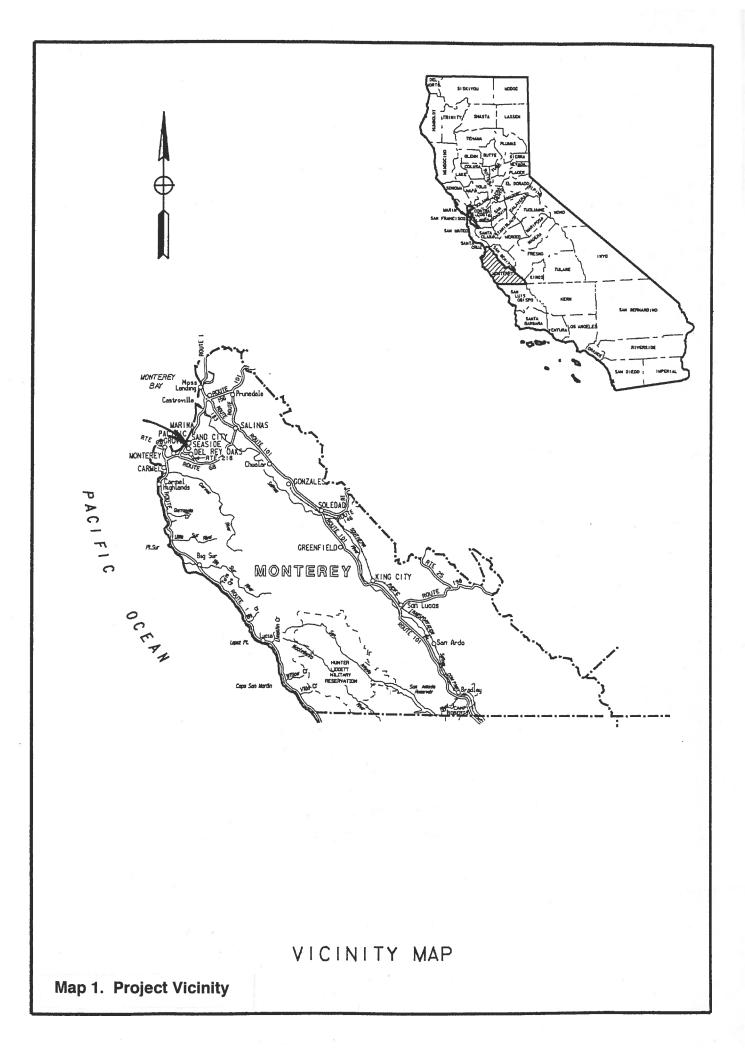
- Doane, M. and G. S. Breschini
  - 2007 Phase 1 Archaeological Reconnaissance for the Marina Coast Water District, Regional Urban Water Augmentation Project, Recycled Water Component, Northern Segment, in Marina, Ord Community, Seaside and Monterey, Monterey, Monterey County, California. Report on file with the Northwest Information Center, Sonoma State University.
  - 2009 Preliminary Archaeological Reconnaissance for the California-American Water Company Improvement Project 1, PRV Stations in the Coastal Zone, In Monterey and Seaside, Monterey County, California. Report on file with the Northwest Information Center, Sonoma State University.
- Doane, M. and T. Haversat
  - 2006 Phase 1 Archaeological Reconnaissance for the Marina Coast Water District, Regional Urban Water Augmentation Project, Recycled Water Component, Northern Segment, in Marina and Seaside, Monterey, Monterey County, California. Report on file with the Northwest Information Center, Sonoma State University.
- Holm, L., K. Chao and J. Holson
  - 2011 Archaeological Assessment for the City of Monterey 2011 Sewer Rehabilitation Project, Monterey County, California. Report on file with the Northwest Information Center, Sonoma State University.
- Kroeber, A. L.
  - 1925 Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78.

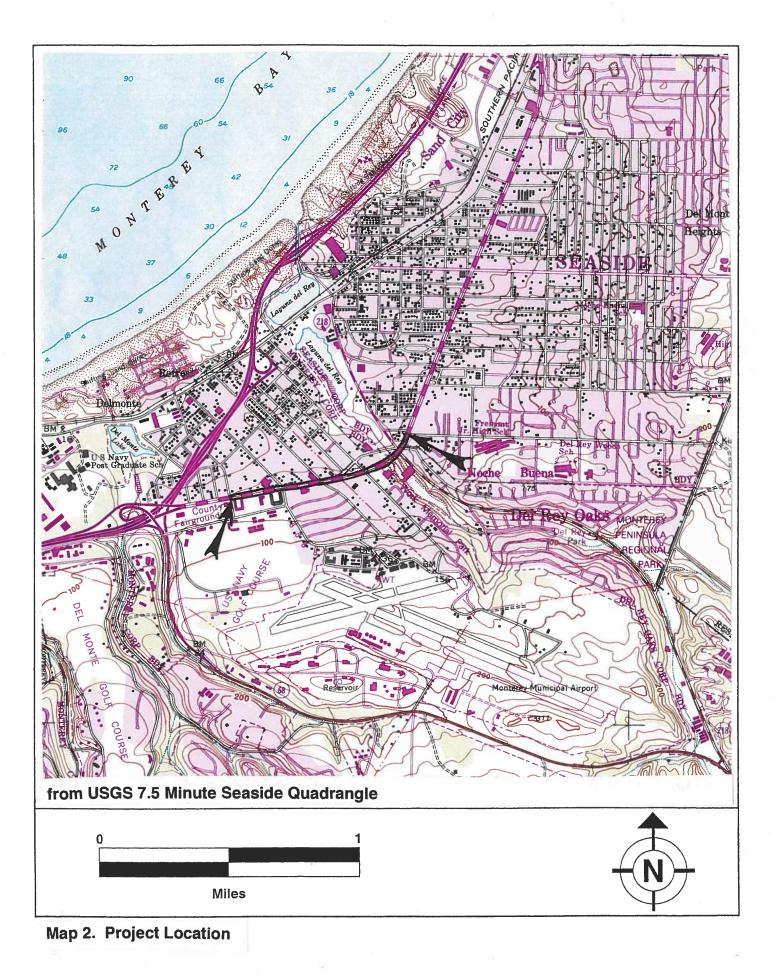
## Levy, R.

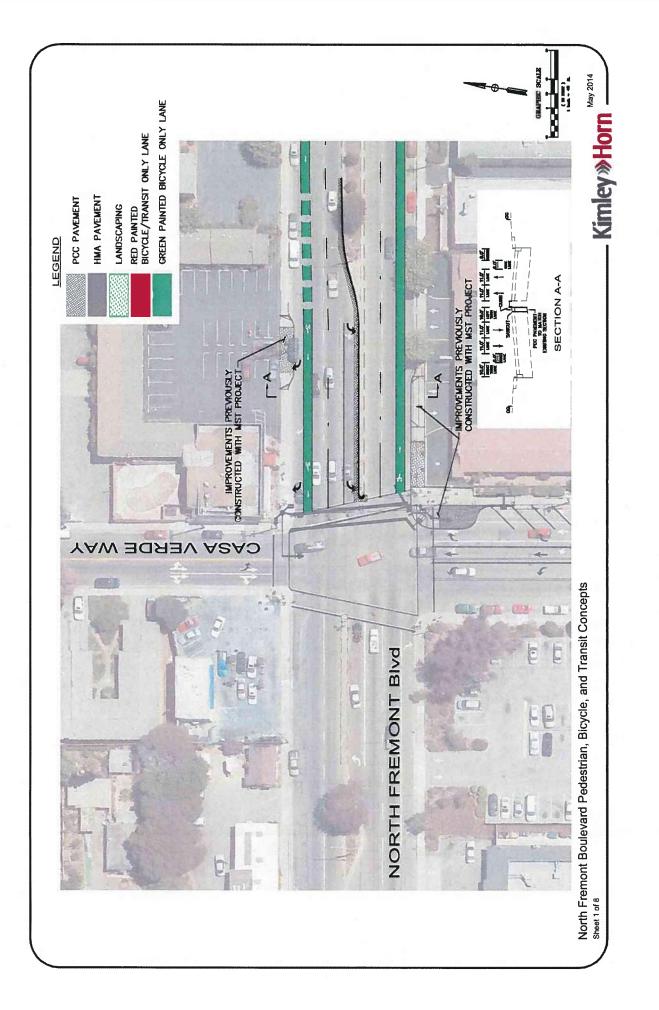
1978 Costanoan. Pp. 485-495 in **Handbook of North American Indians**, Vol. 8, California. Smithsonian Institution, Washington, D.C.

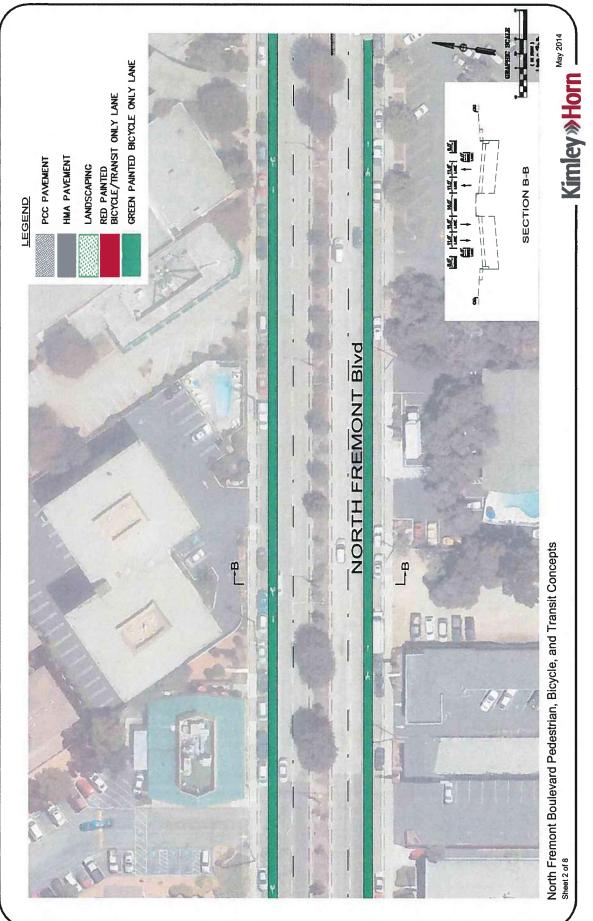
#### Margolin, M.

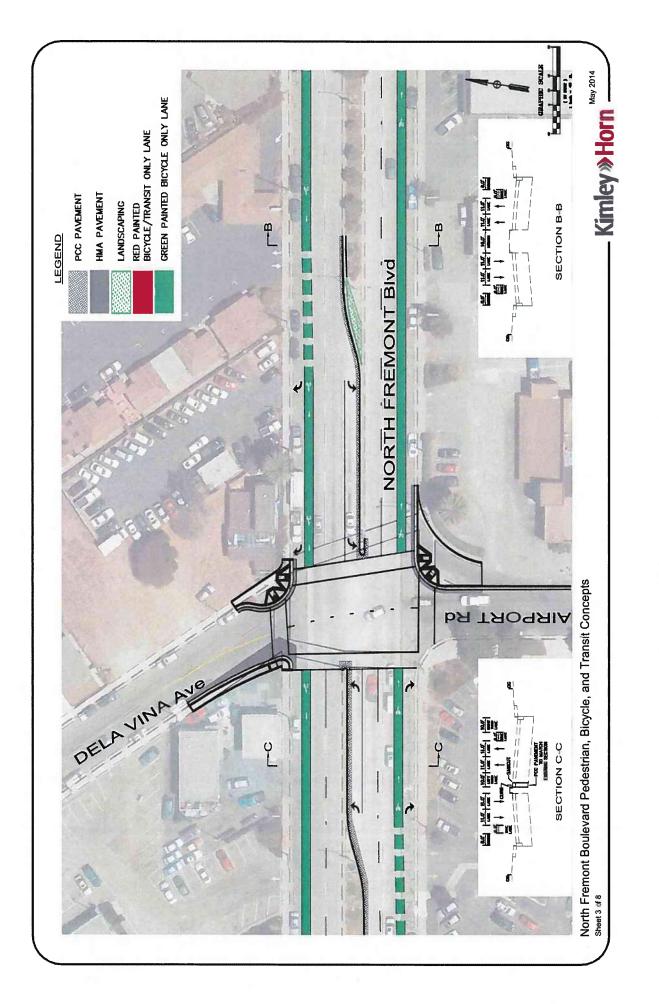
1978 **The Ohlone Way.** Heyday Books, Berkeley.

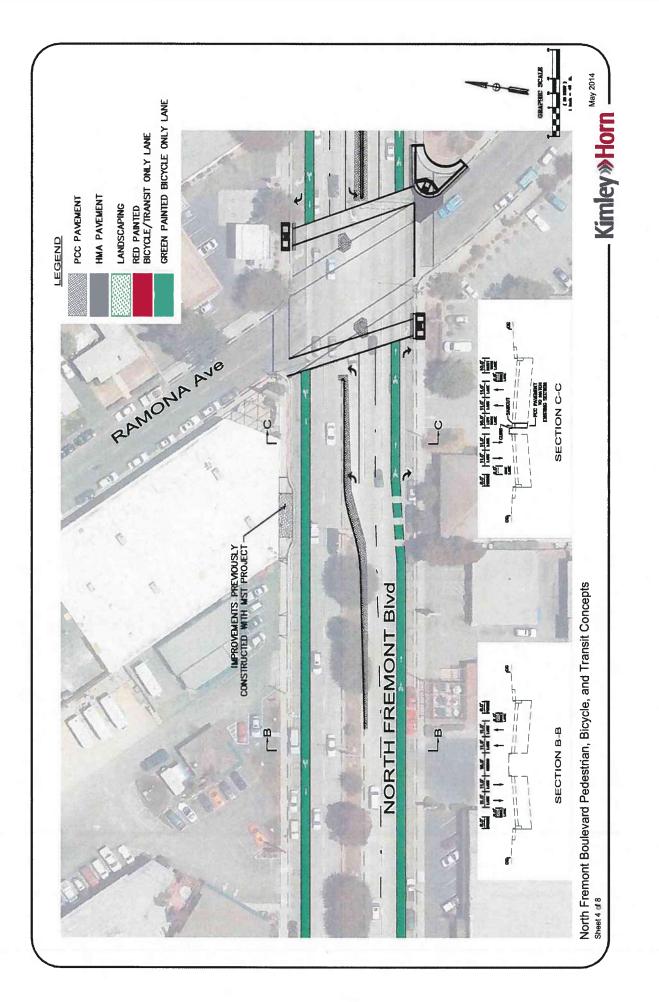


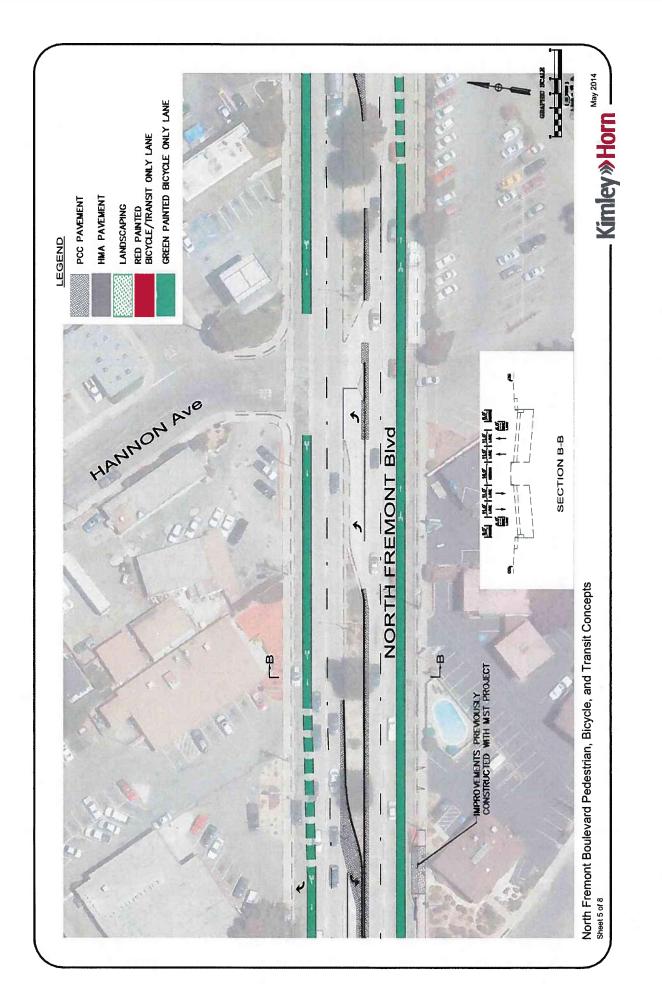


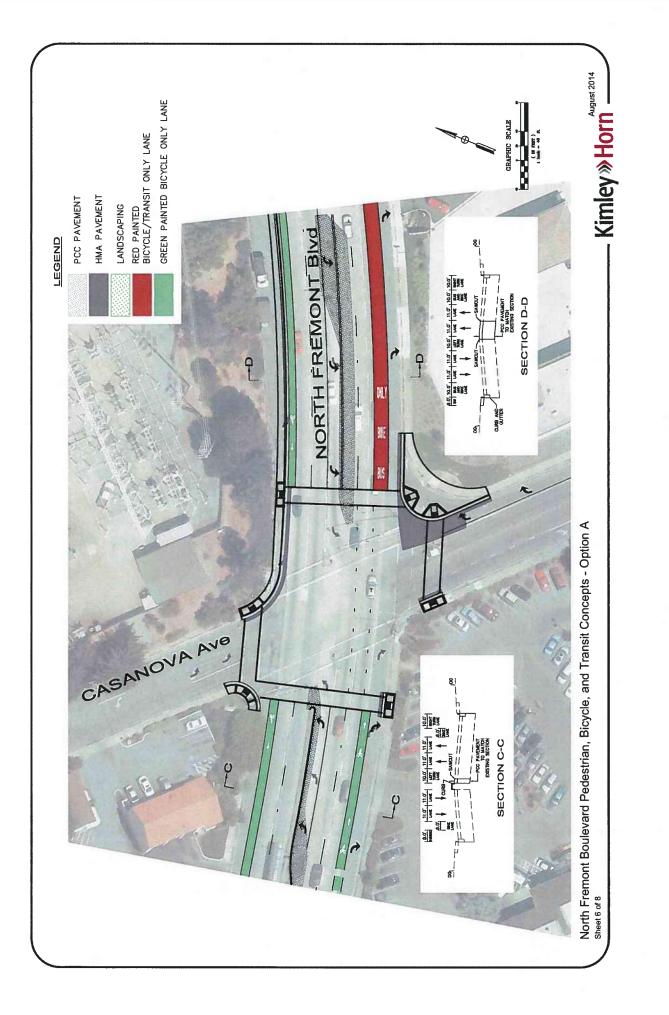


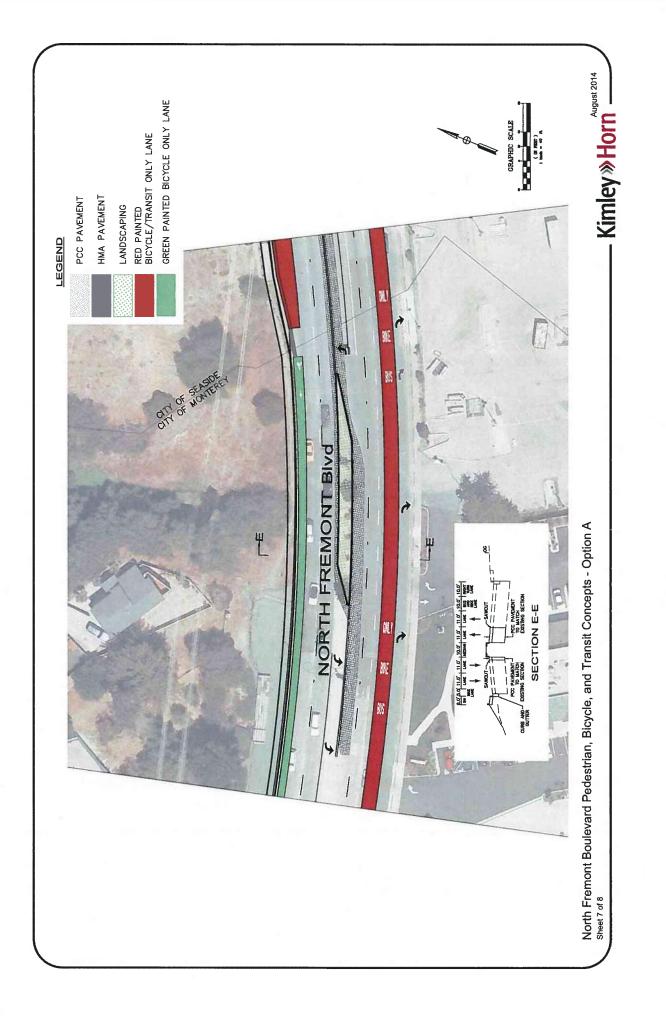


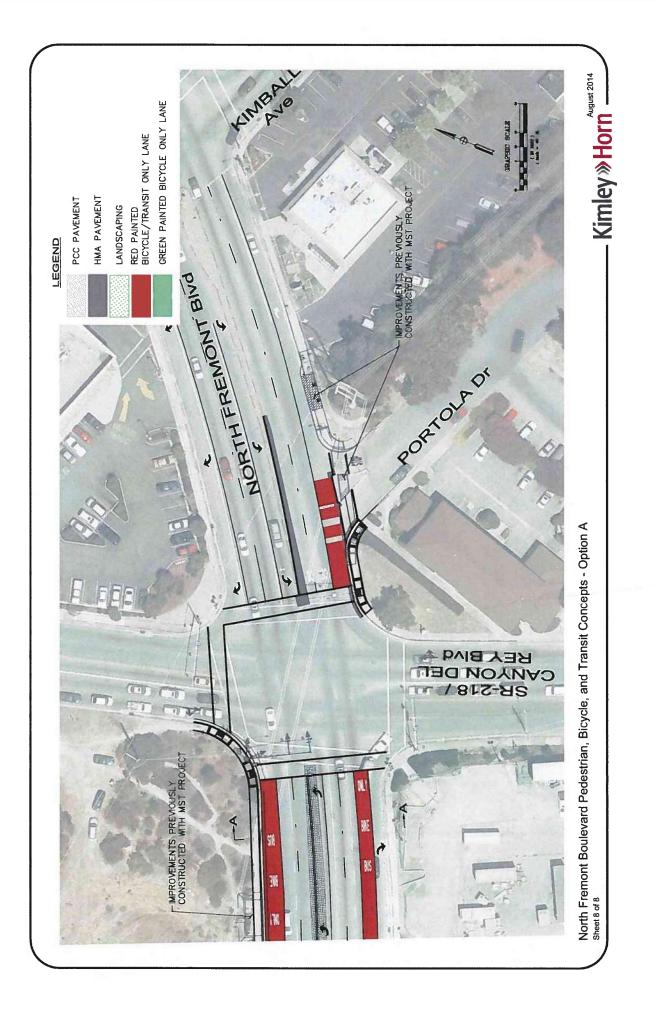












Attachment 1

## CHRIS DOCUMENTATION



10/16/2014

NWIC File No.: 14-0423

Mary Doane Archaeological Consulting P.O. Box 3377 Salinas, CA 93912

re: AC 5028, 5034, & 5035

The Northwest Information Center received your record search request for the project area referenced above, located on the Santa Cruz, Marina, & Seaside USGS 7.5' quads. The following reflects the results of the records search for the project area and a 0.6 mile radius:

As indicated on the data request form, the locations of resources & reports are provided in the following format:  $\boxtimes$  custom GIS maps  $\square$  shapefiles  $\square$  hand-drawn maps

Resources within project areas:	None				
Resources within 0.6 mile radius:	1.				
	2.				
	3. AC 5035: P-27-2923, 2947, 2946, 2948, 3248, & 3097.				
Reports within project area:	1.				
	2.				
	3. AC 5035: S-27043, 33677, 36108, 38728, & 22657.				
Other Reports within records search	S-18217, 848, 9462, 36513, 15529, 3671, & 5536 These				
radius:	reports are classified as Other Reports; reports with little or no				
	field work or missing maps. The electronic maps do not depict				
	study areas for these reports. In addition, you have not been				
	charged digitized shape fees for the studies.				

Resource Database Printout (list):	⊠ enclosed	$\Box$ not requested	$\Box$ nothing listed
Resource Database Printout (details):	$\Box$ enclosed	⊠ not requested	$\Box$ nothing listed
<b>Resource Digital Database Records:</b>	$\Box$ enclosed	⊠ not requested	$\Box$ nothing listed
<u>Report Database Printout (list):</u>	🛛 enclosed	$\Box$ not requested	$\Box$ nothing listed
Report Database Printout (details):	□ enclosed	⊠ not requested	$\Box$ nothing listed
Report Digital Database Records:	□ enclosed	⊠ not requested	$\Box$ nothing listed
<b>Resource Record Copies:</b>	$\Box$ enclosed	$\boxtimes$ not requested	$\Box$ nothing listed

Report Copies:	$\Box$ enclosed	$\boxtimes$ not requested	$\Box$ nothing listed
<b>OHP Historic Properties Directory:</b>	$\boxtimes$ enclosed	$\Box$ not requested	$\Box$ nothing listed
Archaeological Determinations of Eligibility:	$\Box$ enclosed	$\Box$ not requested	$\boxtimes$ nothing listed
CA Inventory of Historic Resources (1976):	$\Box$ enclosed	$\Box$ not requested	$\boxtimes$ nothing listed
Caltrans Bridge Survey:	$\Box$ enclosed	$\boxtimes$ not requested	$\Box$ nothing listed
<b>Ethnographic Information:</b>	$\Box$ enclosed	$\boxtimes$ not requested	□ nothing listed
Historical Literature:	$\Box$ enclosed	⊠ not requested	□ nothing listed
Historical Maps:	$\boxtimes$ enclosed	$\Box$ not requested	$\Box$ nothing listed
Local Inventories:	$\Box$ enclosed	$\Box$ not requested	⊠ nothing listed
GLO and/or Rancho Plat Maps:	$\boxtimes$ enclosed	$\Box$ not requested	□ nothing listed
Shipwreck Inventory:	$\Box$ enclosed	$\boxtimes$ not requested	□ nothing listed
<u>Soil Survey Maps:</u>	$\Box$ enclosed	⊠ not requested	□ nothing listed

\*Notes:

- Copied the HPD index pages that included properties on Ocean St & Fremont Blvd (there were no properties on Monterey Rd).
- The invoice will be kept open until 10/23/14.

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa Hagel Researcher Attachment 2

## NATIVE AMERICAN CONSULTATION

# **ARCHAEOLOGICAL CONSULTING**

P.O. BOX 3377 SALINAS, CA 93912 (831) 422-4912 Fax (831) 422-4913 December 5, 2014 AC 5035

Josh Harwayne Denise Duffy & Associates 947 Cass St., Suite 5 Monterey, CA 93940

Re: North Fremont Boulevard project

Dear Mr. Harwayne:

At your request we initiated a search of the sacred lands file with the Native American Heritage Commission (NAHC) on October 3, 2014. Attached please find a copy of the response, dated November 17, 2014 from Katy Sanchez of the NAHC. As you will see there was no specific site information found in their files regarding the project area, which lies within traditional Ohlone territory. She recommended that we make additional contacts with other Native American sources of information regarding the potential for cultural resources in the project area. Because these Native American peoples are not a federally recognized tribe, there is no single person or group who represents all of them. A sample copy of the letters regarding your project that were sent on November 24, 2014 to the Native American contacts on the NAHC list is also attached.

I have received an email response from Ed Ketchum, historian of the Amah Mutsun Tribal, who referred me to the Esselen Nation. I also received a response from Irenne Zwierlein and Michelle Zimmer of the Aman Mutsun Tribal Band of Mission San Juan Bautista. They recommend that construction crews be trained in cultural sensitivity and monitors when necessary.

I called the other consultants on December 4, 2014. Val Lopez referred me to the Esselen Nation for information. Tony Cerda of the Costanoan Rumsen Carmel Tribe requested information on any findings that may occur during the project. Ramona Garibay of the Trina Marine Ruano Family was unfamiliar with the area. Ann Marie Sayers of the Indian Canyon Band of Costanoan had no specific information or concerns with the project area. I left voice messages for Louise Miranda-Ramirez and Christianne Arias of the Ohlone/Coastanoan-Esselen Nation, and with Jakki Kehl. Although the Native Americans offered no information specific to sites in the project area, they wish to know of any significant discoveries during the project. Because of their concern for the preservation of the cultural resources which comprise their heritage, the listed Native Americans should be informed of the of the discovery of any previously unknown cultural resources which may occur during the course of this project. A continuing sensitivity to their concerns and the inclusion of interested Native Americans in this project will be greatly appreciated by them.

If I should receive further information or requests for consultation from other Native Americans, I will provide a supplement to this summary letter.

Please feel free to call if you have any further questions or need additional information in this matter.

Yours truly,

Mary Doane

Mary Doane

Cc. Native American Heritage Commission

# **ARCHAEOLOGICAL CONSULTING**

P.O. BOX 3377 SALINAS, CA 93912 (831) 422-4912 Fax (831) 422-4913 October 3, 2014

AC 5035

Debbie Pilas Treadway State Of California Native American Heritage Commission Via email: nahc@nahc.ca.gov

Re: Sacred Lands File search request

Dear Debbie:

We have just started a Phase I Archaeological Survey for the proposed North Fremont Boulevard Project in Monterey and Seaside, Monterey County. We do not yet have the results of the CHRIS search for recorded archaeological sites in and near the project area.

We are contacting your office for information on possible Native American Sacred sites or concerns in the project area. Would you please search your Inventory of Sacred Lands to determine whether the project area contains any such resources in Township 15S/Range 1E (see attached map from the USGS 7.5 Minute Seaside Quadrangle).

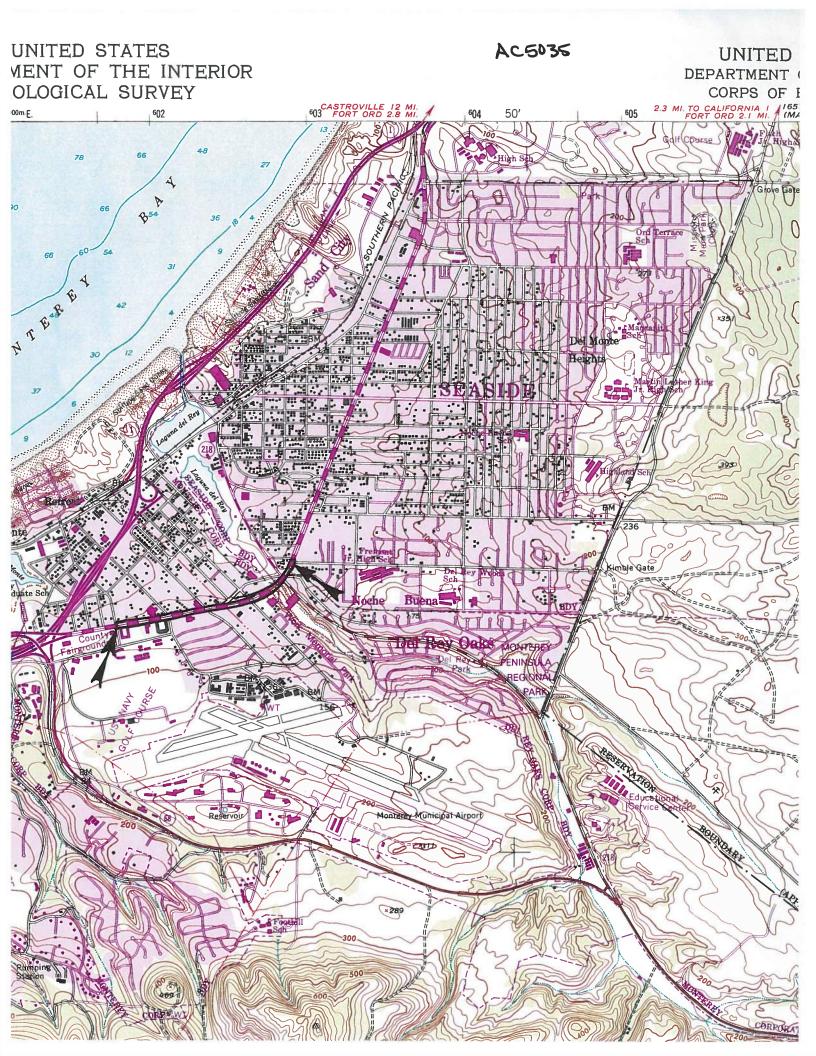
We are prepared to contact local Native Americans for their comments on the proposed project area if you will provide us with the names and addresses on your current list for this part of Monterey County.

If you have any questions about this request, please do not hesitate to contact our office.

Yours truly,

Mary Doane Mary Doane

Mary Doane Attachment



1º

#### NATIVE AMERICAN HERITAGE COMMISSION 1550 Harbor Blvd., RO OM 100 West SACRAMENTO, CA 95691



(916) 373-3710 Fax (916) 373-5471

November 17, 2014

Mary Doane ARCHAEOLOGICAL CONSULTING P.O. Box 3377 Salinas, CA 93912 FAX: 831-422-4913 MAILED. Emailed: flame @ razzolink.com RE: North Fremont Boulevard Project, Monterey County 3 Pages

Ms. Doane,

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans. Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above project.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. A *Sacred Lands File* search was completed with negative results. Local governments should be aware that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

sta Winston A Kat Sanchez

Associate Government Program Analyst

cc: State Clearinghouse

### Native American Contacts Monterey County November 14, 2014

Jakki Kehi 720 North 2nd Street Patterson , CA 95363 jakkikehl@gmail.com 510-701-3975

Ohlone/Costanoan

Valentin Lopez, Chairperson P.O. Box 5272 ( Galt , CA 95632 ) vlopez@amahmutsun.org (916) 743-5833

Amah MutsunTribal Band

Ohlone/Costanoan Northern Valley Yokuts

Coastanoan Rumsen Carmel Tribe Tony Cerda, Chairperson 240 E. 1st Street Ohlone/Costanoan Pomona , CA 91766 rumsen@aol.com (909) 524-8041 Cell (909) 629-6081

Ohlone/Coastanoan-Esselen Nation Louise Miranda-Ramirez, Chairperson P.O. Box 1301 Esselen Monterey CA 93942 Ohlone/Costanoan ramirez.louise@yahoo.com (408) 629-5189 (408) 205-7579 Cell

Trina Marine Ruano Family<br/>Ramona Garibay, Representative30940 Watkins StreetOhlor<br/>Union CityUnion CityCA 94587soaprootmo@comcast.netPlain<br/>Patw

Ohlone/Costanoan Bay Miwok Plains Miwok Patwin Amah MutsunTribal Band of Mission San Juan Bautista Irenne Zwierlein, Chairperson 789 Canada Road Ohlone/Costanoan Woodside , CA 94062 amahmutsuntribal@gmail. (2000) (650) 400-4806 Cell (650) 332-1526 Fax

Ohione/Coastanoan-Esselen Nation Christianne Arias, Vice Chairperson P.O. Box 552 Esselen Soledad , CA 93960 Ohione/Costanoan (831) 235-4590

Amah MutsunTribal Band Edward Ketchum 35867 Yosemite Ave Davis , CA 95616 aerieways@aol.com

Ohlone/Costanoan Northern Valley Yokuts

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed North Fremont Boulevard Project, Monterey County.

### Native American Contacts Monterey County November 14, 2014

Ohlone/Coastanoan-Esselen Nation Pauline Martinez-Arias, Tribal Council woman 1116 Merlot Way Esselen Gonzales CA 93926 Ohlone/Costanoan maklici0-us@gmail, Chym (831) 596-9897

Indian Canyon Mutsun Band of Costanoan Ann Marie Sayers, Chairperson P.O. Box 28 Ohlone/Costanoan Hollister CA 95024 ams@indiancanyon.org (831) 637-4238

Amah MutsunTribal Band of Mission San Juan Bautista Michelle Zimmer 789 Canada Road Ohlone/Costanoan Woodside , CA 94062 amahmutsuntribal@gmail.com

(650) 851-7747 Home (650) 332-1526 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed North Fremont Boulevard Project, Monterey County.

# ARCHAEOLOGICAL CONSULTING P.O. BOX 3377 SALINAS, CA 93912 (831) 422-4912 Fax (831) 422-4913

November 24, 2014 AC 5035

Tony Cerda Coastanoan Rumsen Carmel Tribe 240 E. 1st St. Pomona, CA 91766

Re: North Fremont Boulevard Project in Monterey and Seaside

Dear Tony:

We are in the process of completing a Phase I Archaeological Survey for the proposed North Fremont Boulevard Project in Monterey and Seaside Monterey County, California (see Map attached). The current project proposes pedestrian, bicycle and transit improvements within the existing Fremont Boulevard right-of-way.

The Northwest Information Center has found no prehistoric archaeological sites within the project area or within one kilometer of the project area. There are several historic resources recorded within one kilometer.

We are contacting you for additional information on Native American Sacred Lands or other native resources that may be in or near the project area and subject to project impacts. Please contact me at your earliest convenience with your response or concerns.

If you have any questions about this request, please do not hesitate to contact our office.

Yours truly,

Mary Doane Mary Doane

Mary Doane Attachment

