Sailing Lake Access Road Improvement Project

Initial Study/Preliminary Mitigated Negative Declaration

CITY OF MOUNTAIN VIEW

December 2020

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
BAAQMD	Bay Area Air Quality Management District
Basin Plan	*San Francisco Bay Basin Water Quality Control Plan*
BERD	Built Environment Resources Directory
bgs	below ground surface
BMP	best management practice
B.P.	Before Present
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAP	*Bay Area 2017 Clean Air Plan*
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historical Resources Information System
City	City of Mountain View
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CRHR	California Register of Historical Resources
DOC	Department of Conservation
DSOD	California Division of Safety of Dams
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
ESA	federal Endangered Species Act
FD	Federally Delisted
FE	Federal Endangered
FEMA	Federal Emergency Management Agency
FP	Fully Protected
FT	Federal Threatened
GCCS	gas collection and control system
GGRP	Greenhouse Gas Reduction Program
GHG	greenhouse gas
GSI	Green Stormwater Infrastructure
GWP	global warming potential
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon

HPD	Historic Property Data
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
LRA	local responsibility area
$\mu g/m^3$	micrograms per cubic meter
MHHW	mean higher high water
MND	Mitigated Negative Declaration
MS4 Permit	NPDES permit to discharge stormwater from municipal separate storm sewer systems
msl	mean sea level
MT	metric ton
MVFD	Mountain View Fire Department
MVPD	Mountain View Police Department
MVSL	Mountain View Shoreline Landfill
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
N_2O	nitrous oxide
NOD	Notice of Determination
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OHP	Office of Historic Preservation
PCE	tetrachloroethene
PFC	perfluorocarbon
PGA	peak ground acceleration
PG&E	Pacific Gas and Electric Company
PM_{10}	particulate matter equal to or less than 10 micrometers in diameter
$PM_{2.5}$	particulate matter equal to or less than 2.5 micrometers in diameter
ppm	parts per million
RMP	Resource Management Plan
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SD	State Delisted
SE	State Endangered
SFPUC	San Francisco Public Utilities Commission
SLF	Sacred Lands File
SMaRT	Sunnyvale Materials Recovery and Transfer
SRA	state responsibility area
SSC	Species of Special Concern
ST	State Threatened
SVCE	Silicon Valley Clean Energy
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant

TMDL	Total Maximum Daily Load
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	vehicle miles traveled
waters of the U.S.	waters of the United States
WCGEP	Working Group on California Earthquake Probabilities
WDR	report of waste discharge

1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Mountain View (City), as the Lead Agency, has prepared this Initial Study (IS) for the Sailing Lake Access Road Improvement Project (City CIP Project No. 15-38) in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations [CCR] §15000 et. seq.) and the regulations and policies of the City.

The proposed project includes improvements to the Shoreline Lake Dam embankment and access road over the dam. This IS evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 INITIAL STUDY PROCESS

An IS is a preliminary analysis that is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine whether a project will have a significant adverse effect on the environment, thereby triggering the need to prepare a full Environmental Impact Report (EIR). It also functions as an evidentiary document, containing information that supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less than Significant" or "No Impact" level.

If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) is prepared.

Publication of this IS/Preliminary MND marks the beginning of a 30-day public review and comment period. During this period, the IS/Preliminary MND will be available to local, state, and federal agencies and to interested organizations and individuals for review.

Following the conclusion of the public review period, the City will consider the adoption of the IS/MND for the project at a regularly scheduled meeting. The City shall consider the IS/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

If the project is approved, the City will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075[g]).

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION AND BACKGROUND

The City is proposing the Sailing Lake Access Road Improvement Project to retrofit Shoreline Lake Dam (No. 7000-142, Santa Clara County) to meet dam safety standards, including strengthening the embankment and mitigating seepage issues. In addition, the roadway over the dam would be improved to accommodate future construction access to the Coast Casey Forebay north levee for the South Bay Salt Pond Restoration Project. This section identifies the background, location, objectives, proposed improvements, and the necessary permits and approvals for the proposed project.

The approximately 15-foot-high Shoreline Lake Dam in Shoreline Regional Park impounds 660 acre-feet of salt water. The salt water lake is filled by water from San Francisco Bay that is pumped from an intake and pump station currently located along the levee between Inner Charleston Slough and the Coast Casey Forebay detention basin. Water from the lake is discharged through a gravity outfall into Permanente Creek and then drained back into San Francisco Bay. Backflow through the pump station is also allowed periodically to flush sediment from the intake.

Sailing Lake (also known as Shoreline Lake), occupies the northwestern corner of Shoreline Regional Park, which opened in 1982. Most of the regional park was constructed on the site of a former sanitary landfill; however, Sailing Lake is not located on the former landfill. Shoreline Lake Dam separates the lake from Coast Casey Forebay to the west. The dam, which is under the jurisdiction of the California Division of Safety of Dams (DSOD), is composed of an earthen embankment. Sailing Lake has a surface area of approximately 45 acres and an average depth of 18 feet. The lake offers a variety of recreational activities, including sailing, windsurfing, kayaking, and canoeing.

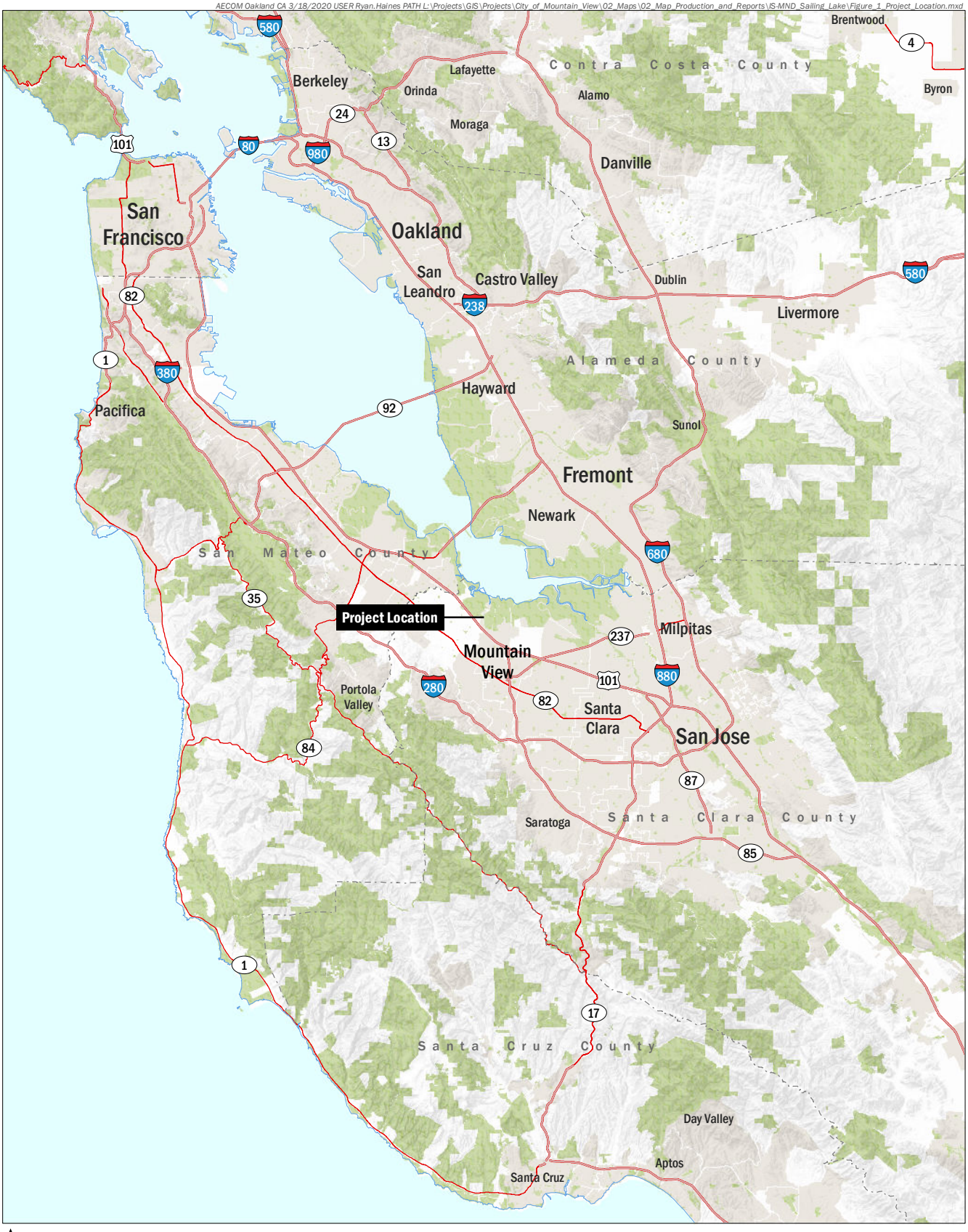
2.2 PROJECT OBJECTIVES

The primary objectives for the proposed Sailing Lake Access Road Improvement Project include:

- Strengthening the Shoreline Lake Dam embankment and address seepage issues at the downstream toe of the dam to meet DSOD dam safety standards; and
- Improving the roadway over the dam to support the anticipated heavy truck loads during construction of the South Bay Salt Pond Restoration Project.

2.3 PROJECT LOCATION

The project site encompasses approximately 3 acres at the western end of Sailing Lake and the eastern end of the Coast Casey Forebay, along with a separate staging area of approximately 0.25 acre. The project site is in Mountain View, near the shoreline of San Francisco Bay, in Santa Clara County (Figures 2-1 and 2-2). The project site is in Shoreline Regional Park, which is owned and operated by the City. The proposed offsite contractor staging area, which would be in a parking lot at the eastern end of Terminal Boulevard, is also owned by the City and serves as a parking area for public access to the trails in Shoreline Regional Park.



AECOM

City of Mountain View

Sailing Lake Access Road Improvement Project

FIGURE 2-1

Project Location

Data Sources: Esri Imagery, 2017; AECOM, 2019.

AECOM

City of Mountain View

Sailing Lake Access Road Improvement Project

FIGURE 2-2

Project Site

2.4 PROJECT IMPROVEMENTS

The City proposes to construct a drained stability berm at the downstream toe of the existing Shoreline Lake Dam to address seepage and meet DSOD safety criteria. To provide adequate freeboard for projected peak flood events and compensate for projected settlement of the underlying Young Bay Mud, a raise of the existing dam crest by 3.5 feet is also proposed. Finally, improvements to the roadway over the crest of the dam are proposed to accommodate future construction traffic for the South Bay Salt Pond Restoration Project. A detailed description of the proposed project components is provided below, and plans showing the project components are provided in Figures 2-3 and 2-4.

The project would involve partial excavation of the existing downstream dam embankment, construction of a graded filter and drain system, construction of a downstream earthfill berm to partial height of the dam, and construction of a 3.5-foot earthfill crest raise. A portion of the existing downstream (western) embankment slope would be excavated down approximately 2 feet and would be replaced with a 2-foot-thick graded filter and drain system. The graded filter and drain system would be buttressed with a well-compacted earthfill berm about 18 feet wide and 11 feet high. The maximum depth of excavation is estimated to be approximately 2 feet below ground surface (bgs). Fill would be placed along the top of the existing embankment crest to raise the crest to an elevation of 15.5 feet mean higher high water (MHHW). The berm and crest raise would be constructed using imported clean fill from nearby commercial sources. Riprap would be placed for slope protection on the upstream (eastern) embankment along Sailing Lake.

Excavation of the foundation soils beneath the berm will likely require temporarily lowering the groundwater table foundation through localized dewatering measures (e.g., sandbags); dewatering via pumping is not anticipated to be necessary.

Road improvements would include the placement of aggregate base on top of the heightened berm crest, followed by asphalt. The current one-lane road width (12 feet plus 1-foot shoulder on each side) would be maintained.

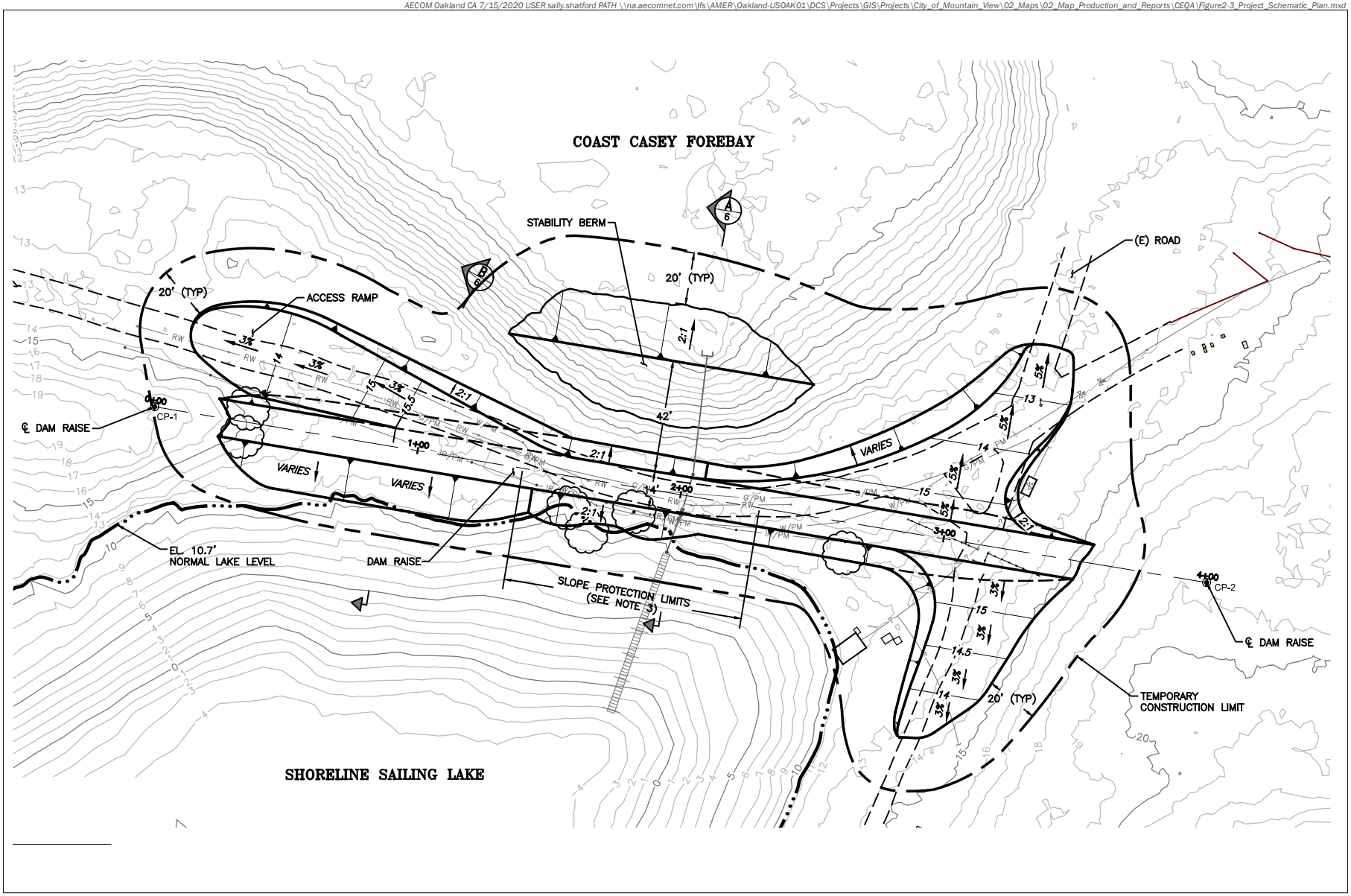
As part of the proposed project, an approximately 100-foot-long planting area would be installed on the eastern side of the dam crest, along with two new irrigation lines. The planting area would consist of native plants intermixed with California buckwheat (*Eriogonum fasiculatum*) and Oregon gumweed (*Grindelia stricta*).

Existing potable water lines, landfill discharge lines, landfill gas lines, landfill leachate collection lines, and landfill air supply lines would be preserved in place. One existing irrigation line would be abandoned in place. A new 2-inch landfill leachate collection line and a new 1-inch landfill air supply line for the landfill system would be installed adjacent to the eastern side of the reconstructed crest road.

2.5 CONSTRUCTION ACTIVITIES

This project is proposed to commence construction in 2021, for a duration of approximately 6 months. Construction activities are expected to occur primarily from Monday through Friday, 7:00 a.m. to 6:00 p.m. Construction of the proposed improvements would require up to about 10 workers at peak times.

All construction vehicles and equipment would be staged at the eastern end of Terminal Boulevard, adjacent to Shoreline Regional Park; construction personnel would also park at this location. The staging area would be accessed from U.S. 101 via San Antonio Road. Construction equipment that would be used for the majority of project improvements includes excavators, front-end loaders, dozers/graders, dump trucks, air and electric power tools, compressors, generators, and water trucks.



0 40
Feet

Data Sources: Tetra Tech BAS 2013; Esri Imagery, 2017; AECOM, 2019.

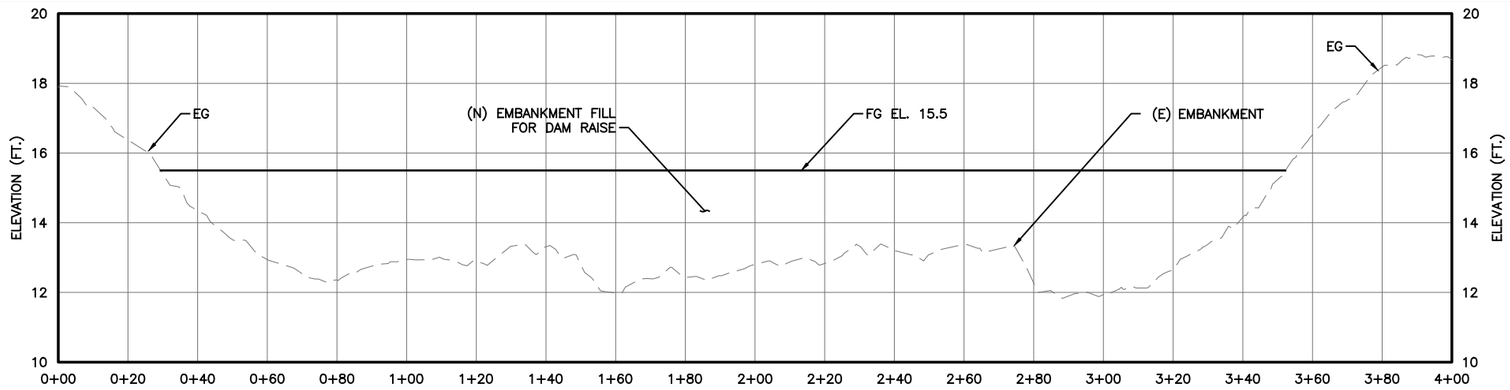
AECOM

City of Mountain View

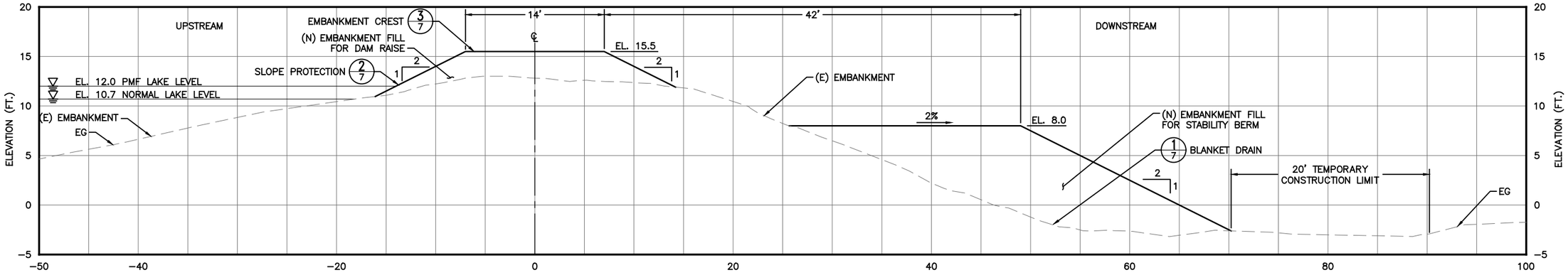
Sailing Lake Access Road Improvement Project

FIGURE 2-3

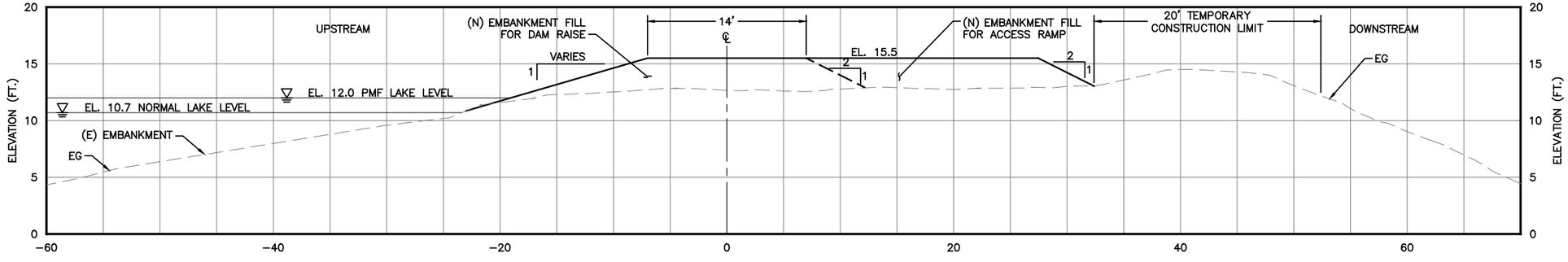
Plan View



PROFILE ALONG ℄
SCALE" 1" = 20' HORIZ
SCALE: 1" = 2' VERT



SECTION ℄ STA 2+00 (A/5)
SCALE: 1" = 5'



SECTION ℄ STA 0+91 (B/5)
SCALE: 1" = 5'

2' 0 2' 4'
SCALE: 1"= 2'–0"

5' 0 5' 10'
SCALE: 1"= 5'–0"

20' 0 20' 40'
SCALE: 1"= 20'–0"

Data Sources: City of Mountain View, Public Works Department, 2019; Esri Imagery, 2017; AECOM, 2019.

AECOM
City of Mountain View
Sailing Lake Access Road Improvement Project

FIGURE 2-4
Stability Berm and Dam Crest Raise

An estimated 260 truck trips are required to transport approximately 2,450 cubic yards of imported fill material to the project site for the stability berm and the dam raise. To implement the proposed project, approximately 400 cubic yards of existing soil and demolition waste would be excavated and hauled to a landfill for disposal; hauling of these materials would require approximately 40 truck trips.

To construct the proposed project, existing vegetation would be removed from the surface of the dam and at the eastern end of the adjacent Coast Casey Forebay, in the project site. A total of five trees (–four beach she-oaks [*Casuarina equisetifolia*] and –one Monterey pine [*Pinus radiata*]) on the eastern side of the dam crest would be removed. At the conclusion of construction activities, the contractor would be responsible for reseeding all disturbed areas with a native seed mix to be approved by the project engineer.

2.6 CONSTRUCTION BEST MANAGEMENT PRACTICES

The proposed project would include the following best management practices (BMPs) to avoid or minimize environmental impacts, which would be defined in the construction contract documents:

- Temporary erosion control measures would be implemented as specified in the project-specific Storm Water Pollution Prevention Plan (SWPPP), as applicable. Stormwater runoff would be managed as required by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The contractor would be required to comply with National Pollutant Discharge Elimination System (NPDES)/ No. 2012-0006-DWQ NPDES No. CAS000002 (General Construction Permit).

- Erosion and sediment control BMPs would be installed prior to the start of any ground-disturbing activities, as detailed in the SWPPP.

- Silt fences or fiber rolls would be installed, or other suitable measures would be implemented around the perimeters of the construction zone, staging areas, temporary stockpiles, and drainage features, as detailed in the SWPPP.

- Equipment staging, material storage, and stockpile areas would be restricted to upland areas so as not to affect jurisdictional wetlands or any other sensitive habitat.

- A plan for the emergency cleanup of any spills of fuel or other materials would be prepared and implemented by the contractor.

- Water produced by construction site dewatering would be detained and treated using sedimentation basins on the project site, sediment traps (when water is flowing and there is sediment), or other measures, to ensure that discharges to receiving waters are in accordance with the State of California General Permit for Storm Water Discharges Associated with Construction Activity (General Permit).

- Stockpiles would be kept a minimum of 50 feet away from concentrated flows of stormwater, water bodies, ditches, and inlets. All stockpiles would be contained using perimeter controls such as berms, dikes, fiber rolls, silt fences, sandbag, gravel bags, or straw bale barriers. All stockpiles would be covered with polyethylene plastic sheeting or other impermeable materials.

- Construction vehicles and equipment would be inspected to prevent discharge and contamination of soil or water (from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease).
- Equipment would be refueled and serviced at the designated construction staging area.
- Discharge of pollutants into water bodies from vehicles and equipment would be avoided by using drip pans, spill kits, berms, and secondary containment.
- Hazardous materials would be stored in an area protected from rainfall and stormwater runoff to prevent the offsite discharge of leaks or spills.
- All debris materials, sediment, trash, vegetation, or other material removed from the disturbed areas would be disposed of at an approved disposal site.
- Nontidal wetlands and waters of the United States (waters of the U.S.) to be avoided would be marked in the field.
- All construction personnel will be given environmental awareness training by a qualified biological monitor before the start of construction. The training will familiarize all construction personnel with the listed species that may occur onsite, their habitats, general provisions and protections afforded by law, measures to be implemented to protect these species, and the project boundaries.

2.7 PROJECT APPROVALS

The anticipated approval actions required for the proposed project include:

City of Mountain View

- City Planning Commission General Plan Consistency Determination
- City adoption of the final MND and the mitigation monitoring and reporting program
- City approval of the Sailing Lake Access Road Improvement Project

State Agency Approvals

- San Francisco RWQCB Clean Water Act Section 401 Water Quality Certification
- California DSOD

Federal Agency Approvals

- United States Army Corps of Engineers Clean Water Act Section 404 Permit
- United States Fish and Wildlife Service (USFWS) Section 7 Endangered Species Act Consultation

3.0 ENVIRONMENTAL CHECKLIST

This section describes the existing environmental conditions in the project vicinity, as well as the environmental impacts associated with the proposed project. The environmental checklist, as recommended by CEQA, identifies environmental impacts that could occur if the proposed project is implemented. The following subsections discuss the project's impact as it relates to the environmental checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370).

PROJECT INFORMATION

1. Project Title: Sailing Lake Access Road Improvement Project (City CIP Project No. 15-38)
2. Lead Agency: City of Mountain View
3. Contact Person and Phone Number: Raymond Wong, 650-867-3304
4. Project Location: Sailing Lake, Shoreline Regional Park, east end of Terminal Boulevard
5. Project Sponsor: City of Mountain View
6. General Plan Designation: Regional Park
7. Zoning: Public Facility
8. Description of Project:

   The City is proposing to construct improvements to the existing Shoreline Lake Dam to provide increased stability and address seepage issues, and to strengthen the dam and the pathway over the dam crest to support anticipated construction traffic associated with the South Bay Salt Pond Restoration Project. Components of the proposed project include:
   - installation of a blanket drain and stability berm at the downstream toe of the existing dam;
   - raising the existing dam crest by 3.5 feet;
   - installing slope protection measures; and
   - constructing improvements to the paved roadway on top of the dam crest.
9. Surrounding Land Uses and Setting: The project site is in Shoreline Regional Park and is bordered by the Coast Casey Forebay and Sailing Lake. Surrounding land uses consist of a regional park, a flood detention basin, and office buildings.
10. Other public agencies whose approval may be required: San Francisco Bay Regional Water Quality Control Board; California Division of Safety of Dams
11. Request by California Native American tribes traditionally and culturally affiliated with the project area for consultation pursuant to Public Resources Code section 21080.3.1: No tribes have requested consultation

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation/Traffic	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project COULD have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

10/5/2020
Date

Dawn Cameron
Printed Name

Public Works Director
Title

City of Mountain View
Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
I. Aesthetics. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?	☐	☐	☐	☒
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?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

3.1.1 ENVIRONMENTAL SETTING

The project site is in the northwestern corner of the approximately 750-acre Shoreline Regional Park, adjacent to the southwestern side of San Francisco Bay. The topography in the project area is nearly flat. The approximately 3-acre project site encompasses Shoreline Lake Dam—a 15-foot-high earthen embankment, which impounds the approximately 45-acre Sailing Lake. The project site also includes a paved, approximately 12-foot-wide, path/access road from the eastern end of Terminal Boulevard over the crest of the dam. This path/access road connects with a portion of the Bay Trail, along with a small portion of the pedestrian bicycle trail around the northern shore of the lake. These trails are flat, and recreationists have expansive northwestern views of Sailing Lake, surrounded by green turf grass and trees, a small wooden pier that extends into the lake, and the lake inlet structure; two-story office buildings with associated urban landscaping; and the Santa Cruz Mountains in the background (see Viewpoint 1).

Shoreline Lake Dam separates the lake from the Coast Casey Forebay to the west (see Viewpoint 2). The Forebay serves as a flood control detention basin during the winter and spring months. In the summer and fall, the Forebay is generally dry, and contains a variety of low-growing shrubs and grasses that are green in the spring but brown during the remainder of the year. From the Shoreline Regional Park trail at the western end of Coast Casey Forebay and the nearby portion of the Bay Trail, recreationists looking southeast have views of the Forebay and associated native vegetation; the back side of Shoreline Lake Dam, which is covered with grasses and low-growing vegetation; and a group of evergreen and deciduous trees on the southeastern side of the dam.

Viewpoint 1: Sailing Lake Pier, Intake, and Paved Access Road over the Dam Crest
Source: AECOM 2019

Viewpoint 2: Coast Casey Forebay and Shoreline Lake Dam
Source: AECOM 2019

The entrance to Sailing Lake is on the eastern side of the lake, approximately 0.5 mile from the project site. This area contains a parking lot, boat dock, boat launch ramp, boathouse, and restaurant. A pedestrian/bicycle trail parallels the northern side of the lake, connecting with the Bay Trail at the northern side of the project site. The southern side of Sailing Lake is adjacent to Holes 10 through 12 of the Shoreline Golf Links golf course. Recreationists in this area looking west toward the project site have views of rental boats on the shoreline and buildings associated with the restaurant and boathouse in the foreground; turf grass associated with the golf course, boaters on the lake, scattered trees, and the Shoreline Lake Dam in the middleground; and the Santa Cruz Mountains in the background (see Viewpoint 3).

Pedestrian/bicycle access to the trails at the western end of Shoreline Regional Park, near the lake, is provided via a parking area at the eastern end of Terminal Boulevard. This approximately 0.25-acre, flat, paved area would be used on a temporary basis for project-related staging and storage of construction equipment and materials. A variety of two-story office buildings with associated paved parking areas and a sliding metal access gate, high-mast light standards, and urban landscaping (consisting primarily of turf grass with scattered trees and shrubs) are present immediately adjacent to and south of the proposed staging area. The northern side of the proposed staging area is separated from the vegetation in and around the Coast Casey Forebay by a white board fence and a few small, deciduous trees. The eastern end of the proposed staging area is surrounded by tall evergreen trees and is blocked by a metal gate that prevents public vehicular access to the park (see Viewpoint 4). The elevated berms surrounding the Coast Casey Forebay and the crest of Shoreline Lake Dam block views of San Francisco Bay and most of the park from the staging area.

Viewpoint 3: Sailing Lake East Entrance (red arrow indicates the location of the dam)
Source: Google Earth 2019

Viewpoint 4: Proposed Staging Area
Source: AECOM 2019

3.1.2 DISCUSSION

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

The project site and surrounding Shoreline Regional Park do not contain any designated scenic vistas. However, expansive views of San Francisco Bay, the Diablo Range, the Santa Cruz Mountains, and open space in Shoreline Regional Park are available to recreationists from most locations in the park. The existing Shoreline Lake Dam is at an elevation of approximately 12 feet MHHW; to provide adequate freeboard for projected peak flood events and compensate for projected settlement of the underlying Young Bay Mud, the crest would be raised by an additional 3.5 feet, to a total height of 15.5 feet MHHW. Views for recreationists on the lake, at the boathouse and restaurant, and on the path on the northern side of the lake looking west are already blocked by the existing dam (see Viewpoint 3); raising the dam by an additional 3.5 feet would have no effect on foreground and middleground views and would not block background views of the Santa Cruz Mountains. Furthermore, because the Bay is on the northern side of Sailing Lake, raising the crest of the dam would have no effect on views of the Bay.

An earthen stability berm would be constructed on the western side of the dam. At the conclusion of project-related construction activities, the stability berm and the dam would be reseeded with low-growing vegetation. All but six of the existing trees, the wooden pier, and the lake intake structure would be retained. Once the vegetation has grown, the project site would have a visual appearance similar to the existing dam and to the sides of the existing berms that surround the Forebay (see Viewpoints 1 and 2).

Finally, use of the eastern end of Terminal Boulevard for the project's construction staging area would result in the short-term and temporary visual presence of construction equipment, materials, and personnel in this approximately 0.25-acre paved parking area. However, because the adjacent pedestrian/bicycle pathway in the park and a small portion of the Bay Trail to the north would be closed during construction activities, and because a group of tall deciduous trees would block views of the staging area from boaters on Sailing Lake (see Viewpoint 4), use of the staging area would not affect scenic views from recreationists in the park or on the Bay

Trail. Therefore, the proposed project would not have a substantial adverse effect on a scenic vista, and this impact is considered **less than significant.**

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

There are no state-designated or locally designated scenic highways in the project vicinity.[1,2] Therefore, the proposed project would not substantially damage scenic resources within a state scenic highway, and there would be **no impact.**

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?

Shoreline Lake Dam is currently covered by low-growing vegetation, primarily grasses, that would be removed during project-related construction activities. In addition, a small groundcover planting area near the dam crest would be removed, along with a total of six trees on the southeastern side of the dam crest. The groundcover planting areas would be replaced and the project site would be reseeded with vegetation at the conclusion of construction activities. The six trees would not be replaced; however, there is a large group of existing trees in this area that would not be affected by the project and would still provide an aesthetically pleasing feature on the southeastern side of the dam. An earthen stability berm would be constructed on the western side of the dam. At the conclusion of project-related construction activities, the stability berm and the dam would be reseeded with low-growing vegetation and would have a visual appearance visual appearance to the existing dam and to the sides of the existing berms that surround the Coast Casey Forebay. Finally, as described in a) above, increasing the height of the dam crest by 3.5 feet would not obstruct existing views of the Santa Cruz Mountains, San Francisco Bay, Diablo Range, or Shoreline Regional Park. Construction equipment, materials, and personnel in the staging area at the eastern end of Terminal Boulevard would be present only on a short-term and temporary basis; moreover, because of the cover afforded by a stand of tall evergreen trees at the eastern end of the staging area, they would generally not be visible to most recreationists in the park. Construction equipment and materials would also be present in the vicinity of the dam during the approximately 6-month construction period and would be visible to recreationists from certain vantage points. Although construction equipment and activities would temporarily degrade the project site's existing visual quality, project completion would ultimately restore the site to near preproject conditions. Therefore, the proposed project would not substantially degrade the existing visual character or quality of public views of the site or its surroundings.

The project site is zoned and designated for public facility/regional park use. The proposed staging area is in a City-owned parking area on a public street, at the eastern end of Terminal Boulevard, immediately adjacent to the park. The area surrounding the project site is zoned and designated for public facility/regional park use, and high-intensity office land uses.[3,4] The proposed modifications to the existing Shoreline Lake Dam would not conflict

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1 Caltrans (California Department of Transportation). 2019. *List of Eligible and Officially Designated State Scenic Highways.* Available online at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed December 16, 2019.

2 City of Mountain View (City). 2012a. *Mountain View 2030 General Plan.* Adopted 2012, amended 2017. Available online at: https://www.mountainview.gov/depts/comdev/planning/regulations/general.asp. Accessed December 16, 2019.

3 City. 2018a. *General Plan Land Use Map.* Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=10701. Accessed December 16, 2019.

4 City. 2018b. *Zoning Map.* Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=10990. Accessed December 16, 2019.

with zoning, because the dam would continue to impound Sailing Lake, which is one of the recreational features in Shoreline Regional Park. The proposed project would not conflict with any existing regulations governing scenic quality because, as described in the preceding paragraph, the proposed modifications to the dam would not obstruct views and would have a visually similar appearance to the existing dam and the berms around the Coast Casey Forebay. Therefore, this impact would be **less than significant.**

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

Project-related construction activities would occur during the daytime hours. The existing Shoreline Lake Dam does not contain nighttime lighting, and no new nighttime lighting would be required for continued operation of the dam after the proposed improvements have been implemented. The proposed stability berm and raise of the dam crest would be composed of earth, which is not a reflective surface; similarly, asphalt, which would be used to repave the access road, is not a reflective surface. Therefore, the proposed project would not create new sources of substantial light or glare that would adversely affect day or nighttime views, and there would be **no impact.**

3.2 AGRICULTURE AND FORESTRY RESOURCES

r	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
II. Agriculture and Forestry Resources. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.2.1 ENVIRONMENTAL SETTING

Based on a review of the 2016 Important Farmland Map for Santa Clara County produced by the California Department of Conservation under the Farmland Mapping and Monitoring Program, the project site is designated as "Urban and Built-Up Land" and "Other Land."[5] The project site is in the Shoreline Regional Park adjacent to the Coast Casey Forebay flood control detention basin and high-intensity office land uses; there is no farmland at the project site or in the project vicinity.

[5] DOC (California Department of Conservation). 2018. *Santa Clara County Important Farmland 2016*. Available online at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaClara.aspx. Accessed November 14, 2019.

The project site is zoned and designated for public facility/regional park use. The proposed staging area is in a City-owned parking area on a public street, at the eastern end of Terminal Boulevard, immediately adjacent to the park and office buildings. The surrounding area is zoned and designated for public facility/regional park use, and high-intensity office land uses.[6,7]

3.2.2 DISCUSSION

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

There is no designated Farmland at the project site or in the project vicinity. Therefore, the proposed project would not result in the conversion of Farmland to a nonagricultural use, and there would be **no impact**.

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

The project site is zoned for public facility use.[8] There are no Williamson Act contracts at the project site or in the project vicinity. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and there would be **no impact**.

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))?

The project site is located in Shoreline Regional Park and does not contain forest land or timberland. The project site is zoned for public facility use.[9] Therefore, the proposed project would not conflict with existing zoning or cause rezoning of forest land, timberland, or land zoned for timber production, and there would be **no impact.**

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

Neither the project site nor the surrounding area contains any forest land. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to nonforest use, and there would be **no impact**.

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

There is no Farmland or forest land at the project site or in the project area. Construction and operational activities would take place in the existing Shoreline Regional Park and the southern end of the Coast Casey Forebay. Therefore, the proposed project would not result in the conversion of Farmland or forest land to other uses, and there would be **no impact**.

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[6] City. 2018a. *General Plan Land Use Map.* Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=10701. Accessed November 14, 2019.

[7] City. 2018b. *Zoning Map.* Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=10990. Accessed November 14, 2019.

[8] City 2018b.

[9] City 2018b.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
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?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 ENVIRONMENTAL SETTING

The proposed project is in Mountain View, near the shoreline of San Francisco Bay, in Santa Clara County and within the San Francisco Bay Area Air Basin. Federal and state ambient air quality standards have been established in this region. The Bay Area meets all ambient air quality standards except for ground-level ozone, respirable particulate matter (particulate matter equal to or less than 10 micrometers in diameter, or PM_{10}), and fine particulate matter (particulate matter equal to or less than 2.5 micrometers in diameter, or $PM_{2.5}$).

Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_X). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is assessed and measured in terms of respirable particulate (PM_{10}) and fine particulate matter ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (i.e., cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of the health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants programs.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, children are the most sensitive receptors, because they are more susceptible to cancer-causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors are residences approximately 0.5 mile southwest of the project site.

Regulatory Setting

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the agency tasked with managing air quality in the region. BAAQMD has jurisdiction over the approximately 5,600-square-mile Bay Area, encompassing all or portions of nine counties. BAAQMD is the lead agency in developing plans to address the attainment and maintenance of the National Ambient Air Quality Standards and California Ambient Air Quality Standards. BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

The BAAQMD *CEQA Air Quality Guidelines*[10] were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements, including thresholds of significance, mitigation measures, and background air quality information. They also

[10] Bay Area Air Quality Management District (BAAQMD). 2017a. California Environmental Quality Act Air Quality Guidelines. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

include assessment methodologies for air toxics, odors, and greenhouse gas (GHG) emissions. Table 3.3-1 below lists the BAAQMD air quality significance thresholds for construction and operation.

Table 3.3-1 Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (pounds per day)	Average Daily Emissions (pounds per day)	Annual Average Emissions (tons per year)
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
CO_2	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average	
Health Risks and Hazards	**Single Sources Within 1,000-foot Zone of Influence**	**Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)**	
Excess Cancer Risk	>10.0 per one million	>100 per one million	
Hazard Index	>1.0	>10.0	
Incremental Annual $PM_{2.5}$	>0.3 µg/m^3	>0.8 µg/m^3	

Notes:

CO_2 = carbon dioxide
µg/m^3 = micrograms per cubic meter
NO_X = nitrogen oxides
PM_{10} = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers or less
$PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5 micrometers or less
ppm = parts per million
ROG = reactive organic gases

Source: BAAQMD 2017b[11]

3.3.2 DISCUSSION

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

BAAQMD developed a regional air quality plan, the *Bay Area 2017 Clean Air Plan* (CAP), to meet planning requirements related to regional exceedances of air quality emissions standards.[12] As discussed under checklist criterion b) below and shown in Table 3.3-2, the project would not exceed BAAQMD impact significance thresholds. Project construction would be temporary and would not generate a substantial amount of new vehicle trips (refer to Section 3.17, Transportation). Furthermore, the proposed project would not be considered growth-inducing, because it would not increase the regional population. Operation of the proposed project would not generate new air pollutants or otherwise result in a significant air quality impact. Therefore, the project would not conflict with or obstruct implementation of the CAP, and **no impact** would occur.

[11] BAAQMD. 2017b Final 2017 Clean Air Plan. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf.

[12] BAAQMD. 2017b

Table 3.3-2 Average Daily Construction Emissions

Construction Phase	Average Daily Emissions (pound(s) per day)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Average daily emissions	4.1	43.4	20.5	12.0
Threshold of significance	54	54	82	54
Significant Impact?	No	No	No	No

Notes:

NO_X = nitrogen oxides
PM_{10} = particulate matter equal to or less than 10 micrometers in diameter
$PM_{2.5}$ = particulate matter equal to or less than 2.5 micrometers in diameter
ROG = reactive organic gases

Source: Modeled by AECOM in 2020.

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?

The cumulative analysis focuses on whether a specific project would result in a cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development in the Bay Area Air Basin, and this regional impact is cumulative rather than being attributable to any one source. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

The Project is in the Bay Area Air Basin, which is currently designated as being in nonattainment for the state 1-hour and 8-hour ozone standards, nonattainment for the state 24-hour and annual PM_{10} standards, and nonattainment for the state annual $PM_{2.5}$ standard. It is also designated as being in nonattainment for the national 8-hour ozone standard and nonattainment for the national 24-hour $PM_{2.5}$ standard.

Project Construction

The proposed project would involve construction activities that would result in temporary, incremental increases in air pollutant emissions generated from equipment exhaust, earth disturbance, and construction-related vehicle trips to and from the site. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions associated with project construction. Table 3.3-2 shows average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during the construction of the proposed project. As indicated in Table 3.3-2, construction-period emissions would not exceed the BAAQMD significance thresholds. Additional emission modeling assumptions and details (project's size, land uses, construction schedule, and other CalEEMod inputs) are provided in Appendix A.

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if controlled with implementation of the *Basic Construction Mitigation Measures Recommended for all Projects* identified in the BAAQMD *CEQA Air Quality Guidelines,* as outlined in **Mitigation Measure AQ-1**. BAAQMD recommends the implementation of all *Basic Construction Mitigation Measures*, whether or not construction-related emissions exceed applicable significance thresholds.

Mitigation Measure AQ-1: Air Quality Construction Measures

The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by the BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by the BAAQMD or contractor as appropriate, such as:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations.

The proposed project, with the implementation of the above measures, would reduce construction criteria air pollutant emissions by controlling dust and exhaust and limiting exposed soil surfaces, and would not result in a cumulatively considerable increase in criteria air pollutants from construction emissions. Therefore, this constructed-related impact would be **less than significant with mitigation**.

Project Operations

The project would not require a change to the existing land use designation. Implementation of the project would not require or result in additional activities for operations and maintenance beyond existing conditions. Project operation would not generate new vehicle trips or require a substantial number of new maintenance vehicle trips that would emit substantial levels of criteria pollutant emissions. Therefore, **no impact** would occur as a result of project operations.

c) Expose sensitive receptors to substantial pollutant concentrations?

Project Construction

Some members of the population—children, older adults, and persons with pre-existing respiratory or cardiovascular illness—are especially sensitive to air pollutant emissions. Such people are given additional consideration when the impacts of projects on air quality are evaluated. Therefore, at-risk land uses sensitive to poor air quality would include residences, schools, daycare centers, playgrounds, medical facilities, and nursing homes. The BAAQMD CEQA Air Quality Guidelines recommend analyzing pollutant sources within 1,000 feet of at-risk sensitive receptors for emission levels that could result in unacceptable cancer risk. The land uses surrounding the project area do not include at-risk sensitive uses within 1,000 feet of the proposed project site. Recreational land uses, such as parks, are also considered moderately sensitive to air pollution. Although the project site is in Shoreline Regional Park, recreational uses within 1,000 feet of the project site are trails, a portion of the Shoreline Gold Links golf course, and a portion of the lake where nonmotorized boating and windsurfing occur. These recreational activities are transient by nature, and any exposure of recreationists to project-related construction emissions would be short-term and temporary. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations, and this constructed-related impact would be **less than significant.**

Project Operations

Post-project operations and maintenance would not require new or result in additional activities beyond existing conditions. Therefore, **no impact** would occur as a result of post-project operations.

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

Project Construction

The occurrence and severity of odor impacts depend on numerous factors: the nature, frequency, and intensity of the source; the wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause physical harm, they still can be very unpleasant and can generate citizen complaints to local governments and regulatory agencies. The BAAQMD CEQA Air Quality Guidelines have not established a threshold of significance for construction-related activities in terms of odors.

Exhaust from diesel construction equipment may emit odors during project construction. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, nearby receptors would not likely be adversely affected by project-related diesel exhaust odors. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site; these odors would be typical of most construction sites, and temporary. As a result, the project would not create objectionable odors affecting a substantial number of people. Therefore, such odors are not anticipated to result in odor complaints. This construction-related impact would be **less than significant**.

Project Operation

Post-project operations and maintenance would not require new or result in additional activities beyond existing conditions. Therefore, **no impact** would occur as a result of post-project operations.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 ENVIRONMENTAL SETTING

A background review of the following data sources was conducted to identify special-status plants, special-status wildlife, and sensitive natural communities with the potential to occur in the project area:

- USFWS list of federal candidate, proposed, threatened, and endangered plant and wildlife species for the project area obtained from the Environmental Conservation Online System Information for Planning and Consultation online tool;[13]

[13] United States Fish and Wildlife Service (USFWS). 2019a. IPaC Resource List. December 23. Available online at: https://ecos.fws.gov/ipac/location/UMWC444XCNCDVASU6U3GIJERAU/resources.

- USFWS Critical Habitat for Threatened and Endangered Species;[14]
- California Natural Diversity Database (CNDDB) list of known plant occurrences, wildlife occurrences, and California Department of Fish and Wildlife (CDFW)-designated sensitive natural communities within a 5-mile radius of the proposed project;[15]
- California Native Plant Society Inventory of Rare and Endangered Plants;[16]
- National Wetland Inventory and National Hydrography Database.[17,18]

AECOM biologists conducted a reconnaissance survey of the project area on January 13, 2020, to gather additional information about biological resources present in the project area; a wetland delineation and a habitat assessment for special-status species were performed.

This section describes the environmental conditions of the project area. These physical characteristics provide context for the biological conditions and the potential for special-status species to occur in the project area.

Vegetation Communities

Upland vegetative communities present in and near the project area include ruderal, nonnative grassland, mixed woodland, and developed areas (**Figure 3.4-1**).

Ruderal vegetation abuts developed land use types in the project area. Ruderal communities are dominated by nonnative and invasive species, but also include sparse patches of native shrubs such as coyote brush (*Baccharis pilularis*) and coffeeberry (*Frangula californica*). Herbaceous invasive species observed included fennel (*Foeniculum vulgare*), curly dock (*Rumex crispus*), Italian thistle (*Carduus pycnocephalu*s), bristly ox-tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), and various nonnative annual grasses.

Nonnative grassland in the project area consist of homogeneous stands of quackgrass (*Elymus repens*). This species dominates portions of the Sailing Lake shoreline and portions of the slopes along the Coast Casey Forebay levees. Stands of quackgrass and ruderal communities blend into one another in the project area.

There are mixed woodland communities to the southeast and northeast of the project footprint. Many of these trees appear to have been planted, and there is no dominant species in this community. The composition of species is both native and nonnative, including Monterey pine, coast live oak (*Quercus agrifolia*), eucalyptus (*Eucalyptus globulus*), toyon (*Heteromeles arbutifolia*), madrone (*Arbutus menziesii*), and California bay (*Umbellularia californica*).

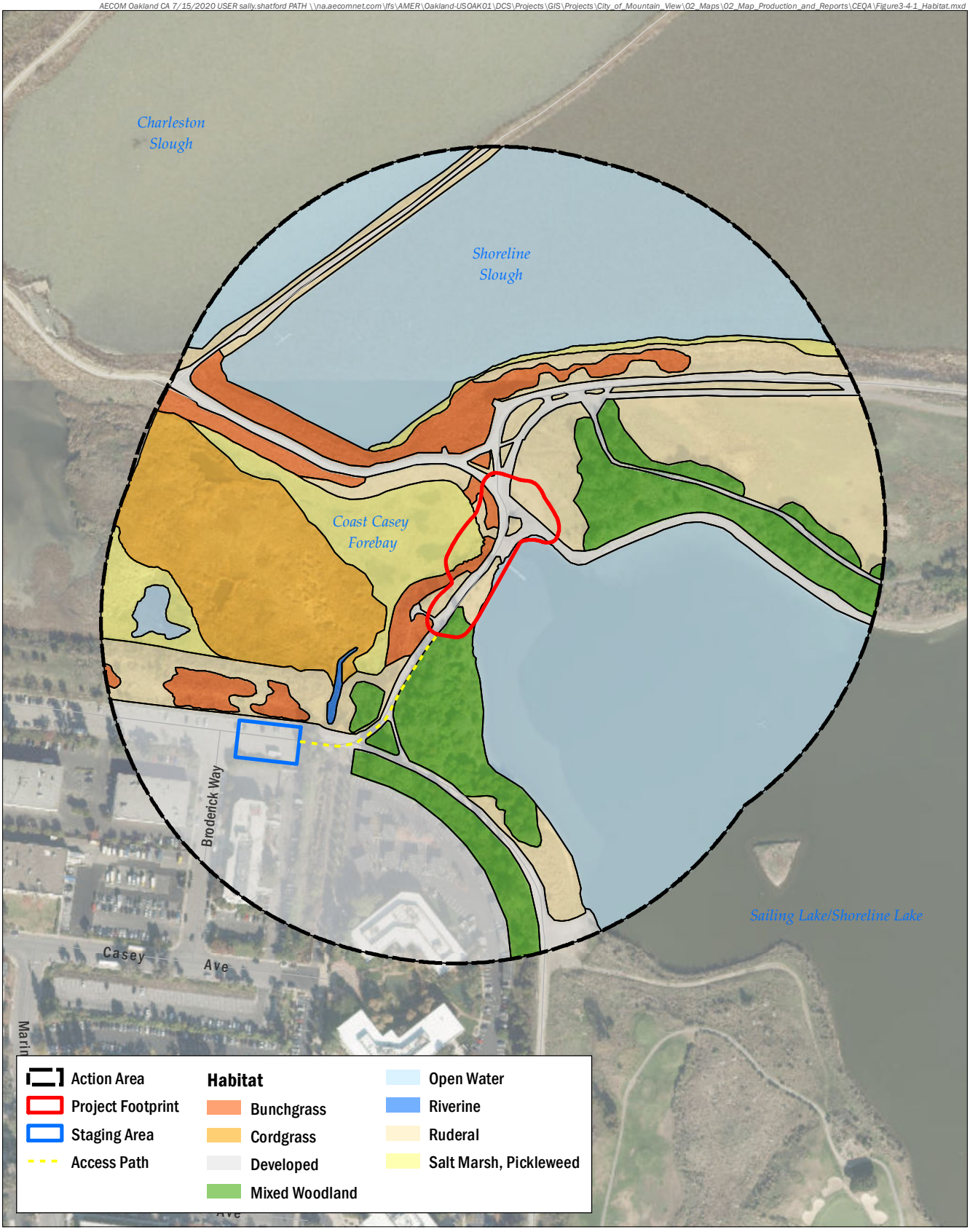
[14] USFWS. 2019a.

[15] California Department of Fish and Wildlife (CDFW). 2020. Rarefind 5, a program created by the California Department of Fish and Wildlife that allows access to the California Natural Diversity Database. Updated March 2019.

[16] California Native Plant Society (CNPS). Plant List. 9-Quad Review Area for: 3712252, 3712251, 3712158, 3712242, 3712241, 3712148, 3712232, 3712231 and 3712138. February. Available online at: http://www.rareplants.cnps.org/advanced.html.

[17] USFWS 2019b. National Wetland Inventory. Updated October 8. Available online at: https://www.fws.gov/wetlands/data/Mapper.html.

[18] U.S. Geological Survey (USGS). 2020. National Hydrography Dataset. Available online at: https://www.usgs.gov/core-science-systems/ngp/national-hydrography/national-hydrography-dataset?qt-science_support_page_related_con=0#qt-science_support_page_related_con.



Santa Clara County Imagery, 2018; AECOM, 2020

AECOM

City of Mountain View

Sailing Lake Access Road Improvement Project

FIGURE 3.4-1

Habitat Map

All concrete, asphalt, and bare soil in the project area are defined as developed, including the access road along the top of the embankment, the pedestrian trail that runs across the northern part of the project footprint, and the staging area situated in a parking lot.

Special Status Species

The potential for special-status species to occur in the project area was evaluated based on the background data review and the reconnaissance survey. For the purpose of this evaluation, "special-status species" include those species protected under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) as threatened or endangered; or proposed for listing as threatened or endangered; or identified as species of special concern, rare, or as a candidate species.

Most of the special-status species identified through the database search were eliminated from further consideration either because the project area is outside the known range of the species or because the project area lacks habitats required by the species. Other species are not expected to occur in the project area because of habitat quality or lack of known occurrences in the vicinity of the project. Special-status wildlife species and special-status plant species were determined to have potential to occur in the project area are listed in Table 3.4-1.

Critical habitat designations were reviewed and determined to be absent from the project area.

Sensitive Natural Communities

Natural communities with a State Rank of 1, 2, or 3 are considered to be Sensitive Natural Communities and are identified by the CDFW Vegetation Classification and Mapping Program.[19] Sensitive Natural Communities are not present on the embankment or in association with Sailing Lake, however; the wetland vegetation alliance with Coast Casey Forebay would be best classified as pickleweed mats, which are ranked as S3. The extent of the sensitive natural community is the same as the mapped salt marsh wetlands in the project footprint (0.15 acre) and is discussed in more detail below.

Wetlands and Open Waters

Wetlands and open waters were field-verified during the reconnaissance surveys to confirm the extent and type of features previously identified in a wetland delineation conducted for the South Bay Salt Ponds at the Refuge Project[20] and based on elevations of existing outfall structures. One wetland was identified in the project area associated with the lower elevations west of the access road and in Coast Casey Forebay. On the eastern side of the access road, Sailing Lake was identified by the normal lake elevation (10.7 feet mean sea level [msl]).[21]

[19] CDFW. 2019. California Sensitive Natural Communities. November 8. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.

[20] AECOM. 2016. Wetland Delineation Report: *Updated.* South Bay Salt Pond Restoration Project – Phase 2. Submitted by: AECOM. September.

[21] AECOM. 2019. Sailing Lake Access Road Improvement Basis of Design 50% Design. Draft. For City of Mountain View. October 7.

Table 3.4-1 Special-Status Wildlife and Plant Species with Potential to Occur in the Project Area

Common Name/ Scientific Name	Listing Status	General Habitat Requirements	Potential to Occur
salt marsh harvest mouse *Reithrodontomys raviventris*	FE/SE/FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.	Suitable habitat is present in pickleweed marsh associated with Coast Casey Forebay and is known to occur in the surrounding pickleweed marsh areas.
California black rail *Laterallus jamaicensis coturniculus*	ST/FP	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Suitable habitat is present in the project area and surrounding areas.
California clapper rail *Rallus longirostris obsoletus*[1]	FE/SE/FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottomed sloughs.	Project area does not contain tidal wetlands, but species has been observed in the vicinity of the project area, and suitable habitat for the species is present in the pickleweed and cordgrass marshes in and near the project area.
California least tern *Sterna antillarum browni*	FE/SE/FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Suitable foraging habitat is present in the project area; however, project area is far from known breeding sites.
western snowy plover *Charadrius nivosus*	FT/SSC	Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	Suitable breeding habitat is present close to but not in the project area. Suitable foraging habitat is present in the project area.
Alameda song sparrow *Melospiza melodia pusillula*	SSC	Resident of salt marshes bordering the southern arm of San Francisco Bay. Inhabits Salicornia marshes; nests low in Grindelia bushes (high enough to escape high tides) and in Salicornia.	Suitable habitats are present in the project area. One recent nesting observation was documented from the Coast Casey Forebay near the project area.
American peregrine falcon *Falco peregrinus anatum*	FD/SD/FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Suitable foraging habitat is present in the project area.
northern harrier *Circus hudsonius*	SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienegas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Suitable nesting and foraging habitat is present in the project area. The species is known to nest in the tidal marshes, approximately 3,700 feet from the project area and is present at Shoreline Regional Park year-round.

Common Name/ Scientific Name	Listing Status	General Habitat Requirements	Potential to Occur
saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	The species has been observed breeding in Coast Casey Forebay; both suitable nesting and foraging habitat are present in the project area.
black skimmer *Rynchops niger*	SSC	Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually consist of fewer than 200 pairs.	Suitable nesting habitat is not present in the project area; however, there is a known nesting colony on Sailing Lake Island. The species is known to forage in Sailing Lake.
burrowing owl *Athene cunicularia*	SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent on burrowing mammals, most notably the California ground squirrel.	Both resident and migratory individuals have been documented at Shoreline Regional Park; however, the *Shoreline Burrowing Owl Management Plan* (City of Mountain View 2012) does not identify the project area as a known breeding or foraging area. Most breeding and wintering owl observations are at Northeast Meadow Lands, Vista Slope, Crittenden Hill, and in the Golf Course, and east of the project area. Wintering owls have been observed along the levees of Coast Casey Forebay and Charleston Slough.
white-tailed kite *Elanus leucurus*	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Foraging and breeding habitat is present in and adjacent to the project area. Confirmed nesting has occurred at Shoreline Regional Park for the past 3 years including 2020, approximately 2,300 feet from project footprint.
alkali milk-vetch *Astragalus tener* var. *tener*	1B.2	Playas, valley and foothill grassland (adobe clay), vernal pools; alkaline. Blooms March through June. 0 to 195 feet.	The species has a limited potential to occur in the project area Suitable habitats are largely absent, but alkaline areas of Coast Casey Forebay have potential to support the species. Only one nearby occurrence is known, from the 1900s. This occurrence, adjacent to Mayfield Slough, is believed to be extirpated.

Common Name/ Scientific Name	Listing Status	General Habitat Requirements	Potential to Occur
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	1B.1	Valley and foothill grassland (alkaline). Blooms May through October (November). 0 to 755 feet.	There are no known occurrences in the project area. The species is known from several locations at Shoreline Regional Park, including from levee crests, golf course, Crittenden Hill, and PG&E rights-of-way. Suitable alkaline habitat is present from Coast Casey Forebay.
Hoover's button-celery *Eryngium aristulatum* var. *hooveri*	1B.1	Vernal pools. Blooms (June) July (August). 5 to 150 feet.	Vernal pools are not present in the project area; the species has a limited potential to occur in and near the project area. Two nearby occurrences are both historical (1900s) and believed to be extirpated.

Sources:

CDFW. 2020

Philip Higgins, Biologist, City of Mountain View. 2020. Personal communication.

Notes:

[1] Regarding taxonomic assignment and nomenclature for the California clapper rail, until a time when the USFWS officially adopts recent changes made by the American Ornithologists' Union (from California clapper rail to Ridgway's rail [*Rallus obsoletus*]), this study maintains the use of California clapper rail.

PG&E = Pacific Gas and Electric Company

Federal Status

FE = Federal Endangered
FT = Federal Threatened
FD = Federally Delisted
SD = State Delisted

State Status

SE = State Endangered
ST = State Threatened

Other

FP = Fully Protected
SSC = Species of Special Concern

California Native Plant Society (CNPS); California Rare Plant Rank (CRPR)

1A – Presumed extirpated in California, rare elsewhere
1B – Rare, threatened, or endangered in California and elsewhere
2A – Presumed extirpated in California, common elsewhere
2B – Rare, threatened, or endangered in California, common elsewhere
3 – More information is needed
4 – Limited distribution
0.1 – Seriously threatened in California
0.2 – Moderately threatened in California
0.3 – Not very threatened in California

Coast Casey Forebay- Brackish Marsh

A brackish marsh wetland dominated by pickleweed (*Salicornia pacifica*) occurs in portions of Coast Casey Forebay and along the western boundary of the project area. This feature is jurisdictional under Section 404 of the Clean Water Act (33 United States Code [U.S.C.] 1344) and the new California Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (effective May 28, 2020). Sparse patches of salt grass (*Distichlis spicata*) and brass buttons (*Cotula coronopifolia*) also occur sporadically throughout this pickleweed community. Coast Casey Forebay is a fresh and salt water area (brackish marsh) that provides flood control for Mountain View and the surrounding communities. Coast Casey Forebay does not have a direct connection to San Francisco Bay; salt water is pumped from the forebay from an adjacent pump house and discharged into Adobe Creek. Outside of the project footprint, Coast Casey Forebay contains extensive pickleweed brackish-marshes and cordgrass (*Spartina* sp.) brackish marshes.

Sailing Lake

The project footprint only contains a small portion of Sailing Lake, also known as Shoreline Lake, a salt water lake. This open water body is jurisdictional under Section 404 of the Clean Water Act (33 U.S.C. 1344) and the new California Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (effective May 28, 2020). However, there is not a direct downstream physical connection from Sailing Lake to other waterways. Salt water is circulated through Sailing Lake by pumping water from Inner Charleston Slough and discharging it to Permanente Creek/Mountain View Slough through a separate outlet spillway structure. On average, pumps are operated 16 hours per day and are associated with high tides.[22] Water is also discharged back to Inner Charleston Slough through the supply line to back-flush the pumps twice a day for 2 hours. The total storage volume of the reservoir is reported as 660 acre-feet. It was assumed that the estimated total of 660 acre-feet would apply to the normal water surface elevation of 10.7 feet North American Vertical Datum of 1988.[23]

Wildlife Movement

Based on a review of existing databases containing locations of wildlife movement corridors, the project area is not identified as an Essential Connectivity Corridor but is in a Natural Landscape Block.[24] Natural Landscape Blocks support native biodiversity, whereas Essential Connectivity Areas are areas essential for ecological connectivity between the Natural Landscape Blocks. This coarse-scale assessment of wildlife movements map was based primarily on the concept of ecological integrity, rather than the needs of a species.[25] The project area is a modified environment, constructed on a former landfill, and includes embankment materials deposited above natural Bay Muds. Natural communities and habitat are present in the project area, and these areas are frequently used by the public for recreation. The project area provides habitat for a wide variety of terrestrial and aquatic species; however, as a modified environment, it offers diminished potential to support wildlife movement, and likely does not provide a significant wildlife corridor for terrestrial wildlife species. In portions of the project area, the steep bank of Sailing Lake prohibits aquatic to terrestrial movement from Sailing Lake to the embankment/ Coast Casey Forebay. The project area includes aquatic environments that may support aquatic wildlife, but these

[22] AECOM. 2019.

[23] AECOM. 2019.

[24] Caltrans and CDFW. 2010. Essential Connectivity Areas - California Essential Habitat Connectivity. SDE Raster Dataset. Available online at: https://map.dfg.ca.gov/metadata/ds0620.html.

[25] Caltrans and CDFW. 2010.

habitats are not expected to support anadromous fish or other aquatic migratory species and would not be considered an important migratory route.

Local Policies and Ordinances

The City's tree regulations protect all trees designated as "Heritage" trees (Chapter 32, Article 2). Under this ordinance, a Heritage tree is defined as any one of the following:

- a tree which has a trunk with a circumference of 48 inches or more measured at 54 inches above natural grade;
- a multi-branched tree which has major branches below 54 inches above the natural grade with a circumference of 48 inches measured just below the first major trunk fork;
- any Quercus (oak), Sequoia (redwood), or Cedrus (cedar) tree with a circumference of 12 inches or more when measured at 54 inches above natural grade; or
- a tree or grove of trees designated by resolution of the City Council to be of special historical value or of significant community benefit.

It is unlawful to willfully injure, damage, destroy, move, or remove a Heritage tree. Removal of Heritage trees requires a permit approved by Urban Forestry Board and City Council. No heritage trees are present in the project area.

The City also protects trees in the public right-of-way along streets, in parks, and in other City-owned properties. Based on the reconnaissance survey, the trees in the project footprint include:

- Four beach she-oaks with diameters of 8, 7, 3 and 4 inches at 48 inches above natural grade. Beach she-oaks are listed on the California Invasive Plant Council (Cal-IPC) watch list.
- One Monterey pine with a diameter of 6 inches at 48 inches above natural grade.

Habitat Conservation Plan, Natural Community Conservation Plan, or Other Habitat Conservation Plans

Based on a review of USFWS and CDFW websites, there are no Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) in the project area.[26] There are no nearby NCCPs; the closest HCP, in San Jose, is associated with the Santa Clara Valley HCP.

3.4.2 DISCUSSION

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

[26] USFWS. 2020. Habitat Conservation Plans. Sacramento Fish and Wildlife Office. Available online at: https://www.fws.gov/sacramento/es/Habitat-Conservation-Plans/.

plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

No special-status amphibians, reptiles, fish, or invertebrate species are expected to occur in the project area. One special-status mammal species (salt marsh harvest mouse), eleven special-status bird species, and three special-status plants species have potential to occur in the project area. Project implementation could impact these species through modifications to habitat present in the project site.

Salt Marsh Harvest Mouse

Pickleweed marsh habitats in the project area may provide suitable habitat for the salt marsh harvest mouse. There are no known CNDDB occurrences in the Coast Casey Forebay, and the suitable habitat in the project area is isolated and separated from other known occurrences and areas containing occupied tidal marsh habitat by open water bodies, levees, roads, and trails. For these reasons, salt marsh harvest mice have potential to occur in pickleweed habitat in and adjacent to the project area and are not expected to occur in other habitat types in the project area.

Construction of the project would permanently remove 0.06 acre of pickleweed habitat that is suitable for the species and would temporarily impact 0.09 acre of pickleweed habitat during construction. Permanent impacts would consist of removal and excavation of pickleweed habitat and placement of fill material to construct the stability berm. Temporary impacts would consist of building a ramp for construction equipment and personnel access, and materials needed to dewater the work area; these areas would be restored to general preexisting conditions at the completion of construction. These activities have the potential to impact the species, if present, through direct or indirect encounters with equipment or personnel that could result in the injury, mortality, or disturbance to the species. **Mitigation Measure BIO-1: Hand Removal of Vegetation and Wildlife Exclusion Fencing** would be implemented to avoid direct encounters and minimize potential indirect impacts on the species. The 0.06 acre loss of habitat for the species would not be expected to result in significant long-term impacts on the species or any undocumented population that may occur in Coast Casey Forebay, given the overall amount pickleweed habitat available in the project area. As stated in Section 2.6, Construction Best Management Practices, all construction personnel would be given environmental awareness training by a qualified biological monitor before the start of construction. The training would familiarize all construction personnel with the listed species that may occur onsite, their habitats, general provisions and protections afforded by law, measures to be implemented to protect these species, and the project boundaries. With implementation of worker training and Mitigation Measure BIO-1 to avoid and minimize impacts, impacts on salt marsh harvest mouse would be **less than significant with mitigation**.

Mitigation Measure BIO-1: Hand Removal of Vegetation and Wildlife Exclusion Fencing

The City will manually remove pickleweed vegetation in the project area using hand tools. All pickleweed vegetation in the work areas will be removed as directed and overseen by a qualified biological monitor; removal of pickleweed vegetation will be performed by hand and/or using hand tools (e.g., trowel, hoe, rake, shovel; and limited use of weed-whips, wheel barrows, handcarts, sleds, etc.). Vegetation removal will begin when no mice are observed; removal will start at the edge farthest from the salt marsh or the poorest habitat and work its way toward higher-quality salt marsh habitat (from the embankment waterward). Vegetation removal activities will be complete when the biological monitor determines that all aboveground parts have been removed and that bare ground is sufficiently visible. A

final inspection will be performed by the biological monitor to verify that no salt marsh harvest mice are present in the project area.

At the completion of the inspection, the contractor will install a wildlife exclusion fence to prevent the salt marsh harvest mouse from entering the site during construction. The fencing will meet the USFWS design standards for exclusion of salt marsh harvest mouse. No vehicles or heavy equipment will be allowed in the work area before completion of the vegetation removal and installation of wildlife exclusion fencing. During construction, the exclusion fence will be maintained by the contractor. A qualified biologist will conduct a weekly inspection of the exclusion fence.

Birds

Nesting birds, including special-status birds, are known to occur in or have potential to occur in the vicinity of the project area. Special-status bird species with potential to occur in the project area include California black rail, California clapper rail, California least tern, western snowy plover, Alameda song sparrow, American peregrine falcon, black skimmer, burrowing owl, northern harrier, saltmarsh common yellowthroat, and white-tailed kite (Table 3.4-1).

California Black Rail

The California black rail is listed as a threatened species under the CESA and is Fully Protected under Fish and Game Code 3511. The closest known occurrence of this species to the project area is from the eastern side of Mountain View Slough; the habitat is described as salt marsh dominated by bulrush and cordgrass.[27] Other occurrences are described as nontidal marsh areas dominated by pickleweed. Nontidal brackish marsh dominated by pickleweed is present in Coast Casey Forebay; therefore, the species has potential to breed and forage in this habitat type in and adjacent to the project area. However, because California black rails have not been documented in recent *Invasive Spartina Project* surveys in optimal habitats near the project area, it is unlikely the species occurs as a breeder.[28]

California Clapper Rail

California clapper rail is listed as an endangered species under the federal ESA and CESA and is also a Fully Protected species under the California Fish and Game Code 3511. The closest known CNDDB occurrence is about 0.5 mile from the project area. These occurrences are from habitats described as saline emergent wetlands dominated by pickleweed. [29, 30] In Coast Casey Forebay, the cordgrass habitat may provide suitable breeding and foraging habitat, and the pickleweed habitat may provide suitable foraging habitat for the species. Tidally influenced areas outside of the project area provide suitable breeding and foraging habitat for the species. California clapper rails have been observed in Coast Casey Forebay but are not expected to occur in Sailing Lake; neither of these areas have been included in previous *Invasive Spartina Project* survey events.[31]

California Least Tern

The California least tern is listed as an endangered species under both the ESA and CESA and is also Fully Protected under the California Fish and Game Code 3511. There are two CNDDB known occurrences in the vicinity of the project area; both are historic (greater than 30 years old). These occurrences are from Charleston Slough, north of the project area; and from Pond B2 (between Mountain View Slough and Guadalupe Slough), east of the project area. The habitat at this location provides post-breeding foraging and staging for the species.

[27] CDFW. 2020. Occurrence 302.

[28] Olofson Environmental Inc. 2020. California Ridgway's Rail Surveys for the San Francisco Estuary Invasive *Spartina* Project 2019. Report to The State Coastal Conservancy. January 13. Available online at: http://www.spartina.org/documents/ISPRIRAReport2019_000.pdf.

[29] Olofson Environmental Inc. 2020.

[30] CDFW. 2020. Occurrences 42 and 84.

[31] Olofson Environmental Inc. 2020.

There is no suitable breeding habitat in and around the project area, and there are no known breeding areas within 2 miles of the project area. Suitable post-breeding foraging habitat (prior to migration to Central America) is present in the project area, primarily associated with Sailing Lake, but also in some brackish marsh habitat in Coast Casey Forebay.

Western Snowy Plover

The western snowy plover is listed as a threatened species under the ESA and is a California Species of Special Concern. There are two CNDDB known occurrences in the vicinity of the project area. Both occurrences are more than 2 miles from the project area. The first is in Ravenswood Complex[32] and includes several salt ponds in which nesting was documented. The second is from a nonbreeding season survey (January) of a brackish marsh dominated by pickleweed near San Francisquito Creek,[33] during which 25 individuals were observed. There is no suitable breeding habitat in or adjacent to the project area. The roadway embankment may provide suitable wintering or roosting habitat for the species. In the post-breeding season and in winter, western snowy plovers may forage or roost in and adjacent to the project area but would not be expected to occur in the project area during the species' breeding season.

Alameda Song Sparrow

The Alameda song sparrow is listed as a California Species of Special Concern. There are several documented occurrences of the Alameda song sparrow in the general vicinity of the project, including one recent observation of a nesting individual within the Coast Casey Forebay.[34] This species may use the project area for nesting or breeding activities, although the brackish marsh lacks tidal influence, and tall vegetation is absent. Suitable breeding habitat is found in Coast Casey Forebay, and the species has potential to forage in the brackish marsh habitat in and adjacent to the project area.

American Peregrine Falcon

American peregrine falcon was originally listed as an endangered species under the ESA and CESA but has since been delisted. Peregrine falcons are currently listed as Fully Protected species by the State of California Fish and Game Code 3511, making it illegal to kill, harm, or harass the species. The closest CNDDB occurrence is about 4 miles from the project area. The American peregrine falcon is not expected to nest or breed in or adjacent to the project area, due to absence of suitable nesting habitat, but may forage in the project area.

Black Skimmer

Black skimmer is listed as a California Species of Special Concern. There is one documented occurrence of the black skimmer near the project area from the island in the middle of Sailing Lake. [35] In 2019, there were more than a dozen nesting pairs; in 2020, 15 nests were documented.[36] Black skimmers also forage in Sailing Lake.

[32] CDFW. 2020. Occurrence 137.

[33] CDFW. 2020. Occurrence 128.

[34] Philip Higgins, Biologist, City of Mountain View. 2020. Personal communication.

[35] CDFW. 2020. Occurrence 7.

[36] Higgins. 2020.

Burrowing Owl

Borrowing owl is listed as a California Species of Special Concern. The species is well documented in Shoreline Regional Park, and the Shoreline Burrowing Owl Management Plan[37] does not identify the project area as a known breeding or foraging area; breeding has not been documented in the project area. Most breeding and wintering owl observations are at Northeast Meadow Lands, Vista Slope, Crittenden Hill, and in the Golf Course, and east of the project area.[38] [39] Shoreline Regional Park is one of only four breeding locations for this species in Santa Clara County, making the park regionally significant for this species. A year-round population of burrowing owls is present at Shoreline Regional Park, consisting of both resident individuals and migratory individuals. Wintering owls have been observed along the levees of Coast Casey Forebay and Charleston Slough and may occur on the levee in the project area. Breeding pairs have used the golf course and other areas of Shoreline Regional Park.[40] [41]

Northern Harrier

Northern harrier is a California Species of Special Concern. This species has been observed nesting in Shoreline Regional Park at the Mountain View Tidal Marsh, about 3,700 feet from the project area.[42] Of the three CNDDB occurrences near the project area, all habitats are described as salt marsh containing pickleweed and cordgrass.[43] These habitat types are present in and adjacent to the project area where suitable foraging habitat is present; however, suitable breeding habitat is not present in the project area, but maybe present in the cordgrass portions of the brackish marsh west of the project area.

Saltmarsh Common Yellowthroat

Saltmarsh common yellowthroat is a California Species of Special Concern. There are many CNDDB occurrences of the species within 10 miles of the project area, including occurrences from Charleston Slough and Coast Casey Forebay to the west of the project area,[44] and in Shoreline Park and the overflow outfall of Sailing Lake to Permanent Creek/Mountain View Slough.[45] [46]The brackish marsh in project area contains suitable nesting and foraging habitat, and the species has potential to breed in and adjacent to the project area in Coast Casey Forebay.

White-Tailed Kite

White-tailed kite is a Fully Protected species under the California Fish and Game Code 3511. White-tailed kites have been observed nesting at Shoreline Regional Park for the past 3 years, about 2,300 feet from the project area.[47] This species has been observed in the vicinity of the project area and has potential to use the habitats in the project area for foraging. Suitable nesting trees are not present in the project area but suitable nesting trees are present within 200 feet of the project area.

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[37] City of Mountain View. 2012 Shoreline Burrowing Owl Preservation Plan. Public Works and Community Services Departments. Prepared by Lynne Trulio and Philip Higgins. October 1. Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=29099.

[38] CDFW. 2020. Occurrences 25, 1031, 1032, 1033, and 1235.

[39] Higgins. 2020.

[40] CDFW. 2020. Occurrences 25, 1031, 1032, 1033, and 1235.

[41] Higgins. 2020.

[42] Higgins. 2020.

[43] CDFW. 2020. Occurrences 2, 4, and 33.

[44] CDFW. 2020. Occurrence 55.

[45] Higgins. 2020.

[46] CDFW. 2020. Occurrence 118.

[47] Higgins. 2020.

Potential Impacts

Project activities could disturb nesting birds, including special-status species, if construction occurs in the breeding season. Construction activities could also disturb foraging activities. The construction activities would result in conversion of habitat types and may degrade roosting, foraging, and breeding habitat for special-status birds; however, given the small project footprint relative to the available roosting, foraging, and breeding habitat in the vicinity, impacts from habitat loss would be negligible. Furthermore, the project would benefit birds by removing the steep embankment and creating a gentle slope at the bank of Sailing Lake. The gentle slope would allow birds to use the shoreline and move between aquatic and terrestrial habitats. Construction-related disturbances to nesting special-status birds may result in nest failure or abandonment, an impact that would be considered potentially significant. Implementation of **Mitigation Measure BIO-2: Nesting and Rail Bird Protection Measures** requires preconstruction surveys to identify nest sites in the vicinity of the project area, as well as establishment of nest protection buffers around active nests. As stated in Section 2.6, Construction Best Management Practices, all construction personnel would be given environmental awareness training by a qualified biological monitor before the start of construction. The training would familiarize all construction personnel with the listed species that may occur onsite, their habitats, general provisions and protections afforded by law, measures to be implemented to protect these species, and the project boundaries. With implementation of worker training and the mitigation measure to avoid and minimize impacts, impacts on special-status bird species would be **less than significant with mitigation.**

Mitigation Measure BIO-2: Nesting and Rail Bird Protection Measures

If construction must occur during the breeding season, then a qualified biologist will conduct preconstruction nesting bird surveys at least 2 weeks prior to construction to identify active nests in the vicinity of the project; rail surveys will be conducted during the spring of the year of construction. The nesting bird breeding season varies by species; for the rails (California black rail and California clapper rail), the accepted breeding season is February 1 through August 31, but the nesting season is often shorter for passerines. The nesting bird minimum survey area radius beyond the project area will be (1) 250 feet for passerines; (2) 500 feet for small raptors; and (3) 1,000 feet for larger raptors.

In the spring of the year of construction, a qualified biologist will conduct protocol-level surveys for rails. The rail survey methodology and results will be submitted to the CDFW and USFWS within 30 days. If surveys confirm that there are no breeding rails within 700 feet of the project area, then no other rail-specific protection measures will be required. However, if rails are detected, then authorization from the USFWS and or CDFW would be required for construction activities between February 1 and August 31.

If active nests are identified, the City will establish a construction buffer to avoid disturbance, in consultation with the qualified biologist monitor and/or the CDFW and USFWS. The City's biological monitor will monitor the nests for potential signs of disturbance and to verify nest status and fledging of young. The biological monitor will have stop work authority and will stop work if signs of disturbance are observed. Once the young have fledged, then construction activities may begin. If active nests are found and require disturbance or removal, the City will consult with the CDFW and USFWS regarding appropriate actions to comply with the Migratory Bird Treaty Act of 1918 and the Fish and Game Code, Section 3503.

Plants

Special-status plants are known to occur in the vicinity or have potential to occur in the vicinity of the project area. Special-status plant species with potential to occur in the project area include alkali milk-vetch, Congdon's tarplant, and Hoover's button-celery (Table 3.4-1). These species are not protected under the ESA or CESA but are identified as rare species.

Alkali Milk-Vetch

Alkali milk-vetch is listed as a rare species in California and is moderately threatened (California Rare Plant Rank [CRPR] 1B.2). This species is typically found on low ground of alkali flats, on flooded lands, in annual grassland, or in playas or vernal pools. Most of these habitat types are not present in the project area; however, the brackish marsh may provide suitable habitat for this species. There is one occurrence of the alkali milk-vetch in proximity to the project area; however, this occurrence is from the early 1900s, presumably from Mayfield Slough (about 1 mile to the northwest of the project area) and is believed to be extirpated.[48]

Congdon's Tarplant

Congdon's tarplant is listed as a rare species in California and is seriously threatened (CRPR 1B.1). This species is typically found in valley and foothill grasslands with alkaline soils, sometimes described as heavy white clay. This species has not been documented in the project area, but has been documented in several locations in Shoreline Regional Park, including a levee crest, the golf course, Crittenden Hill, and Pacific Gas and Electric Company (PG&E) rights-of-way.[49] Suitable alkaline habitat for the species is present in the brackish marsh of Coast Casey Forebay. The documented occurrences suggest that disturbed or atypical habitats, such as the levee crest and ruderal habitats, may also support the species.

Hoover's Button-Celery

Hoover's button-celery is listed as a rare species in California and is seriously threatened (CRPR 1B.1). This species is typically found in vernal pools, including alkaline depressions, roadside ditches and other wet places near the coast. This species has been documented from two locations in the vicinity of the proposed project; however, both observations are from the early 1900s and are likely extirpated.[50] Suitable habitats for this species are limited, because vernal pools are not present; however, the alkaline habitats in the brackish marsh of Coast Casey Forebay may provide suitable habitat for the species.

Potential Impacts

Although no known occurrences of special-status plants are documented in the project area, suitable habitat for three special-status species is present. These habitats include the ruderal vegetation on the earthen fill embankment and the brackish marsh areas of Coast Casey Forebay. If a special-status plant species is present in either of these habitats, then the proposed project could impact any individuals present. The impacts would include death of the plant through trampling, excavation, removal, and/or trimming; plants could also be impacted

[48] CDFW. 2020. Occurrence 11.

[49] CDFW. 2020. Occurrences 53, 103.

[50] CDFW 2020. Occurrences 5, 6.

through changes in hydrology or through deposition of dust on leaves or flowers. Due to the small size of the proposed project in brackish marsh and the dominance of ruderal vegetation, significant impacts on special-status plants species or their habitat are not anticipated. However, with the lack of project-specific surveys for these special-status plant species, the extent of potential impacts is uncertain, and the proposed project could potentially result in significant impacts on special-status plant species. With completion of focused surveys for the identified special-status plant species, Mitigation Measure BIO-3: Focused Surveys for Special-Status Plant Species, the City will identify whether special-status species are present, the extent of any potential impacts, and, if needed, the avoidance and minimization measures that will be implemented so that the residual impacts from the proposed project would be considered less than significant with mitigation.

Mitigation Measure BIO-3: Focused Surveys for Special-Status Plant Species

Prior to construction, the City will complete focused surveys of the project area for special-status plant species. The surveys will follow the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*[51] for the botanical field surveys where possible; however, because nearby occurrences of some of the species are absent, it may not be possible to visit reference populations for all species. The focused surveys will be conducted by a botanist and will be conducted within the identified bloom period for the three special-status species. At the completion of the focused surveys, the botanist will prepare a report that summarizes the survey findings. In the unexpected event that special-status plants are observed in the project footprint, the report will also include a plan for avoidance and minimization of potential adverse impacts.

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

The proposed project would not result in temporary or permanent impacts on riparian communities, nor would the proposed project impact designated or proposed critical habitat for a federally listed species protected under the ESA.

The project would impact a sensitive natural community: pickleweed mats, identified by the CDFW Vegetation Classification and Mapping Program. [52] The extent of pickleweed mat in the project site is the same as the brackish marsh identified in the wetland delineation.

As described under Section 2.6, Construction Best Management Practices, the proposed project includes measures to prevent the release of hazardous materials, to contain accidental releases, and to prevent discharges of sediment and other pollutants to surface waterways. The implementation of the BMPs listed in Section 2.6 would avoid and/or minimize potential impacts to pickleweed mat from runoff and accidental spills.

Construction impacts would result in temporary loss of approximately 0.09 acre of pickleweed mat along the edge of the mapped sensitive community. A temporary construction access ramp and cofferdam would be constructed in the pickleweed mats to provide equipment access and dewater the work area during the construction period. Excavation and fill associated with improvements to the access road would result in permanent impacts to

[51] CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

[52] CDFW. 2019.

0.06 acre of the pickleweed marsh. Temporary and permanent loss of the community would be a potentially significant impact. Implementation of **Mitigation Measure BIO-4: Work in Pickleweed Wetlands** would avoid and minimize temporary impacts on this sensitive natural community by requiring that the City minimize construction activities and equipment use in the pickleweed wetlands; that work limits be identified with fencing and or flagging; and that construction equipment operate on protective mats or use low-ground pressure equipment. This measure will also require restoration of pickleweed wetland areas temporarily disturbed by the construction activities. Mitigation Measure BIO-4 would avoid and minimize impacts on this sensitive natural community; therefore, this impact would be **less than significant with mitigation**. In addition, because the pickleweed mat is also a regulated wetland, compliance with federal and state regulations protecting wetlands would further minimize impacts on this sensitive natural community, as described under the next impact criterion.

Mitigation Measure BIO-4: Work in Pickleweed Wetlands

The City will work with the Contractor to minimize the extent of the temporary construction footprint in pickleweed wetlands. The temporary disturbance in pickleweed wetlands will be marked and identified by fencing or flagging. Areas outside of the temporary disturbance footprint will be identified as an environmentally sensitive area, and construction equipment and Contractor personnel will not be allowed to enter without review and approval by the City and in coordination with a qualified biologist. The biological monitor will conduct a weekly inspection of the fencing/flagging and will monitor compliance in the environmentally sensitive areas.

Operation of construction equipment in the pickleweed wetlands would only occur on protective mats or the temporary fill platform, or will be conducted by specialized low-ground-pressure equipment.

Any pickleweed wetlands temporarily disturbed during construction will be restored at the completion of construction. The Contractor will reestablish the surface topography and drainage in temporary impact areas, and if needed, will reestablish pickleweed vegetation.

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

As described under Section 2.6, Construction Best Management Practices, the proposed project includes measures to prevent the release of hazardous materials, to contain accidental releases, and to prevent discharges of sediment and other pollutants to surface waterways. The implementation of the BMPs listed in Section 2.6 would avoid and/or minimize potential impacts to wetlands from runoff and accidental spills.

The proposed project would result in the permanent loss of 0.08 acre of wetlands and other waters of the U.S. and waters of the State. Construction impacts would result in temporary loss of approximately 0.09 acre of brackish marsh, and 0.04 acre of Sailing Lake, an open water. Excavation and fill associated with project improvements would result in 0.06 acre of permanent impacts to brackish marsh and would result in 0.02 acre of permanent impacts to Sailing Lake. Temporary impacts would occur along the edge of the aquatic features to facilitate construction activities. Sailing Lake would be lowered during the construction period, and no work would occur in the open water portion of the lake. A temporary cofferdam would be constructed in the brackish marsh in the Coast Casey Forebay to dewater the work area during the construction period.

Although small, these temporary and permanent impacts would result in the loss of state and federally protected waters, including wetlands, and would be a potentially significant impact. However, projects involving fill of a wetland or water of the U.S. or of the state must comply with federal and state regulations to avoid, minimize, and mitigate the effects. Accordingly, the City would obtain permits for impacts to hydrologic features, including a U.S. Army Corps of Engineers Clean Water Act section 404 Nationwide Permit and a RWQCB Clean Water Act section 401 Water Quality Certification. The City will mitigate for impacts to hydrologic features as required by these permits. Because the City must obtain these permits and comply with the permit conditions identified by the above-listed regulatory agencies to implement the proposed project, impacts to protected wetlands and other water features would be **less than significant.**

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?

The proposed project would not interfere with the movement of native resident or migratory fish species, nor would the project impede the use of native wildlife nursery sites. Because the project would soften the slopes of the embankment, terrestrial wildlife species should benefit from increased ability to transverse the embankment, and thus, in the long term, there would be a benefit to wildlife movement through the project area.

During construction, the ability for terrestrial wildlife to move across the embankment between the two aquatic environments would be restricted. However, this impact would only occur over a short distance, and movements to other natural habitats would be possible to the north and south of the project area. The impact would be limited to the short construction duration (6 months). Therefore, the project would not interfere substantially with the movement of any native resident or migratory wildlife species, or with an established native resident or migratory wildlife corridor; impacts would be **less than significant.**

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

No Heritage trees, as defined by the City, are present in the project footprint; therefore, the project would not result in impacts to Heritage trees.

Five trees in the project footprint would require removal for construction of the project. These trees are not identified in the City Master Tree Plan. Of the trees to be removed, most are beach she-oaks, which are nonnative and are on the Cal-IPC watch list. Tree removal for the project would adhere to the City's tree removal guidelines and Tree Preservation Ordinance, as applicable. There are no other local policies or ordinances protecting biological resources that are applicable to the proposed project. For these reasons, the project would not conflict with any local policies or ordinances protecting biological resources, and there would be **no impact.**

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

There are no HCPs, NCCPs, or other approved local, regional, or state HCPs in, or in the immediate vicinity of, the proposed project. For these reasons, the project would not conflict with any HCP or NCCP, and there would be **no impact.**

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

3.5.1 ENVIRONMENTAL SETTING

Project Setting and Context

The project site is immediately west of Sailing Lake (also known as Shoreline Lake), which is in the northwestern corner of Shoreline Regional Park. The park, which is owned and operated by the City, opened in 1982 and was constructed on the site of a former sanitary landfill. The project site covers a 3-acre area at the western end of Sailing Lake and the eastern end of Coast Casey Forebay. The project site also includes a separate 0.25-acre staging area at the eastern end of Terminal Boulevard. The staging area, which is owned by the City, currently serves as a parking area for public access to the trails in Shoreline Regional Park. Historically, the shoreline was more than 2,500 feet to the south of the project site and the project site was in San Francisco Bay.[53]

Data Collection and Review

Baseline historical and archaeological conditions in the project vicinity are based on a review of available ethnographic and historical literature and maps, archaeological base maps and site records, survey reports, and atlases of historic places on file at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University; a review of the Office of Historic Preservation's (OHP's) Directory of Properties in the Historic Property Data (HPD) File for Santa Clara County (OHP 2012);[54] a review of OHP's Built Environment Resources Directory (BERD) (OHP 2019);[55] and a Sacred Lands File (SLF) review by the California Native American Heritage Commission (NAHC) (February 2020). No cultural resources were identified in the HPD or BERD, nor were resources identified in the SLF search of the project site or adjacent area. One nearby resource, the Alviso Salt Works Historic Landscape (P-43-002823), is a historic district eligible for listing in the National Register of Historic Places (NRHP) and therefore is on the California Register of Historical Resources (CRHR). P-43-002823 is characterized by large evaporation ponds

[53] USGS. 1899. *Palo Alto, California*. Scale 1:62500. U.S. Geological Survey, Washington, DC. Available online at: https://ngmdb.usgs.gov/topoview/viewer/#6/37.431/-119.301 Accessed: March 10, 2020.

[54] Office of Historic Preservation (OHP). 2012. *Directory of Properties in the Historic Property Data File* for Santa Clara County (California Office of Historic Preservation, April 5, 2012). On file at Northwest Information Center, Sonoma State University, Rohnert Park, California.

[55] OHP. 2019. *Built Environment Resources Directory* for Santa Clara County (California Office of Historic Preservation, December 2019). On file at Northwest Information Center, Sonoma State University, Rohnert Park, California.

contained by levees.[56] The levee that defines the southwestern edge of the district is approximately 150 feet northwest of the project site. The records search (NWIC File No. 19-1451) identified three previously studied areas in or adjacent to the current project site.[57,58,59]

Studies

A master's thesis written by E.J. Johnck[60] from Sonoma State University discusses the importance of a cultural landscape approach for the South Bay Salt Pond Restoration Project's Resource Management Plan (RMP). The thesis highlights the cultural significance of the evaporative salt ponds in the South Bay, and advocates including these cultural resources into the RMP, including the Alviso Salt Works Historic Landscape. The RMP, at the time, was largely focused on restoring these ponds back to tidal marsh and conserving the resident waterfowl/shorebird populations. The current proposed project site lies 150 feet to the south of this study area.

Basin Research Associates compiled a cultural resource assessment for the U.S. Army Corps of Engineers[61] to determine whether there would be a federal interest to provide flood protection and ecosystem restoration along the Alviso portion of the southern San Francisco Bay shoreline. As part of the study, a planning-level assessment of the condition and spatial extent of cultural resources was similarly compiled. No significant cultural resources were reported in the area near the current project site (Reach B).

A cultural resources inventory report was prepared by Environmental Science Associates[62] for a project involving placing a pipeline in Santa Clara County for the Palo Alto Regional Water Quality Control Plant. The pipeline's projected pathway would run from the plant to the Mountain View shoreline area. In the shoreline area, a network of smaller lateral pipes would be placed to deliver water to customers. Twenty-six soil borings were conducted along the proposed pipeline route, and the study found artificial fill material to be dominant material in the first 4 to 6 feet of soil. The tested pipeline alignment is adjacent to the current project site's staging area on Terminal Boulevard.

Historical Resources

Alviso Salt Works Historic Landscape (P-43-002823), a NRHP-eligible district, is recorded 150 feet northwest of Sailing Lake in Shoreline Slough. Shoreline Slough forms the southwestern portion of the extensive historic district. The primary landscape characteristics of the resource are large evaporation ponds bounded by levees and include small-scale elements such as pilings, remnant piers, small-interior berms, and water control structures. These evaporative salt ponds were created during the twentieth century industrialization and experienced a period of significance from 1920 through 1953, when salt production was at its highest. Since the 1950s, salt production has decreased, and many of the ponds have been taken out of production. Many of these ponds form part of the

[56] Speulda-Drews, Lou Ann, and Nick Valentine. 2007. California Department of Parks and Recreation 523 Series Form for Alviso Salt Works Historic Landscape (P-43-002823). On File: Northwest Information Center, Sonoma State University, Rohnert Park, California.

[57] Basin Research Associates, Inc. 2009. *Cultural Resources Assessment, South San Francisco Bay Shoreline Interim Feasibility Study*. San Leandro, California. Prepared for U.S. Army Corps of Engineers, San Francisco.

[58] Johnck, Ellen Joslin. 2008. *The South Bay Salt Pond Restoration Project: A Cultural Landscape Approach for the Resource Management Plan*. A Masters of Arts thesis submitted to Sonoma State University, Cultural Resources Management.

[59] Martorana, Dean. 2007. *Palo Alto Regional Water Quality Control Plant Reuse Pipeline, Santa Clara County, CA: Cultural Resources Inventory*. Oakland, California. Prepared for RMC Water and Environment, San Jose.

[60] Johnck. 2008.

[61] Basin Research Associates, Inc. 2009.

[62] Martorana 2007.

South Bay Salt Pond Restoration Project and are either being managed as tidal ponds for resident shorebirds or are being restored back to tidal marsh. The Alviso Salt Works Historic Landscape (P-43-002823) is eligible for the NRHP; NRHP-listed "historic properties" in California are considered historical resources for the purposes of CEQA and are also listed in the CRHR.

Native American Outreach

On February 20, 2020, AECOM contacted the NAHC on behalf of the City and requested a search of the SLF and Native American contact list for the project site. On February 25, 2020, the NAHC responded that the SLF search was "negative…[however] a negative response to these searches does not preclude the existence of a tribal cultural resource." Native American consultation pursuant to Assembly Bill (AB) 52 is being completed by the City and discussed further in Section 3.18.

3.5.2 DISCUSSION

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

The proposed project would require construction over a 3-acre site, including improvements to the Shoreline Lake Dam that call for a crest raise of 3.5 feet to an elevation of 15.5 feet MHHW mark. The embankment berm and crest raise would be constructed using imported fill from nearby commercial sources. As identified in the NWIC records search, one historical resource, Alviso Salt Works Historic Landscape (P-43-002823), is 150 feet north of the project site, in Shoreline Slough; the distance between the resource and the dam location is approximately 300 feet. The area of the resource near the project site is at the southwestern tip of a much more extensive landscape, which stretches into Alameda County to the east. Ground-disturbing activities related to the project site, however, will be conducted south of Shoreline Slough, and therefore will not physically demolish or alter any part of the historical resource, and would not alter the characteristics that convey its historical significance and justify its eligibility for inclusion in the CRHR for the purposes of CEQA. Therefore, impacts would be **less than significant.**

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

The proposed project would require a maximum depth of excavation of the downstream (western) embankment slope to approximately 2 feet below existing surface to construct a drained stability berm. No archaeological resources were identified in the NWIC records search, and the search of the SLF was also negative. Native American outreach identified no tribal cultural resources in the vicinity of the project site. A review of the historical maps of the area depict the current project site in the San Francisco Bay, with the historic-era shoreline being more than 2,500 feet to the south of the project site.[63] A prior study[64] near the staging area identified the upper 4 to 6 feet of soil in that vicinity as artificial fill material. Therefore, the minimal ground disturbance required for this project is unlikely to uncover any archaeological resources because the entire soil matrix of the dam, as well as the vertical project area, is artificial fill; there would be **no impact**.

[63] USGS. 1899.

[64] Martorana 2007.

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

Section 15064.5 of CEQA assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under Public Resources Code Section 5097.98.

There are no known burial locations in the project site, no known archaeological resources were identified in the NWIC records search, and the search of the SLF was also negative. A review of the historical maps of the area depict the current project site in the San Francisco Bay, with the shoreline being more than 2,500 feet to the south of the project site.[65] A prior study[66] near the staging area identified the upper 4 to 6 feet of soil in that vicinity as artificial fill material. The potential for encountering human remains in the artificial fill of the project's subsurface footprint is considered extremely low; there would be **no impact**.

[65] USGS. 1899.

[66] Martorana 2007.

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
VI. Energy. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

3.6.1 ENVIRONMENTAL SETTING

The proposed project involves improving the stability of the existing Shoreline Lake Dam (No. 7000-142, Santa Clara County) to meet DSOD safety criteria, and improving access over the dam for construction traffic related to the South Bay Salt Pond Restoration Project. Construction equipment such as bulldozers and haul trucks importing soil for the proposed stability berm would consume fuel, but such fuel consumption would be minimal in comparison to fuel used on a daily basis in the highly urbanized San Francisco Bay Area surrounding the project site. Electricity would be required during the construction period for operation of the contractor's construction trailer in the staging area; however, this electrical energy usage would also be minimal.

3.6.2 DISCUSSION

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

Construction equipment and haul trucks would consume fuel, and minor amounts of electricity would be required during the construction process; however, the site's small size and the limited extent of proposed improvements would minimize the energy consumed. Silicon Valley Clean Energy (SVCE) is the official electricity provider for the City, including the project site. SVCE delivers 100 percent carbon-free electricity, which is generated from clean, renewable sources, such as solar, wind, geothermal, and biomass, and produces no GHG emissions. Furthermore, the City reduces its electrical use through solar power; the pro shop of the Shoreline Golf Links golf course and the Shoreline Maintenance Facility (in Shoreline Regional Park) are both powered by solar energy.[67]

Construction of the proposed project would not result in wasteful or unnecessary energy consumption or inefficient energy use. During continued operation of the dam, small amounts of fuel would be required for vehicles and equipment used by site maintenance workers; this would be similar to the amounts of fuel required for existing site maintenance activities.

[67] City. 2019a. Renewable Energy, Silicon Valley Clean Energy. Available: https://www.mountainview.gov/depts/comdev/sustain/renewable_energy.asp. Accessed November 15, 2019.

Therefore, the proposed project would not adversely affect energy resources or energy conservation. Furthermore, the project would not result in an unnecessary or wasteful use of energy. Therefore, there would be **no impact.**

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

There is no relevant state or local plan that would conflict with improvements to increase the stability of an existing small dam. The proposed project would not result in an unnecessary or wasteful use of energy. The proposed project would not conflict with a state or local plan for renewable energy, and therefore there would be **no impact.**

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

3.7.1 ENVIRONMENTAL SETTING

Geology and Soils

The project site is in the Coast Ranges Geomorphic Province, which is composed of northwest–southeast-trending valleys and ridges that are controlled by folds and faults that resulted from the collision of the Farallon oceanic plate with the Pacific oceanic plate and the North American continental plate. This collision resulted in the subduction of the Farallon plate underneath the Pacific and North American plates, and subsequent strike-slip faulting along the San Andreas Fault System between the Pacific and North American plates.

The project site is in a seismically active area, between the San Andreas Fault to the west and the Hayward Fault to the east. Both faults are part of the San Andreas Fault System. Geologists have determined that the greatest potential for surface fault rupture and strong seismic ground shaking is from "active" faults. Active faults have exhibited evidence of movement during the Holocene epoch (i.e., 11,700 years Before Present [B.P.] to Present Day). Faults classified as "potentially active," where evidence of movement has occurred in the last 1.6 million years B.P., have a lower potential for surface fault rupture and strong seismic ground shaking. Pre-Quaternary faults (older than 1.6 million years B.P.) are not considered to represent a significant surface fault rupture or strong seismic ground shaking hazard. There are a variety of active and potentially active faults in the project region, including the San Andreas, Hayward, Monte-Vista Shannon, Silver Creek, and Stanford Faults. Table 3.7-1 presents the projected maximum magnitude, slip rate, age of last known fault activity, and approximate distance from the project site for each of these faults.

Table 3.7-1 Regionally Active and Potentially Active Faults

Fault Name	Projected Maximum Magnitude	Slip Rate (millimeters per year)	Age of Last Known Activity (years)	Activity Classification	Distance and Direction from Project Site
San Andreas	8.0	Very High (>9)	<150	Active	8 miles west
Hayward	7.25	High to Very High (1 to >9)	<150	Active	10.25 miles east
Monte Vista-Shannon	7.0	Moderate (0.1 to 1.0)	<15,000	Potentially Active	5 miles west
Silver Creek	7.0	Low to moderate (<0.1 to 1.0)	<1,600,000	Potentially Active	8 miles southeast
Stanford	6.5	Moderate (0.1 to 1.0)	<1,600,000	Potentially Active	2.5 miles west

Notes:

< = less than; > = greater than

Sources:

AECOM. 2019. *Sailing Lake Access Road Improvement Basis of Design, 50% Design.* Prepared by: AECOM. Project No. 60548950. Oakland, CA.

United States Geological Survey (USGS). 2019. Quaternary Fault and Fold Database. Available online at: https://earthquake.usgs.gov/hazards/qfaults/. Accessed December 6, 2019.

Geologic mapping indicates that the project site is underlain by Holocene-age, estuary-derived, Young Bay Mud deposits consisting of soft silt and clay interbedded with thin lenses of silty sands.[68] Based on the result of site-specific soil borings, the upper soil layers at the project site consist of embankment fill, which is composed of clayey sand to sandy lean clay ranging from 10.5 to 16 feet bgs. Deposits of Young Bay Mud, ranging from 5 to 10 feet thick, are present below the embankment fill. The Young Bay Mud is underlain by older alluvial deposits to the maximum depth explored, which was 81 feet bgs. Groundwater was encountered at depths ranging from 23 to 33 feet bgs.[69]

[68] Graymer, R.W., B.C. Moring, G.J. Saucedo, C.M. Wentworth, E.E. Brabb, and K.L. Knudsen. 2006. *Geologic Map of the San Francisco Bay Region*. Scientific Investigations Map 2918. United States Geological Survey, Denver, Colorado.

[69] AECOM. 2019. *Sailing Lake Access Road Improvement Basis of Design, 50% Design.* Prepared by: AECOM. Project No. 60548950. Oakland, CA.

Paleontological Resources

Holocene-age materials, which are present at the project site at depths ranging from 15.5 to 26 feet bgs, are too young to contain unique paleontological resources. Older Pleistocene-age alluvial deposits, which are present at depths of 16 to 27 feet bgs at the project site, may contain unique paleontological resources; however, project-related excavation activities would not exceed a depth of approximately 2 feet bgs.

3.7.2 DISCUSSION

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 California Geological Survey Special Publication 42.)

The project site is not in or adjacent to a fault zoned under the Alquist-Priolo Earthquake Fault Zone Act,[70] or any other known fault.[71] The nearest fault zoned under the Alquist-Priolo Act is the San Andreas Fault, approximately 8 miles to the west.[72] Therefore, there would be **no impact**.

ii) Strong seismic ground shaking?

Seismic ground shaking refers to ground motion that results from the release of stored energy during an earthquake. Strong seismic ground shaking can result in damage to or collapse of buildings, bridges, and other structures. The intensity of ground shaking depends on the distance from the earthquake epicenter to the site, the magnitude and depth of the earthquake, and site-specific geologic conditions.

The project site is in a seismically active area. As shown in Table 3.7-1, several active and potentially active faults are located in the project region. The 2014 Working Group on California Earthquake Probabilities estimates that there is a 72 percent chance that an earthquake with a magnitude equal to or greater than 6.7 will occur within the next 30 years in the San Francisco region.[73,74]

As part of the project design and engineering process, AECOM performed an evaluation of the existing dam embankment and the proposed stability berm based on modeled earthquake-induced deformations and the subsequent performance of the embankment and berm. Deformations can cause cracking of the embankment/berm (which can lead to dam failure) and loss of freeboard. Freeboard is the height between the water line and the crest of the dam; if an inadequate amount of freeboard is provided, high water conditions during a flood stage could result in overtopping of the dam. The results of the seismic deformation analysis were used to design the proposed

[70] California Geological Survey (CGS). 2006a. *Earthquake Zones of Required Investigation*. https://maps.conservation.ca.gov/cgs/EQZApp/App/. Accessed December 9, 2019.

[71] Jennings, C.W., and W.A. Bryant. 2010. Fault activity map of California: California Geological Survey Geologic Data Map No. 6, map scale 1:750,000.

[72] CGS. 2006a.

[73] Field, E.H., and 2014 Working Group on California Earthquake Probabilities. 2015. *UCERF3: A New Earthquake Forecast for California's Complex Fault System*. Fact Sheet 2015–3009. United States Geological Survey, Menlo Park, California.

[74] Working Group on California Earthquake Probabilities (WCGEP). 2015. (Need reference info.)

stability berm so that the berm and dam embankment would be stable following an earthquake, and so that seismic deformations would not cause overtopping or an uncontrolled release of water in the lake.

The seismic deformation analysis used the projected earthquake ground motions for the project site, which incorporates the projected slip rate of the controlling fault(s) (see Table 3.7-1) and the dam's hazard class. The hazard class is a function of the dam's downstream hazard potential. Based on DSOD criteria, Shoreline Lake Dam is considered a low-consequence dam with a low-potential downstream hazard because there are no downstream homes or businesses that could be inundated in the event of dam failure—only salt marshes. Peak horizontal ground acceleration (PGA), which is a measure of the projected intensity of ground shaking from seismic events, can be estimated by probabilistic methods using a computer model. As part of the seismic deformation analysis, computer modeling performed by AECOM indicated that there is a 1 in 10 probability that an earthquake within 50 years would result in PGAs of 0.42 and 0.35 from earthquakes on the Stanford and San Andreas Faults, respectively. These calculations indicate that a high level of seismic shaking is anticipated at the project site.

AECOM determined that the potential for seiche activity to result in water overtopping the dam is negligible because there is negligible potential for nearby landsliding into the lake, and because the dimensions of the lake are such that it is unlikely to resonate with the periods of the expected earthquake motions.

Based on the results of the project-specific seismic deformation analysis, the embankment of the dam is expected to experience small displacements during an earthquake, which may cause minor cracking at the embankment crest. This cracking may require minor repairs but would not represent a risk to the stability of the embankment. Larger deformations from a higher-magnitude earthquake may result in more substantial cracking and more extensive repairs. However, given that the seismic deformation analysis modeled the projected maximum credible earthquake magnitude and that there is no risk to life or property downstream of the embankment, the seismic performance of the proposed project improvements was determined to be acceptable. Therefore, although strong seismic shaking is likely to occur at the project site at some point in the future, the proposed project has been designed using standard engineering practices to withstand the projected effects of such shaking to an acceptable margin of safety consistent with DSOD criteria, so that public safety and the environment would be protected. Therefore, this impact would be **less than significant**.

iii) Seismic-related ground failure, including liquefaction?

The project site is in an earthquake zone of required investigation for liquefaction,[75] and has been mapped with a high to very high liquefaction susceptibility.[76] As part of the project design and engineering process, AECOM modeled the potential for liquefaction at the project site and determined that because the existing embankment and foundation materials are clayey, they are not susceptible to liquefaction. However, the Young Bay Mud, which underlies the project site, is susceptible to strength loss during earthquake shaking. The project designs account for a projected reduction in strength of up to 20 percent of the underlying Young Bay Mud, which was incorporated into the seismic deformation analysis for the proposed stability berm.[77] Therefore, although loss of soil strength may occur at the project site, the proposed project has been designed using standard engineering

[75] CGS. 2006a.

[76] Witter, R.C., K.L. Knudsen, J.M. Sowers, C.M. Wentworth, R.D. Koehler, and C.E. Randolph. 2006. *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California*. Open-File Report 06-1037. United States Geological Survey, Reston, Virginia.

[77] AECOM. 2019.

practices to withstand the projected effects of such behavior to an acceptable margin of safety consistent with DSOD criteria, so that public safety and the environment would be protected. Therefore, this impact would be **less than significant**.

iv) Landslides?

The project site is in a nearly flat area adjacent to San Francisco Bay, where landslides do not represent a hazard.[78] As part of the project design and engineering process, AECOM performed a stability analysis, which included the potential for seismically induced landslides as described in ii) above. The results of modeling performed for the proposed stability berm indicate that the proposed project as designed would meet the required DSOD factor of safety.[79] (See also the responses to checklist criterion ii) above and c) below.) Therefore, this impact would be **less than significant.**

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

The proposed project would require grubbing existing vegetation, excavating, grading, and compacting, along with reconstructing the paved access road over the crest of the dam. Disturbance of existing vegetation and soil and other project-related earthmoving activities associated with construction would expose soils to rain events, which could mobilize loose soil and result in soil erosion. Subsequent soil transport during storm events could result in sedimentation both in and downstream of the project site. Furthermore, earthmoving activities during the summer months could result in wind erosion. Because the project would disturb more than 1 acre of land, the City is required by law to prepare a SWPPP and implement associated BMPs that are specifically designed to reduce construction-related erosion. The SWPPP and BMPs would be submitted to the San Francisco Bay RWQCB, in compliance with the statewide NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-009-DWQ as amended by Order 2012-0006-DWQ). Construction techniques that could be implemented to reduce the potential for stormwater runoff include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that could be implemented to reduce erosion may include silt fences, staked straw bales/wattles, silt fences, geofabric, trench plugs, terraces, water bars, soil stabilizers, mulching, and revegetating disturbed areas. Preparation of a SWPPP and implementation of BMPs designed to control stormwater runoff and reduce erosion would result in a **less-than-significant** impact.

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

The existing Shoreline Lake Dam consists of an approximately 15-foot-high earthen embankment, which impounds 660 acre feet of salt water. An investigation of existing conditions at the dam determined that ongoing seepage is occurring at the downstream toe of the dam. Seepage through the dam results in increased instability and could result in potential failure of the dam in the future. As part of the project design and engineering process, AECOM evaluated several options to improve the stability of the dam, and a stability berm was selected by the City as the proposed remedy. As part of the project design, the stability berm has been sized to meet the appropriate DSOD factor of safety for the long-term steady state condition for the downstream slope. The layout

[78] CGS. 2006b. *Seismic Hazard Zone Report for the Mountain View 7.5-Minute Quadrangle, Santa Clara, Alameda, and San Mateo Counties, California*. Available online at: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed December 9, 2019.

[79] AECOM. 2019.

of the berm was chosen so that the narrowest section of the embankment would be widened (away from this narrow section, the existing slopes are gentler and the crest is much wider). The stability analysis also determined that a raise of the dam crest by 3.5 feet is necessary to compensate for an estimated 4 to 6 inches of long-term settlement of the Young Bay Mud sediments underlying the embankment. The proposed design of the stability berm and the dam crest raise are shown on Figure 2-3 (see Chapter 2, Project Description). Seepage and stability modeling performed for the proposed stability berm indicate that the proposed project as designed would meet the required DSOD factor of safety for Shoreline Lake Dam.[80] Therefore, this impact would be **less than significant.**

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

See responses to criteria a) iii) and c), above. For the reasons stated therein, the proposed project as designed would meet the required DSOD factor of safety for Shoreline Lake Dam.[81] Therefore, this impact would be **less than significant.**

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?

The proposed project involves improvements to Shoreline Lake Dam and its access road, and would not require the use of septic tanks or alternative waste water disposal systems. Temporary, portable restrooms would be provided for construction workers. Therefore, there would be **no impact**.

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

Site-specific soil borings[82] revealed that the project site is underlain by embankment fill to depths ranging from 10.5 to 16 feet bgs. Deposits of Young Bay Mud, ranging from 5 to 10 feet thick, are present below the embankment fill. The embankment fill consists of nonnative materials imported from other locations; any fossils that may have been present in the artificial fill would have been destroyed during the excavation process when the fill material was initially obtained, followed by subsequent grading and compaction at the project site. The Young Bay Mud underlying the existing Shoreline Lake Dam embankment is of Holocene age, and therefore is too young to contain unique paleontological resources. Because excavations at the project site would not exceed a depth of approximately 2 feet bgs, older alluvial deposits (which could contain unique paleontological resources) would not be encountered. Therefore, the proposed project would not directly or indirectly destroy a unique paleontological resource, and there would be **no impact**.

[80] AECOM. 2019.

[81] AECOM. 2019.

[82] AECOM. 2019.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
VIII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 ENVIRONMENTAL SETTING

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters the atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs in the atmosphere; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on the earth. Without the naturally occurring greenhouse effect, the earth would not be able to support life as we know it. However, GHG emissions associated with human activities are likely responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate.[83]

The most common GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), water vapor, perfluorocarbons (PFCs), sulphur hexafluoride, and hydrofluorocarbons (HFCs). These gases are released into the atmosphere via a variety of natural and human processes, including:

- Combustion of fossil fuels (CO_2 and N_2O)
- Fertilization of crops (N_2O)
- Off-gassing from agricultural practices and landfills (CH_4)
- Refrigeration and cooling (HFCs)
- Aluminum production and semi-conductor manufacturing (PFCs)

Under existing global climate conditions, global warming is theorized to be the major driver responsible for sea-level rise, global weather pattern changes/inconsistencies, ocean acidification, and precipitation rates. Most relevant scientific studies suggest that these extreme climate trends will continue. Natural events and phenomena in California, including the climate, could be adversely affected by these trends. Potential impacts could include increased precipitation and sea-level rise, coastal flooding, mass migration and/or extinction of flora and fauna, as well as more extreme weather events related to storms and heatwaves.

[83] Intergovernmental Panel on Climate Change (IPCC). 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available online at: https://www.ipcc.ch/report/ar5/syr/.

The effect of a GHG on the earth's energy balance is expressed in terms of global warming potential (GWP). GWP is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The concept of CO_2 equivalents (CO_2e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation. The GWP of a GHG is based on several factors, including the relative effectiveness of gas in absorbing infrared radiation and the length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime").

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known. Suffice it to say, that quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or a global, local, or micro-climate. From the standpoint of CEQA, GHG-related effects on global climate change are inherently cumulative.

Regulatory Setting

Executive Order S-3-05

The goal of this Executive Order, signed by Governor Arnold Schwarzenegger on June 1, 2005, is to reduce California's GHG emissions to year 2000 levels by 2010, 1990 levels by 2020, and 80 percent below the 1990 levels by the year 2050. In 2006, this goal was reinforced with the passage of AB 32.

Global Warming Solutions Act of 2006 and Executive Order S-20-06

The Global Warming Solutions Act of 2006 set the same overall GHG emissions reduction goals as outlined in Executive Order S-3-05. The Act further requires that CARB create a plan that includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06, signed on October 18, 2006, further directed state agencies to begin implementing the Act, including the recommendations made by the State of California's Climate Action Team.

Senate Bill 97

Senate Bill 97 (Chapter 185, Statutes of 2007) required the Governor's Office of Planning and Research to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

BAAQMD CEQA Guidelines

The BAAQMD Air Quality Guidelines supply emissions thresholds for sources of GHG emissions. These thresholds include an emissions threshold of 1,100 metric tons (MT) per year for land-use type projects and 10,000 MT per year for stationary sources. Any projects emitting GHGs above these thresholds would be considered to have a cumulatively considerable significant impact.

City of Mountain View General Plan

The City's General Plan includes a Greenhouse Gas Reduction Program (GGRP),[84] which contains goals and policies through which the City implements GHG reduction strategies. These strategies are designed to coincide

[84] City. 2012b. Mountain View Greenhouse Gas Reduction Program. City of Mountain View. Mountain View, California. Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?blobid=10700.

with the statewide GHG reduction targets established by AB 32, which calls for emission reductions to below 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

3.8.2 DISCUSSION

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

Project Construction

Construction-related GHG emissions would be generated by vehicle engine exhaust from construction equipment, haul trips, and construction worker trips. GHG emissions generated by the project would consist primarily of CO_2. Emissions of other GHGs, such as CH_4 and N_2O, are important in regard to global climate change; however, even when considering the higher GWPs of these other GHGs, their contribution to total GHG emissions is small compared with CO_2 emissions from the project's emission sources (i.e., construction equipment and on-road vehicles). However, where appropriate emission factors were available, emissions of CH_4 and N_2O were included in the analysis of the project.

The BAAQMD CEQA Air Quality Guidelines contain methodology and thresholds of significance for evaluating GHG emissions from land use projects. The BAAQMD thresholds were developed specifically for the Bay Area after considering the latest Bay Area GHG inventory and the effects of AB 32 scoping plan measures that would reduce regional emissions. The BAAQMD applies GHG efficiency thresholds to projects with emissions of 1,100 MT of CO_2e or greater. Projects that have emissions below 1,100 MT of CO_2e per year are considered to have less-than-significant GHG emissions. These thresholds are typically applied to long-term operational emissions.

Construction of the project would generate approximately 196 MT CO_2e over the entire construction period, which would last up to 6 months. These would be well below the 1,100 MT per year threshold that is used to judge the significance of GHG emissions from projects. Therefore, this impact would be **less than significant**.

Additional emission modeling assumptions and details (project's size, land uses, construction schedule, and other CalEEMod inputs) are provided in Appendix A.

Project Operations

Implementation of the project would not require or result in additional operational and maintenance activities above existing conditions. Therefore, **no impact** would occur as a result of the proposed project's operation.

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

Project Construction

None of the measures listed in the CARB *Climate Change Scoping Plan* (2008), which contains the main strategies that California would use to achieve emission reductions necessary to meet the goals of AB 32, relate directly to construction activities. The scoping plan includes some measures that would indirectly address GHG emissions levels associated with construction activity, such as the phasing in of cleaner technology for diesel

engine fleets (including construction equipment) and the development of a low-carbon fuel standard. However, the successful implementation of these measures depends primarily on the development of laws and policies at the state level. It is assumed that those policies formulated under the mandate of AB 32 that apply to construction-related activity, either directly or indirectly, would be implemented during construction of the project if those policies and laws were developed and adopted before the start of project construction. Therefore, project construction is not expected to conflict with the scoping plan.

Also, in August 2012, the City adopted the GGRP, a tool designed to implement the General Plan energy and climate change policies. The GGRP identified five main reduction strategies in transportation, energy, water, solid waste, and carbon sequestration. The Project's consistency with the five strategies is outlined in Table 3.8-1. The project would not conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. As outlined in Table 3.8-1, the proposed project is consistent with the GGRP's strategies to reduce GHG emissions. Therefore, this construction-related impact would be **less than significant**.

Table 3.8-1 Project Consistency with GGRP GHG Reduction Strategies

Program Strategy	Project Consistency
Energy: The Energy Strategy recommends ways to increase energy efficiency in existing buildings, enhance energy performance for new construction, and increase the use of renewable energy.	**Not Applicable.** The proposed project does not propose new building construction.
Waste: The Waste Strategy increases waste diversion and recycling, reducing the consumption of materials that otherwise end up in landfills.	**Consistent.** Proposed project construction would adhere to the City's construction and demolition waste tracking and diversion requirements[85] and would not conflict with this strategy.
Water: The Water Strategy promotes the efficient use and conservation of water in buildings and landscapes.	**Consistent.** The project would use regionally appropriate plants requiring minimal supplemental irrigation. The project would comply with established landscaping regulations to reduce water waste.
Transportation: The Transportation Strategy encourages transit, carpooling, walking, and bicycling as viable transportation modes to decrease the need to drive.	**Not applicable.** Although the project involves resurfacing of a multi-use trail, the trail is not in a transportation corridor where vehicles are also used.
Carbon Sequestration: The Carbon Sequestration Strategy uses street trees and urban forestry to capture and store carbon emitted from other sources.	**Not Applicable.** The proposed project is not related to urban forestry.

Source: City 2012a

Project Operations

Project operations would not require or result in additional operational and maintenance activities above existing conditions. Therefore, **no impact** would occur as a result of the proposed project operation.

[85] City. n.d. "Construction and Demolition Waste Tracking and Diversion Requirements." Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=30741.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
IX.	**Hazards and Hazardous Materials. Would the project:**				
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/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☒	☐	☐
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?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

3.9.1 ENVIRONMENTAL SETTING

Known Hazardous Materials Sites

AECOM performed a search of publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the "Cortese List") to determine whether any known hazardous materials are present either in or within 0.25 mile of the project site. The Hazardous Waste and Substances Site List (the "EnviroStor" database) is maintained by the California Department of Toxic Substances Control (DTSC) as part of the requirements of Public Resources Code Section 65962.5. The State Water Resources Control Board (SWRCB) maintains the GeoTracker database, an information management system for groundwater. The results of records searches from the EnviroStor[86] and GeoTracker[87] databases indicate that there are three open active cases within

[86] California Department of Toxic Substances Control (DTSC). 2019. EnviroStor. Available online at: https://www.envirostor.dtsc.ca.gov/public/. Accessed December 11, 2019.

[87] State Water Resources Control Board (SWRCB). 2019. GeoTracker. Available online at: https://geotracker.waterboards.ca.gov/. Accessed December 11, 2019.

0.25 mile of the project site: Mountain View Shoreline Landfill (MVSL), Former Los Altos Treatment Plant Site, and Casey Avenue Site; each of these sites is discussed in detail below.

Mountain View Shoreline Landfill

The MVSL is a closed Class III solid waste landfill in Mountain View. The MVSL is integrated in and underlies the Shoreline Regional Park, where the project site is located. The information presented below related to the MVSL is summarized from the *Shoreline Landfill Master Plan Final Draft*.[88] The landfill consists of three distinct and separate sites: the 544-acre waste area, containing approximately 350 acres of waste; the 84-acre Vista Landfill area, containing approximately 65 acres of waste; and the 27-acre Crittenden Landfill area, containing approximately 24 acres of waste. The City established a master plan for the site prior to acceptance of waste that allowed the diversion of selected materials to specific areas, based on the area's intended end use. The waste was recycled and concrete was crushed and sold as aggregate whenever possible. Once the MVSL landfill reached its permitted height, the landfill was closed and engineered to protect human health and the environment by installing a low-permeability cap. The final cover consisted of a compacted clay material immediately adjacent to the waste, followed by a layer of topsoil to support vegetation. The cap prevents human exposure to waste materials underneath Shoreline Regional Park, and also limits the amount of rainfall that can permeate through the waste materials, thereby reducing the amount of leachate in the landfill cells.

544-Acre Waste Area

The 544-acre parcel was purchased in 1970 by the City and was operated as a solid waste disposal facility through 1981. The City accepted 8,450,000 tons of refuse during its operation. The 544-acre waste area was operated under Solid Waste Facilities Permit No. 43-AA-0006. This area received approximately 12,500,000 cubic yards of nonhazardous solid waste in 13 separate waste disposal cells. The waste received included construction/ demolition, landscaping, and noncontract municipal waste. Some municipal sludge was accepted and used as a soil amendment. No hazardous wastes, sewage, or grease interceptor wastes were accepted. The 544-acre waste area has been subdivided into the North Shore, Back Nine, Front Nine, and 6A Northeast areas, as shown on Figure 3.9-1.

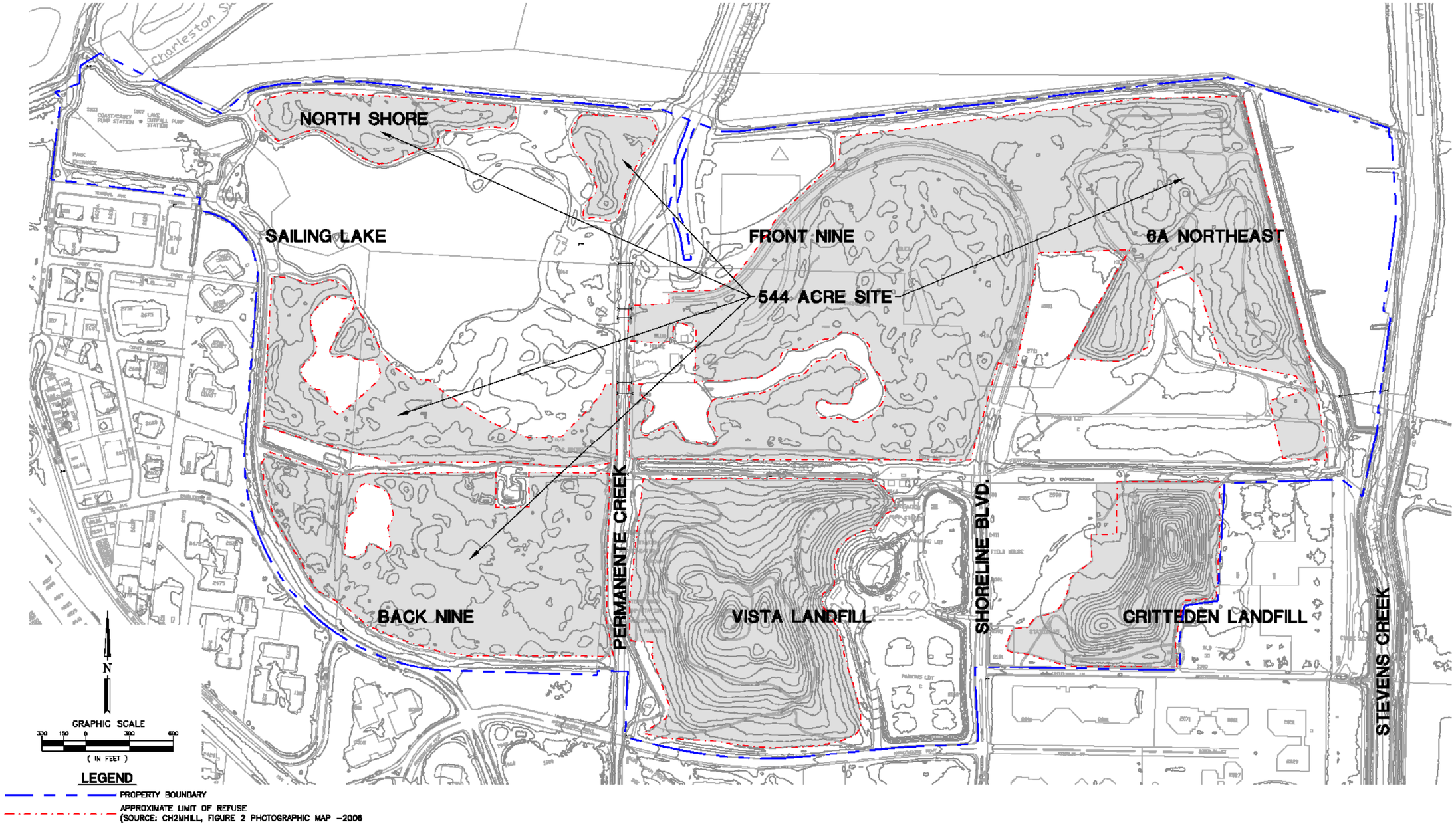
The 544-acre waste area was closed under the prescriptive requirements of the CCR Title 14 in the 1980s, which required a 3- to 4-foot-thick cover with 1-foot-thick clay. Site closure was certified by the San Francisco Bay RWQCB in 1997.

This area includes Coast Casey Forebay, Sailing Lake, and the project site. However, these facilities are not within the approximate limits where refuse was placed, as shown in Figure 3.9-1.

Vista Area

The Vista Landfill area encompasses 84 acres and was operated by the City between 1981 and 1993. Approximately 3,840,000 tons of municipal solid waste were deposited during this period. A portion of this area was leased to Shoreline Amphitheatre Partners in 1986 for the development of the Shoreline Amphitheatre. The Vista Landfill area is on a hill with moderate to steep slopes and is southwest of the 544-acre waste area, on the eastern side of Permanente Creek (see Figure 3.9-1).

[88] City. 2013b. *Shoreline Landfill Master Plan, Final Draft*. Prepared by: Tetra Tech BAS. Project No. 12-39. Oakland, California.



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City of Mountain View
Sailing Lake Access Road Improvement Project

FIGURE 3.9-1
Mountain View Shoreline Landfill

Closure of the Vista Landfill area was approved by the San Francisco Bay RWQCB and CalRecycle (formerly the California Integrated Waste Management Board) under the prescriptive requirements of CCR Title 27, with a cover consisting of three layers: 2 feet of soil adjacent to the waste materials, followed by a 1-foot-thick clay layer, and a 2-foot-thick soil cap on the top.

Crittenden Landfill Area

The 27-acre Crittenden Landfill area accepted approximately 800,000 tons of waste from 1968 through 1988. This area was operated as a privately owned landfill by the Ferrari Brothers starting in 1968, and was acquired by the City in 1984. Some refuse was excavated and reconsolidated in 1995 and 1996 to form the current footprint of this area. The Crittenden Landfill area is on a hill with moderate to steep slopes. It is southeast of the 544-acre site and east of the Vista Landfill site (see Figure 3.9-1).

Closure of the Crittenden Landfill Site was approved by the San Francisco Bay RWQCB and CalRecycle under the prescriptive requirements of CCR Title 27, with a cover consisting of three layers: 1 foot of soil adjacent to the waste materials, followed by a 1-foot-thick clay layer, and 2-foot-thick soil vegetation layer on the top.

Landfill Monitoring and Maintenance

The landfill's post-closure infrastructure includes a below-grade gas collection and control system (GCCS), consisting of three distinct piping networks typically co-located within the same trench (i.e., landfill gas collection, leachate collection, and compressed air supply); groundwater monitoring network; stormwater control infrastructure; and the leachate and condensate disposal systems.

The City is responsible for the post-closure maintenance and operation of the extensive landfill GCCS. Construction on the initial phase of the GCCS for the 544-acre site (where the project site is located) began in 1977 and was completed in 1978; it was subsequently expanded in 1986, 1989, 1993, 1994, 1995, and 2000. The system at the 544-acre site includes 140 vertical extraction wells and six horizontal trench collectors. The MVSL has perimeter vent trenches that prevent migration of landfill gas beyond the property boundary. Collected landfill gas is directed to the central landfill gas flare station along the northern portion of the Vista Landfill site. The landfill gas is converted into energy by means of micro-turbines, which supply energy for the flare station and the sewage pump station. PG&E purchases some of the excess energy generated by the micro-turbines, and some of the excess energy is also sold to the nearby Google campus. Subsurface landfill fires can occur at any landfill with or without a GCCS. Although landfill fires are infrequent occurrences, they can be difficult and costly to extinguish. Historically, the MVSL has had one subsurface landfill fire every 3 to 5 years.

In accordance with state and federal requirements, including San Francisco Bay RWQCB Order No. 96-040, groundwater is monitored at MVSL to ensure that waste constituents do not adversely affect groundwater quality. Groundwater monitoring is performed semi-annually at MVSL.

Water that comes into contact with landfill wastes and potentially leaches out contaminants is considered "leachate." Because leachate poses a threat to water quality near landfills, it is pumped and treated where possible. Leachate extraction at the MVSL is performed using dual-purpose gas/leachate extraction wells, which also enhance the facility's gas collection capabilities. The extracted leachate is conveyed by the sanitary sewer system to the Palo Alto Regional Water Pollution Control Plant for treatment.

In addition to leachate, landfill gas condensate is also generated at the MVSL site. Condensate consists of vapors that condense into a liquid due to cooling in the landfill gas extraction system. The leachate and condensate are permitted to be discharged at three different connections to the City's sanitary sewer system for transport to the Palo Alto Regional Water Quality Control Plant under Waste Discharge Permit No. 546 issued for the MVSL.

Former Los Altos Treatment Plant Site

This open, active case (SWRCB Site No. SL0608598778) is approximately 1,100 feet west of the project site, and is separated by a levee from the western side of the Coast Casey Forebay. This 13.26-acre site contains abandoned structures relating to a former sewage treatment plant and sewage treatment ponds operated by the City of Los Altos from 1958 to 1972. Soluble lead, reactive sulfide, chromium, cobalt, copper, nickel, zinc, and arsenic have all been detected above their respective screening and regulatory human and environmental health thresholds. Reactive sulfide is currently "trapped" in the sludge below the water in the former wastewater treatment ponds. When disturbed, this sludge releases hydrogen sulfide gas that has been detected at levels determined to be "immediately dangerous to life and health." Water in Pond 5 has been found to contain values of arsenic, cobalt, copper, nickel selenium, vanadium, and zinc above Estuary Habitat environmental screening level concentration limits. No exceedances were found in groundwater sampled at the site.[89]

Casey Avenue Site

This open, active case (SWRCB Site No. SL1821Y617) is located at 2690 Casey Avenue, approximately 950 feet southwest of the project site. From 1963 to 1984, Perkin-Elmer operated a stainless steel vacuum pump manufacturing facility at this site, which is currently occupied by several office buildings. Tetrachloroethene (PCE), sodium hydroxide, ammonia, methanol, and various acid solutions were used at the site during the manufacturing process. The results of soil and groundwater sampling indicate that chlorinated volatile organic compounds—including PCE and its break-down products such as trichloroethene, cis-1,2-dichloroethene, and vinyl chloride—are present in two small areas at western end of the site where groundwater is contaminated at levels that exceed one or more cleanup standards. Contaminated soil has been excavated and removed at level locations. Routine soil gas, groundwater monitoring, indoor air sampling, and reporting are conducted at the site and in the associated buildings for continued evaluation of potential risks associated with contaminants of concern.[90]

Schools

The nearest K-12 school is The Girls' Middle School, at 3400 W. Bayshore Road, Palo Alto, approximately 0.75 mile west of the project site (on the western side of U.S. 101).

[89] SWRCB. 2019.

[90] SWRCB. 2019.

Airports

The Palo Alto Airport is approximately 1.6 miles northwest of the project site. This public-use airport owned by the City of Palo Alto has one paved runway approximately 2,433 feet long, with 92 aircraft based at the field and an average of 525 flights per day.[91] The project site is underneath the Runway 31 typical aircraft traffic patterns, but is not within the height-restricted area under Federal Aviation Regulations Part 77, is not within any of the airport safety zones, and is not within the airport influence area.[92]

Moffett Federal Airfield is approximately 2.2 miles southeast of the project site. This private-use airport owned by the National Aeronautics and Space Administration has two paved runways that are 9,197 and 8,122 feet long, respectively. There are 50 aircraft based at the field.[93] The project site is within the height-restricted area under Federal Aviation Regulations Part 77; the maximum height of any structure is limited to 282 feet above msl. However, the project site is not within any of the designated airport safety zones, nor is it within the airport influence area.[94]

Fire Hazards

The project site is not in a wildland fire hazard area.[95,96] Existing fire protection services are provided by the Mountain View Fire Department (MVFD).

3.9.2 DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol and the California Department of Transportation, and use of these materials is regulated by DTSC, as outlined in CCR Title 22. The City and its construction contractors would be required to use, store, and transport hazardous materials in compliance with applicable federal and state regulations during project construction and operation. Because the project would be required to implement and comply with existing hazardous material regulations; and because each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies, this impact would be **less than significant**.

[91] AirNav. 2019a. Palo Alto Airport. Available online at: https://airnav.com/airport/KPAO. Accessed December 11, 2019.

[92] Santa Clara County Airport Land Use Commission. 2016a. *Comprehensive Land Use Plan Santa Clara County, Palo Alto Airport*. Available online at: https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx. Accessed December 11, 2019.

[93] AirNav. 2019b. Moffett Federal Airfield. Available online at: https://airnav.com/airport/KNUQ. Accessed December 11, 2019.

[94] Santa Clara County Airport Land Use Commission. 2016b. *Comprehensive Land Use Plan Santa Clara County, Moffett Federal Airfield*. Available online at: https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx. Accessed December 11, 2019.

[95] California Department of Forestry and Fire Protection (CAL FIRE). 2007. *Santa Clara County—Fire Hazard Severity Zones in SRA*. Available online at: https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed December 11, 2019.

[96] CAL FIRE. 2008. *Santa Clara County—Very High Fire Hazard Severity Zones in LRA*. October. Available online at: https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed December 11, 2019.

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

Construction of the proposed project would entail the use of small amounts of hazardous materials such as fuel, oils, and solvents. However, the use of these materials is heavily regulated at both the federal and state level. As stated in Section 2.6, Construction Best Management Practices, hazardous materials would be stored in an area protected from rainfall and stormwater run-off, to prevent the offsite discharge of leaks or spills. Furthermore, because the proposed project would disturb more than 1 acre of land, the City is required by law to develop and implement a SWPPP with appropriate BMPs, such as spill prevention and contingency measures to reduce the potential for accidental spills and procedures for implementation of appropriate and timely cleanup activities if spills do occur. Therefore, this impact would be **less than significant**.

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

There are no K-12 schools within 0.25 mile of the project site; the nearest K-12 school is The Girls' Middle School, approximately 0.75 mile to the west. Furthermore, construction of the proposed improvements to Shoreline Lake Dam and its access road would not result in the handling of acutely hazardous materials. Therefore, there would be **no impact.**

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

As described in detail above in the "Environmental Setting," there are three open, active known hazardous material sites that are on the Cortese List (i.e., compiled pursuant to Government Code Section 65962.5) within 0.25 mile of the project site. The Casey Avenue site, approximately 950 feet southwest of the project site, contains two small contaminated groundwater plumes. However, the contaminated groundwater is in the process of being remediated, and because the direction of groundwater flow is to the north toward San Francisco Bay, project-related excavation activities would not encounter the contaminated plume. The soil and residual sludge at the former Los Altos Treatment Plant Site is heavily contaminated with a variety of chemicals. However, project-related construction activities would be conducted approximately 1,100 feet west of the contaminated area. Therefore, neither of these sites would pose a human or environmental health hazard for the proposed project.

The MVSL underlies and is incorporated within the Shoreline Regional Park, where the project site is located. As shown in Figure 3.9-1, Sailing Lake (including the dam) and the adjacent Coast Casey Forebay are within the 544-acre waste area, but are outside of the approximate limits of refuse placement. However, the North Shore portion of the 544-acre waste area, which contains refuse, is immediately adjacent to and northeast of the project site.

The engineered final cover system at the MVSL ensures the protection of human health and the environment by containing lateral migration of leachate that can contaminate surface water; minimizing the infiltration of precipitation that generates leachate, thereby reducing potential groundwater contamination; and enhancing the collection of landfill gas, which can be used as an energy source or destroyed in the landfill's gas flare system. The final cover functions with minimum maintenance and provides waste containment to protect public health and safety by controlling vectors, fire, odor, litter and landfill gas emissions. The cover also prevents direct

human and wildlife contact with landfill refuse. Several factors were taken into consideration in establishing the final cover design for the MVSL, including the geometry of the existing landfill and local climatic conditions. The final cover is also compatible with post-closure land use and provides a base for vegetation, which reduces drainage velocities and erosion. In addition, the final cover configuration is designed to accommodate waste settlement and subsidence as well as the effects of seismic events specified in the regulations throughout the minimum 30-year post-closure maintenance period and beyond. The completed final cover over the MVSL performs the following functions:[97]

- minimizes stormwater infiltration into and through the closed landfill;
- minimizes the venting of gas generated in the facility;
- isolates the buried wastes from the surface;
- promotes drainage;
- minimizes erosion or abrasion of the cover; and
- accommodates settlement and subsidence so that cover integrity and positive drainage is maintained.

The proposed project has been designed to avoid any disturbance to the landfill cover, based on the landfill as-built plans. Furthermore, the project-related grading has been designed to allow for proper surface drainage without creating any areas of ponding, in accordance with San Francisco Bay RWQCB Order No. 96-040. However, the precise limits of the landfill refuse in relationship to project-related construction activities cannot be known with certainty. Therefore, it is possible that project-related excavation and/or grading could encounter landfill refuse, resulting in a human and environmental health hazard. Furthermore, landfill discharge lines, gas lines, leachate collection lines, and air supply lines are present underground and traverse the project site. Accidental rupture of these lines could result in a human and environmental health hazard. Therefore, this impact is considered potentially significant.

Mitigation Measure HAZ-1: Prepare and Implement a Health and Safety Plan.

Prepare a Health and Safety Plan that is designed to provide processes and procedures to minimize human health effects and environmental contamination resulting from expose to MVSL refuse, landfill gas, or landfill leachate. The plan shall describe response protocols and address specific needs in the event of an accidental exposure, rupture, release, or spill that poses a threat to the environment or to human health and welfare. The plan shall include, at a minimum, the following requirements:

- implementing construction worker training related to potential for hazardous materials, including job site briefings to discuss specific measures that will be implemented for spill prevention, reporting, and prompt clean-up;

- educating construction workers regarding the location of existing landfill gas, leachate, and air lines to be avoided during construction activities; and

- proper notification procedures to be followed and actions to be implemented in the event that landfill refuse is encountered or landfill gas or leachate lines are ruptured.

[97] City. 2013b.

The Health and Safety Plan prepared by the contractor shall be submitted to the MVFD and the Public Works Department for review and approval prior to the start of any construction activities.

Implementation of Mitigation Measure HAZ-1 would reduce the impact related to construction in a Cortese-listed site to a less-than-significant level because a Health and Safety Plan would be prepared and implemented that requires construction worker personnel training, and details proper notification procedures and actions to be taken if landfill materials are encountered. Therefore, this impact would be **less than significant with mitigation.**

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?

The nearest airports are the Palo Alto Airport and Moffett Field, approximately 1.6 miles north and 2.2 miles southeast of the project site, respectively. Proposed improvements at the Shoreline Lake Dam and its access road would have no effect on airport safety hazards because the proposed project would not include tall buildings, would not include nighttime lighting that could be mistaken for airport lighting, and would not result in an increase in waterfowl habitat that could result in birdstrikes. The existing dam is 15 feet high, and would be raised by an additional 3.5 feet; the use of tall cranes during construction activity would not be required. Furthermore, the project site is not within the safety zones or the airport influence areas of either airport. Therefore, there would be **no impact**. (Please see Section 3.12, "Noise," for an evaluation of noise impacts.)

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

A paved roadway on top of the Shoreline Lake Dam already provides access for maintenance activities. At the conclusion of project-related improvements, the roadway on top of the dam would be improved to provide support for future construction vehicles accessing the South Bay Salt Pond Restoration Project area. The existing roadway over the dam does not provide access to any other area and does not serve as an emergency evacuation route. Therefore, having the dam access road temporarily unavailable during construction activities would have no effect on adopted emergency response plans or emergency evacuation plans. Emergency access to the western end of Shoreline Regional Park would continue to be provided through the existing paved pathway at the eastern end of Terminal Boulevard. Therefore, there would be **no impact.**

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

As discussed in detail in Section 3.20, "Wildfire," the project site and vicinity are in a local responsibility area (LRA) rather than a state responsibility area (SRA), and are not classified as a very high or high fire hazard severity zone.[98,99] The project site is in Shoreline Regional Park, and is surrounded by Sailing Lake and the Shoreline Golf Links golf course, San Francisco Bay, Coast Casey Forebay, and high-intensity office uses; the project area is not adjacent to any wildlands. Fire protection services would continue to be provided by the MVFD Station No. 5, which has sufficient capacity to serve the proposed project. Therefore, the proposed project would have **no impact** related to exposure of people or structures to wildland fires.

[98] CAL FIRE. 2007.

[99] CAL FIRE. 2008,

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
X. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; or	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 ENVIRONMENTAL SETTING

Surface Water

Shoreline Lake Dam impounds Sailing Lake—a boating facility that is part of Shoreline Regional Park. Salt water is regularly pumped into the lake by a submersible pump system in Charleston Slough, northwest of the lake. Water is pumped into the lake at two near-surface discharge points positioned along the northern side of the lake. Water is discharged out of eastern side of the lake to Permanente Creek via a box weir, as regulated under a Lake Management Plan approved by the San Francisco Bay RWQCB.[100] Permanente Creek, which is approximately 0.5 mile east of the project site, discharges into Mountain View Slough. Adobe Creek, which flows northeastward, is approximately 1,300 feet west of the project site, northwest of the Coast Casey Forebay and Charleston Slough. Adobe Creek discharges to the Palo Alto Flood Control Basin, and then into San Francisco Bay. Stevens Creek, which flows northward into San Francisco Bay and discharges into Whisman Slough, is approximately 1.75 miles east of the project site.

[100] Nirmal Sajjan, Principal Civil Engineer, City of Mountain View, 2020. Personal communication.

In addition to regular water sampling and analyses, Sailing Lake operations include regular replenishment of lake waters from Charleston Slough and operation of a SolarBee© system[101] to improve circulation within the lake, reduce stratification, and increase the dissolved oxygen content in the lake's water column. The banks of Shoreline Lake are protected by riprap and grout to provide an armoring of the shoreline to resist erosion. The riprap is keyed into undisturbed native soil to stabilize the slope protection materials.[102]

The City is authorized by San Francisco RWQCB Order No. 93-120 to discharge up to 3,250 gallons of lake water to the adjacent Coast Casey Forebay, no more than twice each year, to control weed growth and maintain stormwater retention capacity. The discharge mixes with urban stormwater runoff that is pumped into the Palo Alto Flood Control Basin (to the northeast), which in turn discharges to the South San Francisco Bay.

Surface Water Quality

As discussed in detail in Section 3.9, "Hazards and Hazardous Materials," Shoreline Regional Park was constructed at the site of the former MVSL. Sailing Lake, the dam, and the adjacent Coast Casey Forebay are not underlain by refuse materials; however, refuse surrounds Sailing Lake on the northern, eastern, and southern sides (see Figure 3.9-1 in Section 3.9, "Hazards and Hazardous Materials"). Stormwater at the former MVSL is monitored by the City under the SWRCB's Industrial General Permit, Order 2014-0057-DWQ. Water that comes into contact with landfill wastes and potentially leaches out contaminants is considered "leachate." Because leachate poses a threat to water quality near landfills, it is pumped and treated where possible. Leachate extraction at the MVSL is performed using dual-purpose gas/leachate extraction wells, which also enhance the facility's gas collection capabilities. The extracted leachate is conveyed by the sanitary sewer system to the Palo Alto Regional Water Pollution Control Plant for treatment. The landfill cap prevents human exposure to waste materials underneath Shoreline Regional Park, and also limits the amount of rainfall that can permeate through the waste materials, thus reducing the amount of leachate in stormwater. As part of the industrial general permit, the City implements a SWPPP and associated BMPs) related to the MVSL. Two samples per year are obtained from each of four sampling points, the results of which are submitted to the SWRCB in a yearly report, to ensure that pollutants in MVSL stormwater do not result in degradation of water quality.[103]

Flooding

The Coast Casey Forebay, immediately adjacent to Shoreline Lake Dam on the western side, regulates peak storm water flows from an area bounded by Rengstorff Avenue to the east, Terminal Boulevard to the north, and San Antonio Road to the west. The Coast Casey pump station is along the Bay, north of U.S. 101, and at the end of San Antonio Road. Stormwater that drains into the Coast Casey Forebay is pumped out directly to the Palo Alto Flood Control Basin, northwest of the project site.[104]

Shoreline Regional Park is bounded by a perimeter earthworks levee system that was constructed in the 1970s to separate the former MVSL from former salt evaporator ponds (on the northern side), Stevens Creek (on the eastern side), and Charleston Slough (on the northwestern side). Smaller levees also border the eastern and

[101] A SolarBee® is a small, floating pump powered by solar panels that circulates water at a preset depth.

[102] City. 2013b.

[103] City. 2013b.

[104] City. 2013b.

western sides of Permanente Creek.[105] A levee is also present along the northern side of Shoreline Regional Park where it borders the Bay.

According to the most recent Flood Insurance Rate Map prepared by the Federal Emergency Management Agency's (FEMA's) National Flood Insurance Program,[106] most of the project site and all of the proposed offsite staging area are classified as Zone AE—a 100-year flood hazard zone (1 percent annual exceedance probability) where the base flood elevation has been determined (see Figure 3.10-1).

Groundwater

Groundwater at the project site and the immediate vicinity occurs in numerous localized and discontinuous sand and gravel zones representing ancient streambeds, which are now enclosed in a matrix of silt and clay. Groundwater generally flows from upland areas south of Shoreline Regional Park northward toward San Francisco Bay. There are two aquifers underneath Shoreline Regional Park. The upper aquifer is an unconfined unit that occurs at elevations ranging from approximately -5 feet msl to about -70 feet msl. There is an extensive (approximately 70-foot-thick) regional aquitard, which confines the lower aquifer, at an elevation of approximately -140 feet msl.[107]

Groundwater Quality

Radial flow of groundwater into the MVSL facility is maintained using three pumping centers to ensure that leachate from the MVSL does not migrate off site. Most pumping occurs at the Crittenden Sump, which is positioned immediately west of the former Crittenden landfill site (see Section 3.9, "Hazards and Hazardous Materials," for additional details). Smaller groundwater volumes are pumped along the western side of the Crittenden site by two extraction wells, which discharge to Permanente Creek via a lake discharge pipe from the lake weir outlet. Groundwater control has also been enhanced passively by groundwater infiltration into sewer lines that underlie the MVSL. The influence of these pumping systems overlaps and modifies the local groundwater flow patterns by reducing typical groundwater levels in the area (ranging from approximately 5 to 15 feet below the ground surface) to depths as great as 60 feet, and by inducing radial inward flow from a distance of approximately 1 mile. Groundwater pumped at the Crittenden Sump is discharged to Stevens Creek in accordance with San Francisco Bay RWQCB Order No. R2-2017-0048 (VOC and Fuel General Permit).[108] The Crittenden Sump pumps at an average rate of approximately 70 to 80 gallons per minute. The two extraction wells were designed and positioned near Shoreline Lake, based on numerical modeling performed in 1996 as part of the landfill closure. With their installation in 2004, the two wells act to complement pumping at Crittenden Sump and ensure that groundwater does not flow away from the MVSL. In accordance with state and federal requirements, including San Francisco Bay RWQCB Order No. 96-040, groundwater monitoring is performed semi-annually at MVSL.[109]

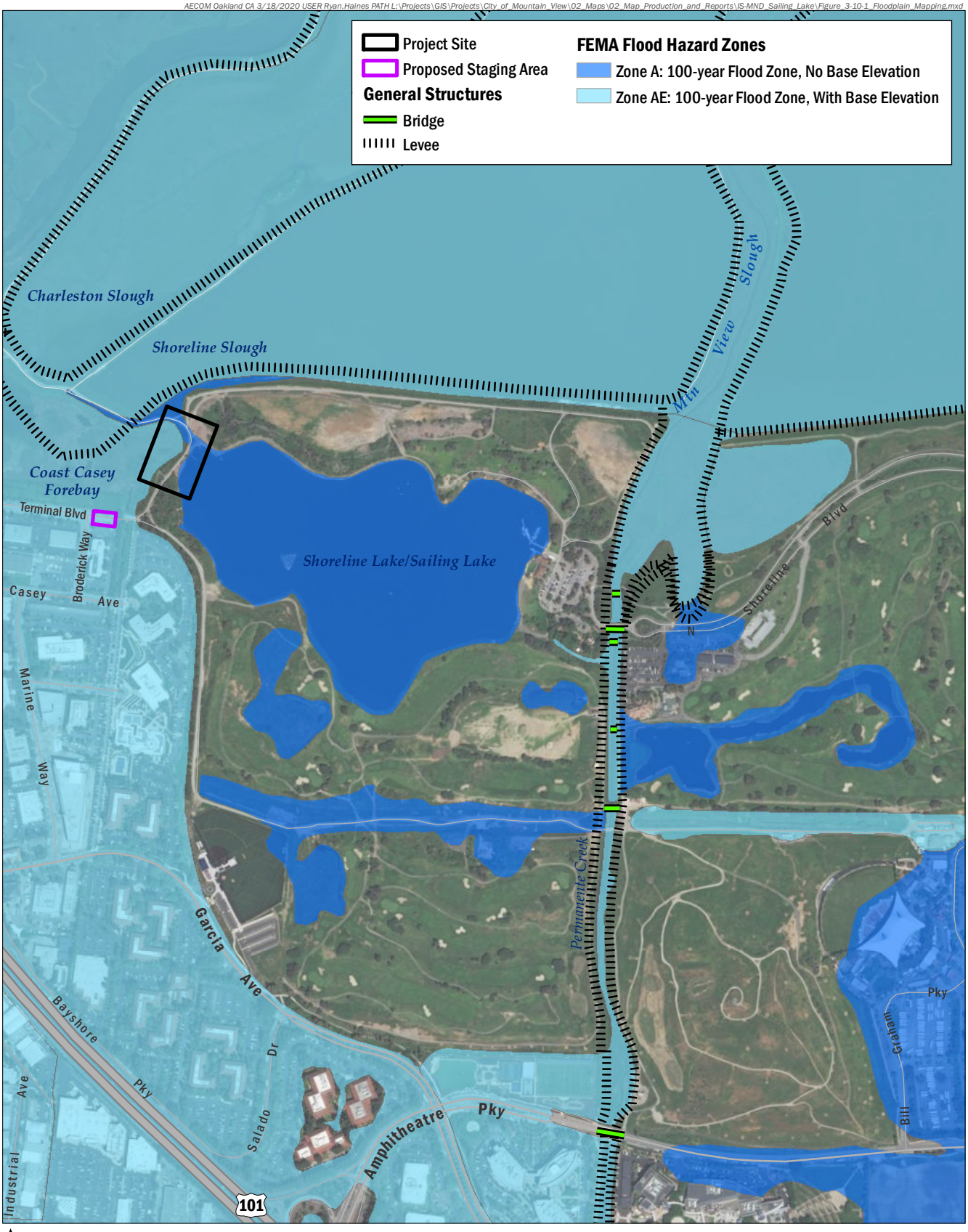
[105] City. 2013b.

[106] Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map, FEMA Flood Map Service Center. Available online at: https://msc.fema.gov/portal/home#. Accessed December 30, 2019.

[107] City. 2013b.

[108] San Francisco Bay Regional Water Quality Control Board (RWQCB). 2017. *General Waste Discharge Requirements for Discharge or Reclamation of Extracted and Treated Groundwater Resulting from the Cleanup of Groundwater Polluted by Volatile Organic Compounds (VOCs), Fuel Leaks, Fuel Additives, and Other Related Wastes*. Order No. R2-2017-0048 (NPDES No. CAG912002).

[109] City. 2013b.



AECOM

City of Mountain View

Sailing Lake Access Road Improvement Project

FIGURE 3.10-1

Floodplain Mapping

3.10.2 DISCUSSION

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

The proposed project would require construction over an approximately 3-acre site. The project-related grading has been designed to allow for proper surface drainage without creating any areas of ponding, in accordance with San Francisco Bay RWQCB Order No. 96-040. The depth to groundwater at the project site where the stability berm would be installed is near the ground surface. The maximum depth of excavation for project-related activities is estimated to be approximately 2 feet below the ground surface. Therefore, construction localized dewatering measures (e.g., sandbags) may be required; dewatering via pumping is not anticipated to be necessary. In addition, project-related construction would require vegetation removal, excavation, and grading. These activities would expose soil to the erosive forces of water if construction activities occur during the winter rainy season. Material stockpiling and storage of equipment at the paved offsite staging area could result in erosion of stockpiled soils and transport of hazardous materials such as fuels and oils from construction equipment in stormwater.

Erosion and construction-related wastes have the potential to degrade water quality and beneficial uses if they enter runoff and flow into waterways, potentially altering the dissolved oxygen content, temperature, pH, suspended sediment and turbidity levels, and/or nutrient content of receiving waters; or causing toxic effects in the aquatic environment. Therefore, project-related construction activities could violate water quality standards or otherwise substantially degrade water quality.

Stormwater runoff from work on the dam crest could result in the transport of sediments and other pollutants into Sailing Lake. Water quality in Sailing Lake is regulated under a Lake Management Plan approved by the San Francisco Bay RWQCB.[110] Stormwater from installation of the stability berm and blanket drain, as well as from materials stockpiles and equipment storage at the offsite staging area, could also result in the transport of sediments and other pollutants into the Coast Casey Forebay, which discharges to the Palo Alto Flood Control Basin. However, the Coast Casey Forebay serves as a detention basin in which sediments carried by stormwater are allowed to settle on the Forebay. The Palo Alto Flood Control Basin provides a similar opportunity for settling of sediments carried by stormwater prior to discharge to the San Francisco Bay. Water quality in the San Francisco Bay and its tributary streams is regulated by the San Francisco Bay RWQCB under the *San Francisco Bay Basin Water Quality Control Plan* (Basin Plan).[111]

The proposed project is required by law to comply with the provisions of the SWRCB's *NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-009-DWQ as amended by Order 2012-0006-DWQ) (Construction General Permit).[112] The Construction General Permit regulates stormwater discharges for construction activities under the Clean Water Act, and applies to all land-disturbing construction activities that would disturb 1 acre or more. The project applicant must submit a notice of intent to discharge to the San Francisco Bay RWQCB, and must prepare and implement a SWPPP that

[110] Nirmal Sajjan, Principal Civil Engineer, City of Mountain View, 2020. Personal communication.

[111] San Francisco RWQCB. 2017. *San Francisco Bay Basin Water Quality Control Plan*. Available online at: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html. Accessed December 29, 2019.

[112] SWRCB. 2012. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2012-006-DWQ*. Available online at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2012/wqo2012_0006_dwq.pdf. Accessed December 30, 2019.

includes BMPs to minimize those discharges. All NPDES permits also have inspection, monitoring, and reporting requirements. Dischargers must also implement construction and operational design features and BMPs that are specifically intended to reduce the potential for downstream hydromodification. The Construction General Permit also requires implementation of BMPs that are designed to prevent accidental spills of hazardous materials during the construction phase to the maximum extent practicable, and the SWPPP must include procedures for immediate cleanup should any releases occur. The San Francisco Bay RWQCB also has the authority to issue waivers to reports of waste discharge (WDRs) and/or WDRs for broad categories of "low-threat" discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions. This includes minor discharges of uncontaminated groundwater during construction dewatering, which is regulated by the San Francisco Bay RWQCB under the Construction General Permit.

The project site lies within the jurisdiction of the Santa Clara Valley County Urban Runoff Pollution Prevention Program, which has an NPDES permit to discharge stormwater from municipal separate storm sewer systems (MS4 Permit) issued by the San Francisco Bay RWQCB (Order No. R2-2015-0049).[113] The MS4 Permit requires the Santa Clara Valley County Urban Runoff Pollution Prevention Program and its members agencies (including the City) to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit nonstormwater discharges. The MS4 Permit contains requirements for implementing urban runoff controls consistent with the Total Maximum Daily Loads[114] (TMDLs) that apply to the watershed boundaries: the San Francisco Bay and Guadalupe River Watershed Mercury TMDL; the San Francisco Bay Polychlorinated Biphenyls TMDL; and the TMDL for Diazinon and Pesticide-Related Toxicity for Urban Creeks. Project proponents are required to incorporate site design measures, specific treatment measures, hydromodification management measures, and operations and maintenance requirements, all of which are specifically intended to reduce erosion and the transport of sediment and other pollutants in stormwater. Project proponents are also required to incorporate planning for Green Stormwater Infrastructure (GSI) as part of the *Santa Clara Basin Stormwater Resource Plan*.[115] GSI projects use vegetation, soils, and natural processes to capture stormwater and dry weather runoff from impervious surfaces throughout the urban landscape. GSI helps to reduce the quantity of pollutants and runoff entering the storm drain system, recharge groundwater and augment potable water supply, and reduce local flooding.

As part of the project, the City has proposed measures to reduce the potential for sediment and pollutants to be discharged into receiving waters (see Section 2.6, Construction Best Management Practices). These measures include implementing erosion and sediment control measures outlined in a project-specific SWPPP; and staging equipment, materials, and stockpile areas away from concentrated flows of stormwater, water bodies, ditches, and inlets. As described above, the City is required by law to implement stormwater design and site-specific measures to control pollutants in stormwater discharges as part of the MS4 Permit, and to prepare and implement a SWPPP with associated BMPs specifically designed to protect beneficial uses of downstream water bodies as part of the Construction General Permit, all in compliance with the federal Clean Water Act, the state Porter-Cologne Water Quality Act, and the regional Basin Plan. Therefore, with implementation of the proposed BMPs in Section 2.6 and compliance with applicable regulations protecting water quality, this impact would be **less than significant**.

[113] San Francisco RWQCB. 2015. *Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049 (NPDES Permit No. CAS612008)*. Available online at: https://www.cleanwaterprogram.org/images/uploads/R2-2015-0049.pdf. Accessed December 30, 2019.

[114] Total Maximum Daily Load (TMDL) is a regulatory term used to describe a plan for restoring impaired waters; it identifies the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.

[115] Santa Clara Valley County Urban Runoff Pollution Prevention Program. 2019. *Santa Clara Basin Stormwater Resource Plan*. Available online at: https://scvurppp.org/swrp/docs-maps/. Accessed January 14, 2020.

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

The proposed project does not require the use of groundwater. There is groundwater at the project site at depths ranging from approximately -5 to -70 feet msl. Elevations at the project site range from approximately -6 feet msl at the base of the dam to approximately 10 feet msl at the crest of the dam. Project-related excavation activities would extend approximately 2 feet below the ground surface. Therefore, localized dewatering measures (e.g., sandbags) could be required during installation of the stability berm and blanket drain at the toe of the existing dam. Construction dewatering is regulated by the San Francisco Bay RWQCB under the Construction General Permit. Groundwater from any necessary construction dewatering would be discharged into the adjacent Coast Casey Forebay flood basin and thence into the Palo Alto Flood Control Basin, which in turn discharges to San Francisco Bay. Therefore, groundwater from the project site would be able to percolate back into the aquifer. Furthermore, due to the small size and limited scope of the proposed project, only a small amount of dewatering would occur (if any is required). Minor amounts of water for dust control during construction would be supplied by trucks. Therefore, the proposed project would have **no impact** on groundwater supplies or recharge.

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.

The proposed project includes installation of a stability berm at the downstream toe of the dam, which would alter the existing slope on the western side of the dam. However, the stability berm would be constructed of compacted soil, and therefore would not increase the amount of impervious surfaces. Although the existing paved access road on top of the dam crest would be reinforced and resurfaced to accommodate future truck traffic for the South Bay Salt Pond Restoration Project, the impervious surface would not increase because the road would not be widened. The San Francisco Bay RWQCB requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. As part of the Santa Clara Valley County Urban Runoff Pollution Prevention Program, the City would implement measures to reduce stormwater runoff such as slope stabilization, including revegetation. Furthermore, the City would prepare and implement a SWPPP that includes BMPs specifically designed to reduce construction-related erosion and pollutant transport. BMPs may include, but are not limited to, silt fences, staked straw bales/wattles, silt fences, geofabric, trench plugs, terraces, water bars, and soil stabilizers. Therefore, this impact would be **less than significant**.

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

Proposed modifications to stabilize the existing Shoreline Lake Dam would not increase the rate or amount of surface water, because these modifications would be constructed of soil, which would continue to allow stormwater to percolate through the ground as it does now. Although the existing paved access road on top of the dam crest would be reinforced and resurfaced to accommodate future truck traffic for the South Bay Salt Pond Restoration Project, the impervious surface would not increase because the road would not be widened. The stormwater from both construction and operation of the project-related modifications would continue to drain into

the adjacent Coast Casey Forebay flood detention basin, as it does now. The proposed improvements would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Therefore, this impact would be **less than significant**.

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.

The proposed project would not create or contribute runoff water that would exceed the capacity of stormwater drainage systems. For the same reasons discussed in a) and c) i) above, the proposed project would not provide substantial additional sources of polluted runoff. Therefore, this impact would be **less than significant**.

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

The project site is not in a tsunami inundation zone.[116] The potential for seiche activity to result in water overtopping the dam is negligible because there is negligible potential for nearby landsliding into the lake, and the dimensions of the lake are such that it is unlikely to resonate with the periods of the expected earthquake motions (also refer to Section 3.7). Those portions of the project site that are northwest and west of the dam, along with the proposed staging area, are classified by FEMA as a 100-year flood hazard zone (see Figure 3.10-1). One purpose of the proposed increase to the berm crest is to meet DSOD safety criteria to provide adequate freeboard for projected peak flood events. The proposed improvements to the berm and access road would not risk the release of pollutants to the environment due to project inundation. Therefore, this impact would be **less than significant**.

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

For the reasons described in a) and b) above, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be **less than significant**.

[116] California Emergency Management Agency and California Geological Survey. 2009. *Tsunami Inundation Map for Emergency Planning, Mountain View Quadrangle*. Available online at: https://www.conservation.ca.gov/cgs/Documents/Tsunami/Maps/Tsunami_Inundation_Mountain View_Quad_SantaClara.pdf. Accessed December 30, 2019.

3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XI. Land Use and Planning. Would the project:				
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?	☐	☐	☐	☒

3.11.1 ENVIRONMENTAL SETTING

The project site is in Shoreline Regional Park, adjacent to the shoreline of southwestern San Francisco Bay and the Coast Casey Forebay flood control detention basin. Shoreline Lake Dam impounds Sailing Lake, which was constructed as part of the Shoreline Regional Park in 1982. Land uses surrounding the project site consist of the regional park, the Coast Casey Forebay flood detention basin, and high-intensity office buildings.

The project site is zoned and designated for public facility/regional park use. The proposed staging area is in a City-owned parking area on a public street, at the eastern end of Terminal Boulevard, immediately adjacent to the park. The area surrounding the project site is zoned and designated for public facility/regional park use, and high-intensity office land uses in the North Bayshore Precise Plan Area. [117,118]

3.11.2 DISCUSSION

a) Physically divide an established community?

Improvements to the existing Shoreline Lake Dam and access road would occur in the regional park and at the southern end of the Coast Casey Forebay. The proposed 0.25-acre staging area at the eastern end of Terminal Boulevard is between the regional park and the adjacent office buildings; use of the staging area would be short-term and temporary during the construction period. Therefore, the proposed project would not create a physical barrier that would divide an established community, and there would be **no impact.**

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

The proposed project would ensure the continuation of public safety and the protection of environmental resources in the project area by improving the stability of the existing Shoreline Lake Dam. The project site would continue to be used as a dam that impounds Sailing Lake to the east and also serves as the eastern boundary of the Coast Casey Forebay flood detention basin, consistent with existing land use and zoning designations. As described in the various topic areas of this IS, the proposed project would not conflict with regulations or policies

[117] City. 2018a. *General Plan Land Use Map.* Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=10701. Accessed November 14, 2019.

[118] City. 2018b. *Zoning Map.* Available online at: https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=10990. Accessed November 14, 2019.

in the City's 2030 General Plan[119] that were adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, there would be **no impact.**

[119] City. 2012a. *Mountain View 2030 General Plan.* Adopted 2012, amended 2017. Available online at: https://www.mountainview.gov/depts/comdev/planning/regulations/general.asp. Accessed November 15, 2019.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XII. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.12.1 ENVIRONMENTAL SETTING

The project site is located in the Shoreline Regional Park and the Coast Casey Forebay, near the shoreline of San Francisco Bay. Shoreline Regional Park is underlain by a former landfill, which is covered by an approximately 1-foot-thick compacted clay layer and an approximately 2-foot-thick soil cap.[120] Based on the results of soil borings, the project site is composed of clayey sand to sandy lean clay with gravel embankment fill, overlying Young Bay Mud and older alluvial deposits.[121] Salt was formerly obtained from evaporation ponds in the project area; however, the area is now being restored to tidal marsh habitat as part of the South Bay Salt Pond Restoration Project.

3.12.2 DISCUSSION

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

The project site is in a regional park, within the limits for a former landfill. As stated in the *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR*,[122] mineral lands classification performed by the California Geological Survey (CGS) in 1987 included a small area along Stevens Creek, southeast of the project site, which was classified MRZ-3,[123] "areas containing mineral deposits the significance of which cannot be evaluated from the available data." Based on subsequent mineral land classification performed in 1996, CGS determined that there are no minerals or aggregate resources of statewide importance are within the City limits. Evaporative salt mining in the project area is no longer occurring. Therefore, the proposed project would not result in the loss of availability of a regionally important mineral resource, and there would be **no impact.**

[120] City. 2013b.

[121] City. 2019b. *Sailing Lake Access Road Improvement Basis of Design, 50% Design*. Prepared by: AECOM. Project No. 60548950. Oakland, California.

[122] City. 2012c. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR—G. Geology, Soils, and Seismicity*. State Clearinghouse No. 2011012069. Prepared by: LSA Associates, Inc. Available online at: https://www.mountainview.gov/depts/comdev/planning/regulations/general.asp. Accessed November 13, 2019.

[123] Regionally significant deposits of mineral resources are classified as MRZ-2.

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?

As described above, there are no locally important mineral resource recovery sites in the City. Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource, and there would be **no impact.**

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XIII. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.13.1 ENVIRONMENTAL SETTING

The project site is in Shoreline Regional Park, adjacent to southwestern San Francisco Bay and the Coast Casey Forebay flood control detention basin. Land uses surrounding the project site consist of the regional park, the Coast Casey Forebay flood detention basin, and high-intensity office buildings. The proposed staging area is in a City-owned parking area on a public street, at the eastern end of Terminal Boulevard, immediately adjacent to the park.

Sensitive noise receptors include residential parcels, schools, libraries, religious institutions, and hospitals. The nearest sensitive receptor to the project site is the Lord's Grace Christian Church at 1101 San Antonio Road; this facility is approximately 1,000 feet southwest of the proposed staging area and approximately 1,500 feet southwest of Shoreline Lake Dam. The nearest residences to the project site are more than 0.5 mile to the southwest across U.S. 101.

The Palo Alto Airport, a public-use airport, is approximately 1.6 miles northwest of the project site. Moffett Federal Airfield, a private-use airport owned by the National Aeronautics and Space Administration, is approximately 2.2 miles southeast of the project site. The project site is not within the noise influence area for either airport. [124,125]

The City's Construction Noise Ordinance establishes the noise regulations for construction-related activities in Mountain View. Construction activities in Mountain View are limited to the hours between 7:00 a.m. and 6:00 p.m. on weekdays; construction is not permitted on weekends and holidays unless authorized by the building official. The City does not establish quantitative limits for construction-related noise. [126]

[124] Santa Clara County Airport Land Use Commission. 2016a.

[125] Santa Clara County Airport Land Use Commission. 2016b.

[126] City. 2016. Code of Ordinances, Section 8, Article VI – Construction Noise. Adopted November 22, 2016.

3.13.2 DISCUSSION

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?

Construction of the proposed project, which is anticipated to take approximately 6 months, would temporarily generate noise. In accordance with the City's Municipal Code, construction activities for the proposed project would be conducted between 7:00 a.m. and 6:00 p.m. Monday through Friday and would not occur on weekends or holidays. The City does not establish quantitative limits for construction-related noise.

The project site is surrounded primarily by outdoor use areas and high-intensity office buildings. The nearest sensitive receptor, the Lord's Grace Christian Church, is approximately 1,500 feet southwest the project construction footprint and would be shielded from project construction noise by intervening buildings. Similarly, the closest residences are approximately 0.5 mile south of the project site and would not perceive noise generated by the project, given the distance and intervening buildings and U.S. 101. Therefore, construction activities would not be anticipated to result in a substantial temporary increase in noise levels at nearby noise-sensitive receptors.

In addition to the use of heavy-duty equipment, construction of the project would require the use of on-road vehicles to deliver and haul away materials and move construction workers to and from the site. Construction would last for approximately 6 months. During that time, up to 10 construction worker vehicle trips per weekday and two to three equipment delivery or material-hauling truck trips per weekday, on average, would be required. Because project construction would involve a relatively small number of on-road trips compared with existing area traffic volumes, there would be no substantial increase in noise from construction traffic.

Operation of the project would not generate new sources of noise; operation and maintenance activities would be similar to those currently performed, and noise generated from these activities would be similar to those in the baseline conditions.

For these reasons, the proposed project would not expose persons to noise levels in excess of applicable standards, and impacts would be **less than significant**.

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

The operation of heavy-duty construction equipment can generate localized ground-borne vibration and noise at buildings adjacent to the construction areas. Construction-related vibration would be limited to hauling trucks, excavators, and other construction activities that, based on the distance of the project site from these sensitive receptors, as described above, would not be expected to result in perceptible vibration levels that would affect sensitive receptors in the project vicinity. Operation of the proposed project would not generate new sources of groundborne vibration or noise; operation and maintenance activities would be similar to those currently performed, and groundborne vibration and noise generated from these activities would be similar to those in the baseline conditions.

Therefore, there would be **no impact**.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?

The project site is not within noise influence areas associated with nearby airports; therefore, there would be **no impact** relative to this criterion.

3.14 POPULATION AND HOUSING

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

3.14.1 ENVIRONMENTAL SETTING

The project site is in Mountain View, in Santa Clara County. The project site is at the western end of Sailing Lake, in the 750-acre Shoreline Regional Park. The proposed construction staging area would be at the eastern end of Terminal Boulevard, adjacent to high-intensity office uses. The Coast Casey Forebay detention basin is adjacent to the project site to the west, and San Francisco Bay is adjacent to the project site to the north. There are no existing residential structures on the project site.

3.14.2 DISCUSSION

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)?

The proposed project involves installation of a stability berm at the toe of Shoreline Lake Dam to meet DSOD safety criteria, and improvements to the existing paved maintenance road on top of the dam to provide support for future construction vehicles accessing the South Bay Salt Pond Restoration Project area. No new homes or businesses would be built as a result of the proposed project. Improving the stability of the existing dam and maintenance access road would not induce population growth, would not increase the population in the area, and would not contribute to population growth in the area. Therefore, the proposed project would have no effect on population growth, either directly or indirectly, and there would be **no impact.**

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

The proposed improvements to the dam and access road would not displace any existing residents or housing. Therefore, there would be **no impact**.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☐	☒

3.15.1 ENVIRONMENTAL SETTING

Fire Protection

The MVFD has a staff of more than 86 personnel serving its emergency operations center and five fire stations. MVFD fire-fighting equipment includes seven engines, one rescue vehicle, one hazmat vehicle, and one truck.[127] The closest fire station to the project site is Station No. 5, at 2195 N. Shoreline Boulevard, approximately 1 mile southeast of the project site.

Police Protection

The Mountain View Police Department (MVPD) employs approximately 148 staff, who provide services for approximately 80,000 people in Mountain View.[128] Police services are provided in four roughly equal areas ("beats") within the City. The project site is in Beat 3. The MVPD is at 1000 Villa Street, approximately 2.75 miles southeast of the project site.

Schools

The project site is in the Mountain View Whisman School District and the Mountain View Los Altos Union High School District. The closest Mountain View public school to the project site is Crittenden Middle School at 1701 Rock Street, approximately 1.5 miles to the southeast. The closest private school is The Girls' Middle

[127] MVFD (Mountain View Fire Department). 2019. Apparatus. Available online at: https://www.mountainview.gov/depts/fire/emergency/apparatus.asp. Accessed November 15, 2019.

[128] MVPD (Mountain View Police Department). 2018. *Annual Report 2018.* Available online at: https://www.mountainview.gov/documents/2018%20MVPD%20Annual%20Report.pdf. Accessed November 15, 2019.

School at 3400 W. Bayshore Road, Palo Alto, approximately 0.75 mile west of the project site (on the western side of U.S. 101).[129,130]

Parks

The project site is in Shoreline Regional Park. Shoreline Lake Dam impounds the approximately 45-acre Sailing Lake. A variety of recreational activities at the lake are available, including sailing, windsurfing, kayaking, and canoeing. A boathouse and restaurant are present at the eastern entrance to the lake, along with a hiking trail along the lake's northern shore. The southern side of the lake is adjacent to Holes 10 through 12 of the Shoreline Golf Links golf course. A portion of the Bay Trail crosses through the northern end of the project site.

3.15.2 DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Sailing Lake, Shoreline Regional Park, and Coast Casey Forebay are currently served by the MVFD. After the proposed improvements to Shoreline Lake Dam and its access road are implemented, Sailing Lake and the surrounding area would continue to be served by MVFD, and the improvements to the dam would not increase the need for additional fire-fighting personnel, facilities, or equipment. Therefore, there would be **no impact**.

Police protection?

Sailing Lake, Shoreline Regional Park, and Coast Casey Forebay are currently served by the MVPD. After the proposed improvements to Shoreline Lake Dam and its access road are implemented, Sailing Lake and the surrounding area would continue to be served by MVPD, and the improvements to the dam would not increase the need for additional police personnel, facilities, or equipment. Therefore, there would be **no impact**.

Schools?

The project does not include new housing or other improvements that would result in a demand for additional new school facilities, and does not require alterations to any existing school facilities. Therefore, there would be **no impact**.

Parks?

The proposed project is in Shoreline Regional Park. Although short-term, temporary closures of some park facilities would be required during project-related construction facilities; the proposed project would only affect approximately 3 acres of the 750-acre regional park. The 0.25-acre construction staging area would result in short-

[129] Mountain View Los Altos Union High School District. 2019. About MVLA. Available online at: https://www.mvla.net/About-MVLA/index.html. Accessed November 15, 2019.

[130] Mountain View Whisman School District. 2019. About, Facts and Figures. Available online at: https://www.mvwsd.org/home. Accessed November 15, 2019.

term, temporary closure of the eastern end of Terminal Boulevard, which is used as a public parking area for access to trails at the western end of Shoreline Regional Park. However, other parking areas are available for public use, including parking at the Shoreline Athletic Fields, the Shoreline Lake boathouse/entrance area, the Shoreline Amphitheater, and the parking lots of the adjacent office buildings on the weekends. Because 747 acres of Shoreline Regional Park would still be available for public use during the project's construction phase, other public parking and access to the park is available, and closure of the 3-acre project site and 0.25-acre construction staging area would be short-term and temporary, the proposed project would not result in the need for new or altered park facilities. Therefore, this impact is considered **less than significant.**

Other public facilities?

The proposed project would have no effect on any other public facilities such as libraries or community centers. Therefore, there would be **no impact.**

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XVI. Recreation.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 ENVIRONMENTAL SETTING

The approximately 3-acre project site encompasses Shoreline Lake Dam, which impounds the approximately 45-acre Sailing Lake. The lake is in the northwestern corner of the 750-acre Shoreline Regional Park. Sailing Lake offers a variety of recreational activities, including sailing, canoeing, kayaking, and windsurfing. The entrance to Sailing Lake is on the eastern side of the lake, approximately 0.5 mile from the project site. This area contains a parking lot, boat dock, boat launch ramp, boathouse, and a restaurant. A pedestrian/bicycle trail parallels the northern side of the lake, connecting with the Bay Trail at the northern side of the project site. The southern side of Sailing Lake is adjacent to Holes 10 through 12 of the Shoreline Golf Links golf course. A paved maintenance access road, which also serves as a pedestrian/bicycle path, crosses over the crest of the dam, linking the northern and southern sides of the park.

Pedestrian/bicycle access to the trails at the western end of Shoreline Regional Park, near the dam, is provided via a parking area at the eastern end of Terminal Boulevard. This approximately 0.25-acre area would be used on a temporary basis for project-related staging and storage of construction equipment and materials.

3.16.2 DISCUSSION

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

The pedestrian/bicycle access path (i.e., the dam access road) from Terminal Boulevard over the dam crest to the Bay Trail would require temporary closure during construction activities. The Bay Trail, which passes to the north of the project site, would not be impacted by project construction. The Bay Trail would remain accessible via other nearby trails to the east in Shoreline Regional Park and via a trail along the western side of the Coast Casey Forebay from Terminal Boulevard. Boating activities on Sailing Lake would continue during project-related construction activities.

Use of the 0.25-acre construction staging area would result in short-term, temporary closure of the eastern end of Terminal Boulevard, which currently functions as a public parking area for access to trails at the western end of

Shoreline Regional Park. However, other parking areas are available for public use, including parking at the Shoreline Athletic Fields, the Shoreline Lake boathouse/entrance area, the Shoreline Amphitheater, and in the parking lots of the adjacent office buildings on the weekends.

The City's Recreation Division would post notices on its website informing recreationists of the trail closures, the closure of the Terminal Boulevard parking area, and the locations of alternate parking areas. Closure of the 3-acre project site and construction staging area would be short-term and temporary; 747 acres of Shoreline Regional Park would still be available for public use during the project's construction phase; and other public parking and access to the park and the Bay Trail is available. For these reasons, the proposed project would not result in an increased use of existing neighborhood and regional parks or other recreational facilities that would require new or altered park facilities. Therefore, this impact is considered **less than significant.**

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

The proposed project involves improvements to the existing Shoreline Lake Dam and its access road. Although the access road also serves as a trail in Shoreline Regional Park, the proposed improvements are to an existing facility and would not result in an expansion of recreational facilities. Therefore, there would be **no impact**.

3.17 TRANSPORTATION

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

3.17.1 ENVIRONMENTAL SETTING

U.S. 101 is a north-south running highway extending from the City of Los Angeles to Oregon. In Mountain View, U.S. 101 runs in a northwest-southeast direction and includes three mixed-flow lanes and one high-occupancy vehicle lane per direction—except at State Route 85, where two high-occupancy vehicle lanes are provided. From U.S. 101, the project site is accessible via the San Antonio Road exit by proceeding north on San Antonio Road for approximately 0.4 mile and then east on Terminal Boulevard for approximately 0.15 mile to the parking lot at the eastern end of Terminal Boulevard, the proposed staging area location. This parking lot provides pedestrian/bicycle access to the trails at the western end of Shoreline Regional Park. A pedestrian/bicycle trail parallels the northern side of the lake, connecting with the Bay Trail at the northern side of the project site. A paved maintenance access road, which also serves as a pedestrian/bicycle path, crosses over the crest of the dam, linking the northern and southern sides of the park.

3.17.2 DISCUSSION

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

Project construction would add vehicle trips to nearby roadways as construction workers and vehicles enter and exit the proposed staging area. Project construction would generate up to 10 construction worker vehicle trips per weekday and two to three equipment delivery or material-hauling truck trips per weekday, on average. These construction-related trips represent a negligible traffic increase in the context of existing local and regional traffic volumes. The addition of these vehicle trips to the project area would be short-term and temporary during construction, and implementation of the proposed project would not permanently affect traffic circulation in the area.

The pedestrian/bicycle access path from Terminal Boulevard over the dam crest to the Bay Trail (i.e., the dam access road) would require temporary closure during construction activities. The Bay Trail, which passes to the north of the project site, would not be impacted by project construction. The Bay Trail would remain accessible

via other nearby trails to the east in Shoreline Regional Park and via a trail along the western side of the Coast Casey Forebay from Terminal Boulevard.

The proposed project would replace the existing access road/multi-use trail across the dam and would not significantly increase the number of users accessing the trails in Shoreline Regional Park. The proposed project does not include permanent roadway modifications or other improvements that would interfere with adopted transit policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. This impact would be **less than significant**.

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

CEQA Guidelines Section 15064.3 describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts. For this analysis, "VMT" refers to the amount and distance of automobile travel attributable to the proposed project. As discussed above under Transportation checklist criterion a), construction-related traffic impacts would be negligible and temporary in nature. The proposed project involves improvements to Shoreline Lake Dam, to meet DSOD safety criteria and improvements to the access road/trail that passes over the crest of the dam. The project would not include land uses that represent new sources of automobile trips, such as residences and offices, and would not construct facilities (such as additional parking) that would increase vehicle trips to the project area. Therefore, the project would not permanently increase regional miles travelled, and this impact would be **less than significant**.

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

Although the project would reconstruct the access road/trail that passes over the crest of the dam, the general current alignment of the access road would be maintained. The proposed project would not introduce new dangerous curves, intersections, or incompatible uses to the access road/trail, and there would be **no impact**.

d) Result in inadequate emergency access?

A paved roadway on top of the Shoreline Lake Dam is already present to provide access for maintenance activities. This roadway would be improved to provide support for future construction vehicles accessing the South Bay Salt Pond Restoration Project area. The existing roadway over the dam does not provide access to any other area and does not serve as an emergency evacuation route. Therefore, having the dam access road temporarily unavailable during construction activities would have no effect on emergency access. Emergency access to the western end of Shoreline Regional Park would continue to be provided through the existing paved pathway at the eastern end of Terminal Boulevard. Therefore, there would be **no impact.**

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XVIII. Tribal Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically 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 listed in the California Register of Historical Resources, or in 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☐	☒

3.18.1 ENVIRONMENTAL SETTING

Project Setting and Context

The project site is immediately west of Sailing Lake (also known as Shoreline Lake) which is in the northwestern corner of Shoreline Regional Park. Shoreline Regional Park, which is owned and operated by the City, opened in 1982 and was constructed on the site of a former sanitary landfill. The project site covers a 3-acre area at the western end of Sailing Lake and the eastern end of Coast Casey Forebay. The project site also includes a separate 0.25-acre staging area at the eastern end of Terminal Boulevard. The staging area, which is owned by the City, currently serves as a parking area for public access to the trails in Shoreline Regional Park. Historically, the shoreline was more than 2,500 feet to the south of the project site and the project site was in San Francisco Bay.[131]

Data Collection and Review

Baseline historical and archaeological conditions in the project vicinity are based on a review of available ethnographic and historical literature and maps, archaeological base maps and site records, survey reports, and atlases of historic places on file at the NWIC of the CHRIS at Sonoma State University; a review of the Office of

[131] USGS. 1899.

Historic Preservation's OHP's Directory of Properties in the HPD File for Santa Clara County;[132] and a SLF review by the California NAHC (February 2020). No cultural resources were identified in the HPD, nor were there resources identified in the SLF search of the project site or adjacent area. The records search (NWIC File No. 19-1451) identified three previously studied areas in or adjacent to the current project site.[133,134,135] See Section 3.5, Cultural Resources, for further details of the NWIC records search results.

Native American Outreach

On February 20, 2020, AECOM contacted the NAHC on behalf of the City and requested a search of the SLF and Native American contact list for the project site. On February 25, 2020, the NAHC responded that the SLF search was "negative…[however] a negative response to these searches does not preclude the existence of a tribal cultural resource." Native American consultation pursuant to AB 52 is being completed by the City. The City sent project notification letters to those Native American representatives listed by the NAHC on June 29, 2020. No responses have been received to date.

3.18.2 DISCUSSION

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 geologically 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 listed in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k).

The proposed project would require a maximum depth of excavation of the downstream (western) embankment slope to approximately 2 feet below existing surface to construct a drained stability berm. No archaeological resources were identified in the NWIC records search, and the search of the SLF was also negative. Native American outreach identified no tribal cultural resources in the vicinity of the project site. A review of the historical maps of the area depict the current project site in the San Francisco Bay, with the historic-era shoreline being more than 2,500 feet to the south of the project site.[136] A prior study[137] near the staging area identified the upper 4 to 6 feet of soil in that vicinity as artificial fill material. The potential for encountering undocumented tribal cultural resources in the artificial fill of the project's subsurface footprint is considered extremely low; there would be **no impact**.

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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

No archaeological resources were identified in the NWIC records search, and the search of the SLF was also negative. Native American outreach identified no tribal cultural resources in the vicinity of the project site. A review of the historical maps of the area depict

[132] OHP. 2012.
[133] Basin Research Associates 2009.
[134] Johnck 2008.
[135] Martorana 2007.
[136] USGS. 1899.
[137] Martorana 2007.

the current project site in the San Francisco Bay, with the shoreline being more than 2,500 feet to the south of the project site.[138] A prior study[139] near the staging area identified the upper 4 to 6 feet of soil in that vicinity as artificial fill material. The potential for encountering undocumented resources, considered significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, in the artificial fill of the project's subsurface footprint is considered extremely low; there would be **no impact**.

[138] USGS. 1899.
[139] Martorana 2007.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
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 that 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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

3.19.1 ENVIRONMENTAL SETTING

The project site consists of the existing Shoreline Lake Dam and the access road over the dam, in Shoreline Regional Park. The project site is traversed by underground potable water lines that serve the park, several small irrigation lines, and utility lines related to management of the underlying former landfill (discharge, gas, leachate collection, and air supply). Potable water for Shoreline Regional Park facilities is provided by the San Francisco Public Utilities Commission (SFPUC).[140] Recycled water for irrigation of the Shoreline Regional Park and the Shoreline Golf Links golf course is provided by the Palo Alto Regional Water Quality Control Plant.[141] Sailing Lake is a saltwater lake, which is filled by water from San Francisco Bay that is pumped from an intake and pump station currently located along the levee between Charleston Slough and the Coast Casey Forebay detention basin. Water from the lake is discharged through a gravity outfall into Permanente Creek, and then drains back into San Francisco Bay. Electrical power at the Shoreline Maintenance Facility is provided via solar energy. SVCE—which delivers 100 percent carbon-free electricity generated from clean, renewable sources—is the official electricity provider for the City, including the project site.

[140] City. 2019c. City of Mountain View, Our Water Sources. Available online at: https://www.mountainview.gov/depts/pw/services/water/sources.asp. Accessed November 21, 2019.

[141] City 2019d. City of Mountain View, Water and Sewer Services, Recycled Water. Available online at: https://www.mountainview.gov/depts/pw/services/recycled/system.asp. Accessed December 11, 2019.

3.19.2 DISCUSSION

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?

As described in Chapter 2, "Project Description," the existing potable water lines, landfill discharge lines, landfill gas lines, landfill leachate collection lines, and landfill air supply lines in the project site would be preserved in place. A new 2-inch landfill leachate collection line and a new 1-inch landfill air supply line would be installed adjacent to the eastern side of the reconstructed road over the dam. In addition, one existing irrigation line would be abandoned in place, and two new irrigation lines would be installed adjacent to the eastern side of the reconstructed road over the dam, to serve the new vegetation planting area.

Because the proposed project would not involve a population increase or the operation of new buildings that would require utility services, capacity expansions for water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities would not be required. The new leachate collection line and air supply line for the landfill, and the small new irrigation line for the new planting area, would be located entirely within the project footprint. The environmental effects of these onsite utility modifications are evaluated in the individual topic areas throughout this IS, and mitigation measures are recommended (where necessary) to reduce all environmental impacts to a **less-than-significant** level.

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

Minor amounts of water would be used during the construction phase for moisture conditioning of imported soil during the grading process, and for dust control. Potable water for construction workers would be provided via a bottled water drinking station at the construction trailer. During the project's operational phase, potable water supply is not required. The SFPUC has sufficient water supplies to serve the small amount of water that would be necessary during project-related construction. Therefore, this impact would be **less than significant**.

c) Result in a determination by the wastewater treatment provider that 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?

The proposed improvements to increase the stability of the existing Shoreline Lake Dam and the existing maintenance access road on top of the dam would have no effect on wastewater treatment. Temporary, portable restrooms would be provided for construction workers. Therefore, there would be **no impact.**

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

Approximately 400 cubic yards of existing soil and demolition waste would be excavated during project construction. Solid waste from the project site would be transported to the Sunnyvale Materials Recovery and Transfer (SMaRT) Station and ultimately the Kirby Canyon Landfill. The SMaRT Station is at 301 Carl Road in Sunnyvale, and it accepts materials from Mountain View, Palo Alto, and Sunnyvale. Nonrecyclable waste from the SMaRT Station is transported to the Kirby Canyon Landfill, at 910 Coyote Creek Golf Drive in San Jose. Kirby Canyon Landfill has a total estimated permitted capacity of approximately 36 million cubic yards, a

remaining estimated capacity of approximately 16 million cubic yards, and an anticipated closure date of 2044. The landfill is permitted to receive a maximum of 2,600 tons of material per day.[142,143]

Because the SMaRT Station and the Kirby Canyon Landfill have capacity to receive project-related construction waste, and because the proposed project would comply with the City's recycling program, the proposed project would not 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. Therefore, this impact is considered **less than significant**.

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

The City has one of the highest solid waste diversion rates in the country. The City's diversion rate has increased due to an aggressive recycling and reuse program, in addition to participation in the SMaRT Station service. The City's landfill diversion rate was 77 percent for calendar year 2015.[144] Furthermore, the Recycling and Waste Reduction Commission of Santa Clara County works to assist Countywide cooperative programs to reduce, reuse, and recycle materials that would otherwise be disposed of in landfills.[145]

Project-related construction and demolition debris would be recycled at the local facilities listed in d) above, in accordance with City requirements. California state law (AB 939) requires that at least 50 percent of construction and demolition waste be diverted from landfills. The City offers recycling through its partnership with Recology Mountain View and the SMaRT Station. The proposed project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and therefore this impact is considered **less than significant**.

[142] California Department of Resources Recycling and Recovery. 2019. Solid Waste Information System Detail—Kirby Canyon Recycling and Disposal Facility (43-AN-0008). Available online at: https://www2.calrecycle.ca.gov/swfacilities/Directory/43-AN-0008. Accessed November 21, 2019.

[143] California Environmental Protection Agency. 2019. Solid Waste Information System Documents—Kirby Canyon Recycling and Disposal Facility (43-AN-0008). Memorandum from Alfred P. Worcester to Eric Kiruja regarding preliminary closure and postclosure maintenance plans. Available online at: https://www2.calrecycle.ca.gov/swfacilities/Directory/43-AN-0008/Document. Accessed November 21, 2019.

[144] City 2019e. City of Mountain View, Businesses, Recycling and Zero Waste. Available online at: https://www.mountainview.gov/depts/pw/recycling/garbage/businesses.asp. Accessed November 21, 2019.

[145] City. 2012c. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR—M. Utilities and Infrastructure*. State Clearinghouse No. 2011012069. Prepared by: LSA Associates, Inc. Available online at: https://www.mountainview.gov/depts/comdev/planning/regulations/general.asp. Accessed November 21, 2019.

3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XX. Wildfire. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.20.1 ENVIRONMENTAL SETTING

The project site is at the western end of Sailing Lake, in Shoreline Regional Park. The park is composed primarily of turf grass associated with the 18-hole Shoreline Golf Links golf course, which is adjacent to the southern side of Sailing Lake. Landscape trees are scattered throughout the park, and a variety of trees are adjacent to the southern side of the project site. The western side of the dam is in the Coast Casey Forebay flood detention basin, which is empty for most of the year. The basin contains a variety of native and nonnative grasses and shrubs, which are inundated when flood waters are allowed into the basin. San Francisco Bay is approximately 150 feet north of the project site, and office buildings with associated urban landscaping are approximately 200 feet southwest of the project site.

Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189 require identification of fire hazard severity zones in the State of California. The California Department of Forestry and Fire Protection (CAL FIRE) has established a fire hazard severity classification system. Fire prevention areas considered to be under state jurisdiction are referred to as SRAs. In SRAs, CAL FIRE is required to delineate three wildfire hazard ranges: moderate, high, and very high. LRAs, which are under the jurisdiction of local entities (e.g., cities, counties), are required only to identify very high fire hazard severity zones.

The project site is in the heavily urbanized southwestern San Francisco Bay area, and is not in or near an SRA.[146] The project site and the surrounding area are in an LRA, and CAL FIRE has not designated any very high, high, or moderate fire hazard severity zones at the project site or in the project area.[147]

[146] CAL FIRE (California Department of Forestry and Fire Protection). 2007. *Santa Clara County—Fire Hazard Severity Zones in SRA*. Available online at: https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed November 20, 2019.

[147] CAL FIRE. 2008. *Santa Clara County—Very High Fire Hazard Severity Zones in LRA.* Available online at: https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed November 20, 2019.

In addition to the CAL FIRE mapping, local agencies may adopt ordinances that may affect communities' hazard mapping and building code requirements. Local agencies are not required to report such zoning actions to CAL FIRE, and therefore locally designated very high fire hazard severity zones may not be reflected on CAL FIRE maps. Based on a review of the *Mountainview 2030 General Plan* Public Safety Element, the City has not specifically designated any areas as wildfire hazard zones.[148]

As discussed in Section 3.15, "Public Services," the MVFD provides fire-fighting services in Mountain View, including the project site.

3.20.2 DISCUSSION

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

A paved pathway on top of the Shoreline Lake Dam is already present to provide access for maintenance activities. At the conclusion of project-related improvements, the roadway on top of the dam would be improved to provide support for future construction vehicles accessing the South Bay Salt Pond Restoration Project area. The existing pathway over the dam does not provide access to any other area and does not serve as an emergency evacuation route. Therefore, having the dam access road temporarily unavailable during construction activities would have no effect on adopted emergency response plans or emergency evacuation plans. Emergency access to the western end of Shoreline Regional Park would continue to be provided through the existing paved pathway at the eastern end of Terminal Boulevard. Furthermore, the MVFD department reviews all new development plans, including building design and access for emergency vehicles, to ensure that they meet fire and safety codes. Therefore, there would be **no impact.**

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

The project site is in a developed area, in Shoreline Regional Park, adjacent to San Francisco Bay and high-intensity office land uses. Improving the stability of the existing dam to address seepage issues and improving the roadway over the dam to carry construction traffic would not exacerbate wildfire risks or thereby expose nearby recreationists or office workers to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, there would be **no impact.**

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?

The proposed project involves installation of a stability berm at the toe of Shoreline Lake Dam. The existing paved maintenance road on top of the dam would be improved to provide support for future construction vehicles accessing the South Bay Salt Pond Restoration Project area. At the completion of the project-related activities, occasional maintenance associated with the dam would continue in the same manner as it does currently. The proposed project does not require the installation or maintenance of infrastructure that would exacerbate fire risk or create other ongoing impacts to the environment. Therefore, there would be **no impact.**

[148] City. 2012a. *Mountain View 2030 General Plan.* Adopted 2012, amended 2017. Available online at: https://www.mountainview.gov/depts/comdev/planning/regulations/general.asp. Accessed November 15, 2019.

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?

As stated above, the proposed project involves improvements to the existing Shoreline Lake Dam and access road, in the existing developed Shoreline Regional Park. The project site is not in an SRA or a fire hazard severity zone. The project site is surrounded by a park with turf grass, San Francisco Bay, and high-intensity office uses. Proposed improvements to the existing Shoreline Lake Dam and access road would not expose people or structures to wildfire-related risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, there would be **no impact.**

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Authority: Public Resources Code Sections 21083, 21083.5.
Reference: Government Code Sections 65088.4.
Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083, 21083.3, 21083.5, 21093, 21094, 21095, 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296*; Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

3.21.1 DISCUSSION

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

As discussed in Section 3.4, Biological Resources, project construction could have an adverse effect on one or more special-status wildlife and plant species that have the potential to occur in the project site or project area, including salt marsh harvest mouse, multiple special-status or nesting bird species, and special-status plant species. These impacts would be reduced to a less-than-significant level with the implementation of the following mitigation measures: **Mitigation Measure BIO-1: Hand Removal of Vegetation and Wildlife Exclusion Fencing, Mitigation Measure BIO-2: Nesting and Rail Bird Protection Measures, and Mitigation**

Measure BIO-3: Focused Surveys for Special-Status Plant Species, and Mitigation Measure BIO-4: Work in Pickleweed Wetlands.

As discussed in Section 3.5, Cultural Resources, project impacts on historical resources would be less than significant, and the proposed project would have no impact on archaeological resources.

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.)

This analysis determines whether the proposed project, in combination with other recent or foreseeable development, would result in a cumulative impact and, if so, whether the project's individual contribution would be cumulatively considerable.

The project would have no impact on archaeological resources, agricultural and forestry resources, energy, land use and planning, mineral resources, population and housing, tribal cultural resources, and wildfire. Therefore, the proposed project would not contribute to cumulative impacts related to these topics. The project would have less-than-significant and no direct impacts on historical resources; given the site-specific nature of such resources, the project is not expected to contribute to cumulative impacts on historical cultural resources.

The proposed project would result in construction-related impacts on the following resource areas: aesthetics, air quality, biological resources, geology and soils, water quality, hazards and hazardous materials, noise, public services, recreation, transportation, and utilities and service systems. Impacts from the project construction on each of these resources would be localized, and construction activities that may occur concurrently in the project area would also be expected to produce similar impacts on these resources. Due to the relatively short construction period for the proposed project, any overlap in construction activities with other projects would be short in duration. Other construction projects would be subject to environmental review and permitting processes similar to those for the proposed project, which would include identification of measures to minimize impacts. Furthermore, as described in Sections 3.1 through 3.20, construction best management practices and mitigation measures would be implemented to avoid and minimize impacts so that the proposed project's contribution to any cumulative effects would not be cumulatively considerable.

Additionally, potential cumulative impacts were identified using the Mountain View General Plan Final EIR[149] because the proposed project is consistent with the land use planning established therein**.** The General Plan Final EIR identified the following cumulative impacts:

- violation of air quality standards by increasing VMT greater than the population increase;
- net increase in ozone and particulate matter;
- increased traffic noise levels along some roadway and freeway segments in the City;
- increased daily VMT due to population and employment growth planned in the City;
- increased motor vehicle traffic and congestion, which would result in decreased roadway and freeway segment levels of service on several roadway and freeway study segments; and

[149] City. 2012c.

- increased motor vehicle traffic outside the City.

As discussed in Section 3.3, Air Quality, the proposed project would not result in a cumulatively considerable net increase of criteria air pollutants, including ozone or particulate matter. As discussed in Section 3.13, Noise, the propose project would not result in a permanent increase of noise levels. As discussed in Section 3.17, Transportation, the proposed project would not permanently increase traffic levels that would impact the capacity of the local or regional street network. Therefore, the proposed project would not contribute the cumulative impacts identified in the General Plan Final EIR.

Based on the above analysis, with implementation of proposed construction BMPs and mitigation measures, the project would not have impacts that are individually limited, but cumulatively considerable.

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

The discussion in Chapter 3 identifies potentially significant impacts related to air quality, biological resources, and hazards and hazardous materials. Of these, impacts related to air quality and hazards and hazardous materials have the potential to adversely affect human beings. Mitigation measures have been provided in this initial study to reduce these potentially significant project-level impacts to a less-than-significant level. No project-level potentially significant impacts were identified for the following environmental issue areas: aesthetics, agriculture and forestry resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, or wildfire. Therefore, with implementation of the mitigation measures specified in Sections 3.1 through 3.20, the proposed project would not result in substantial adverse effects, direct or indirect, on human beings.

4.0 LIST OF PREPARERS

City of Mountain View

Raymond Wong
Lisa Au
Philip Higgins

AECOM

Kelly Bayer, Environmental Project Manager
Karin Beck
Wendy Copeland
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Erik Newman, P.E.
Justin Whitfield

APPENDIX A
AIR QUALITY MODELING OUTPUT

Sailing Lake Access Road Improvements Project

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	3.25	Acre	3.25	141,570.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description.

Construction Phase - Project Description

Off-road Equipment - Project Description.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project Description.

Off-road Equipment -

Grading - Project Description.

Trips and VMT - Project Description.

Sailing Lake Access Road Improvements Project - Santa Clara County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	18.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	PhaseEndDate	8/23/2022	12/20/2022
tblConstructionPhase	PhaseEndDate	8/16/2021	10/29/2021
tblConstructionPhase	PhaseEndDate	7/28/2022	11/24/2021
tblConstructionPhase	PhaseEndDate	8/4/2021	8/30/2021
tblConstructionPhase	PhaseStartDate	7/29/2022	11/25/2022
tblConstructionPhase	PhaseStartDate	8/5/2021	8/31/2021
tblConstructionPhase	PhaseStartDate	7/5/2022	10/31/2021
tblGrading	MaterialExported	0.00	400.00
tblGrading	MaterialImported	0.00	1,980.00
tblOffRoadEquipment	HorsePower	78.00	81.00
tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Trenchers
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	248.00	250.00
tblTripsAndVMT	VendorTripNumber	23.00	0.00
tblTripsAndVMT	WorkerTripNumber	59.00	15.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1732	1.7541	1.1822	2.2100e-003	0.2169	0.0867	0.3036	0.1166	0.0802	0.1968	0.0000	193.9248	193.9248	0.0541	0.0000	195.2765
2022	0.0309	0.3108	0.1974	3.8000e-004	0.1640	0.0153	0.1793	0.0898	0.0141	0.1039	0.0000	33.5322	33.5322	9.9100e-003	0.0000	33.7799
Maximum	**0.1732**	**1.7541**	**1.1822**	**2.2100e-003**	**0.2169**	**0.0867**	**0.3036**	**0.1166**	**0.0802**	**0.1968**	**0.0000**	**193.9248**	**193.9248**	**0.0541**	**0.0000**	**195.2765**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1732	1.7541	1.1822	2.2100e-003	0.2169	0.0867	0.3036	0.1166	0.0802	0.1968	0.0000	193.9246	193.9246	0.0541	0.0000	195.2763
2022	0.0309	0.3108	0.1974	3.8000e-004	0.1640	0.0153	0.1793	0.0898	0.0141	0.1039	0.0000	33.5322	33.5322	9.9100e-003	0.0000	33.7799
Maximum	**0.1732**	**1.7541**	**1.1822**	**2.2100e-003**	**0.2169**	**0.0867**	**0.3036**	**0.1166**	**0.0802**	**0.1968**	**0.0000**	**193.9246**	**193.9246**	**0.0541**	**0.0000**	**195.2763**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2021	9-30-2021	1.3840	1.3840
2	10-1-2021	12-31-2021	0.5320	0.5320
		Highest	1.3840	1.3840

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3300e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	5.1400e-003	0.0214	0.0578	2.0000e-004	0.0180	1.7000e-004	0.0182	4.8300e-003	1.6000e-004	4.9900e-003	0.0000	18.0142	18.0142	6.2000e-004	0.0000	18.0297
Waste						0.0000	0.0000		0.0000	0.0000	0.0568	0.0000	0.0568	3.3600e-003	0.0000	0.1408
Water						0.0000	0.0000		0.0000	0.0000	0.0000	3.9428	3.9428	1.8000e-004	4.0000e-005	3.9582
Total	**6.4700e-003**	**0.0214**	**0.0579**	**2.0000e-004**	**0.0180**	**1.7000e-004**	**0.0182**	**4.8300e-003**	**1.6000e-004**	**4.9900e-003**	**0.0568**	**21.9571**	**22.0139**	**4.1600e-003**	**4.0000e-005**	**22.1288**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3300e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	5.1400e-003	0.0214	0.0578	2.0000e-004	0.0180	1.7000e-004	0.0182	4.8300e-003	1.6000e-004	4.9900e-003	0.0000	18.0142	18.0142	6.2000e-004	0.0000	18.0297
Waste						0.0000	0.0000		0.0000	0.0000	0.0568	0.0000	0.0568	3.3600e-003	0.0000	0.1408
Water						0.0000	0.0000		0.0000	0.0000	0.0000	3.9428	3.9428	1.8000e-004	4.0000e-005	3.9582
Total	**6.4700e-003**	**0.0214**	**0.0579**	**2.0000e-004**	**0.0180**	**1.7000e-004**	**0.0182**	**4.8300e-003**	**1.6000e-004**	**4.9900e-003**	**0.0568**	**21.9571**	**22.0139**	**4.1600e-003**	**4.0000e-005**	**22.1288**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Sailing Lake Access Road Improvements Project - Santa Clara County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation	Trenching	7/1/2021	7/28/2021	5	20	Excavation of the existing downstream dam embankment
2	Site Preparation	Site Preparation	7/29/2021	8/30/2021	5	23	
3	Berm Construction	Building Construction	8/31/2021	10/29/2021	5	44	construction of a downstream earthfill berm to partial height of the dam, and construction of a 3.5-foot earthfill crest raise
4	Paving	Paving	10/31/2021	11/24/2021	5	18	Road improvements would include the placement of aggregate base on top of the heightened berm crest, followed by asphalt.
5	Planting	Site Preparation	11/25/2022	12/20/2022	5	18	As part of the proposed project, an approximately 100-foot planting area would be installed on the east side of the dam crest, along with two new irrigation lines.

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Sailing Lake Access Road Improvements Project - Santa Clara County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Planting	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Excavation	Trenchers	1	8.00	81	0.73
Excavation	Excavators	3	8.00	158	0.38
Berm Construction	Cranes	1	7.00	231	0.29
Berm Construction	Forklifts	3	8.00	89	0.20
Berm Construction	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Excavation	Rubber Tired Dozers	2	8.00	247	0.40
Berm Construction	Rubber Tired Dozers	1	8.00	247	0.40
Berm Construction	Generator Sets	1	8.00	84	0.74
Berm Construction	Welders	1	8.00	46	0.45
Berm Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Berm Construction	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Planting	Rubber Tired Dozers	3	8.00	247	0.40
Planting	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Berm Construction	12	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Planting	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0336	0.3373	0.2184	3.8000e-004		0.0177	0.0177		0.0162	0.0162	0.0000	33.1208	33.1208	0.0107	0.0000	33.3886
Total	**0.0336**	**0.3373**	**0.2184**	**3.8000e-004**		**0.0177**	**0.0177**		**0.0162**	**0.0162**	**0.0000**	**33.1208**	**33.1208**	**0.0107**	**0.0000**	**33.3886**

3.2 Excavation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.2000e-004	3.4300e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9848	0.9848	2.0000e-005	0.0000	0.9854
Total	**4.6000e-004**	**3.2000e-004**	**3.4300e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9848**	**0.9848**	**2.0000e-005**	**0.0000**	**0.9854**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0336	0.3373	0.2184	3.8000e-004		0.0177	0.0177		0.0162	0.0162	0.0000	33.1208	33.1208	0.0107	0.0000	33.3886
Total	**0.0336**	**0.3373**	**0.2184**	**3.8000e-004**		**0.0177**	**0.0177**		**0.0162**	**0.0162**	**0.0000**	**33.1208**	**33.1208**	**0.0107**	**0.0000**	**33.3886**

3.2 Excavation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.2000e-004	3.4300e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9848	0.9848	2.0000e-005	0.0000	0.9854
Total	**4.6000e-004**	**3.2000e-004**	**3.4300e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9848**	**0.9848**	**2.0000e-005**	**0.0000**	**0.9854**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2079	0.0000	0.2079	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0447	0.4657	0.2433	4.4000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	38.4511	38.4511	0.0124	0.0000	38.7620
Total	**0.0447**	**0.4657**	**0.2433**	**4.4000e-004**	**0.2079**	**0.0235**	**0.2314**	**0.1142**	**0.0216**	**0.1359**	**0.0000**	**38.4511**	**38.4511**	**0.0124**	**0.0000**	**38.7620**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.8000e-004	0.0334	7.2800e-003	1.0000e-004	2.1200e-003	1.0000e-004	2.2200e-003	5.8000e-004	1.0000e-004	6.8000e-004	0.0000	9.4129	9.4129	4.3000e-004	0.0000	9.4236
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.4000e-004	4.7400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3590	1.3590	3.0000e-005	0.0000	1.3598
Total	**1.6200e-003**	**0.0339**	**0.0120**	**1.2000e-004**	**3.7600e-003**	**1.1000e-004**	**3.8700e-003**	**1.0200e-003**	**1.1000e-004**	**1.1300e-003**	**0.0000**	**10.7720**	**10.7720**	**4.6000e-004**	**0.0000**	**10.7834**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2079	0.0000	0.2079	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0447	0.4657	0.2433	4.4000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	38.4510	38.4510	0.0124	0.0000	38.7619
Total	**0.0447**	**0.4657**	**0.2433**	**4.4000e-004**	**0.2079**	**0.0235**	**0.2314**	**0.1142**	**0.0216**	**0.1359**	**0.0000**	**38.4510**	**38.4510**	**0.0124**	**0.0000**	**38.7619**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.8000e-004	0.0334	7.2800e-003	1.0000e-004	2.1200e-003	1.0000e-004	2.2200e-003	5.8000e-004	1.0000e-004	6.8000e-004	0.0000	9.4129	9.4129	4.3000e-004	0.0000	9.4236
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.4000e-004	4.7400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3590	1.3590	3.0000e-005	0.0000	1.3598
Total	**1.6200e-003**	**0.0339**	**0.0120**	**1.2000e-004**	**3.7600e-003**	**1.1000e-004**	**3.8700e-003**	**1.0200e-003**	**1.1000e-004**	**1.1300e-003**	**0.0000**	**10.7720**	**10.7720**	**4.6000e-004**	**0.0000**	**10.7834**

3.4 Berm Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0814	0.8182	0.5830	1.0600e-003		0.0402	0.0402		0.0374	0.0374	0.0000	92.5142	92.5142	0.0257	0.0000	93.1576
Total	**0.0814**	**0.8182**	**0.5830**	**1.0600e-003**		**0.0402**	**0.0402**		**0.0374**	**0.0374**	**0.0000**	**92.5142**	**92.5142**	**0.0257**	**0.0000**	**93.1576**

3.4 Berm Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	7.0000e-004	7.5500e-003	2.0000e-005	2.6200e-003	2.0000e-005	2.6300e-003	7.0000e-004	2.0000e-005	7.1000e-004	0.0000	2.1666	2.1666	5.0000e-005	0.0000	2.1678
Total	**1.0200e-003**	**7.0000e-004**	**7.5500e-003**	**2.0000e-005**	**2.6200e-003**	**2.0000e-005**	**2.6300e-003**	**7.0000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1666**	**2.1666**	**5.0000e-005**	**0.0000**	**2.1678**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0814	0.8182	0.5830	1.0600e-003		0.0402	0.0402		0.0374	0.0374	0.0000	92.5141	92.5141	0.0257	0.0000	93.1574
Total	**0.0814**	**0.8182**	**0.5830**	**1.0600e-003**		**0.0402**	**0.0402**		**0.0374**	**0.0374**	**0.0000**	**92.5141**	**92.5141**	**0.0257**	**0.0000**	**93.1574**

3.4 Berm Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	7.0000e-004	7.5500e-003	2.0000e-005	2.6200e-003	2.0000e-005	2.6300e-003	7.0000e-004	2.0000e-005	7.1000e-004	0.0000	2.1666	2.1666	5.0000e-005	0.0000	2.1678
Total	**1.0200e-003**	**7.0000e-004**	**7.5500e-003**	**2.0000e-005**	**2.6200e-003**	**2.0000e-005**	**2.6300e-003**	**7.0000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1666**	**2.1666**	**5.0000e-005**	**0.0000**	**2.1678**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8500e-003	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7336	14.7336	4.6300e-003	0.0000	14.8493
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.8500e-003**	**0.0976**	**0.1103**	**1.7000e-004**		**5.2100e-003**	**5.2100e-003**		**4.8100e-003**	**4.8100e-003**	**0.0000**	**14.7336**	**14.7336**	**4.6300e-003**	**0.0000**	**14.8493**

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.1200e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1818	1.1818	3.0000e-005	0.0000	1.1825
Total	**5.5000e-004**	**3.8000e-004**	**4.1200e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1818**	**1.1818**	**3.0000e-005**	**0.0000**	**1.1825**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8500e-003	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7335	14.7335	4.6300e-003	0.0000	14.8493
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.8500e-003**	**0.0976**	**0.1103**	**1.7000e-004**		**5.2100e-003**	**5.2100e-003**		**4.8100e-003**	**4.8100e-003**	**0.0000**	**14.7335**	**14.7335**	**4.6300e-003**	**0.0000**	**14.8493**

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.1200e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1818	1.1818	3.0000e-005	0.0000	1.1825
Total	**5.5000e-004**	**3.8000e-004**	**4.1200e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1818**	**1.1818**	**3.0000e-005**	**0.0000**	**1.1825**

3.6 Planting - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1626	0.0000	0.1626	0.0894	0.0000	0.0894	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0304	0.3104	0.1936	3.7000e-004		0.0153	0.0153		0.0141	0.0141	0.0000	32.3934	32.3934	9.8800e-003	0.0000	32.6405
Total	**0.0304**	**0.3104**	**0.1936**	**3.7000e-004**	**0.1626**	**0.0153**	**0.1779**	**0.0894**	**0.0141**	**0.1035**	**0.0000**	**32.3934**	**32.3934**	**9.8800e-003**	**0.0000**	**32.6405**

3.6 Planting - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	3.7800e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1389	1.1389	2.0000e-005	0.0000	1.1395
Total	**5.2000e-004**	**3.4000e-004**	**3.7800e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1389**	**1.1389**	**2.0000e-005**	**0.0000**	**1.1395**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1626	0.0000	0.1626	0.0894	0.0000	0.0894	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0304	0.3104	0.1936	3.7000e-004		0.0153	0.0153		0.0141	0.0141	0.0000	32.3933	32.3933	9.8800e-003	0.0000	32.6404
Total	**0.0304**	**0.3104**	**0.1936**	**3.7000e-004**	**0.1626**	**0.0153**	**0.1779**	**0.0894**	**0.0141**	**0.1035**	**0.0000**	**32.3933**	**32.3933**	**9.8800e-003**	**0.0000**	**32.6404**

3.6 Planting - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	3.7800e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1389	1.1389	2.0000e-005	0.0000	1.1395
Total	**5.2000e-004**	**3.4000e-004**	**3.7800e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1389**	**1.1389**	**2.0000e-005**	**0.0000**	**1.1395**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1400e-003	0.0214	0.0578	2.0000e-004	0.0180	1.7000e-004	0.0182	4.8300e-003	1.6000e-004	4.9900e-003	0.0000	18.0142	18.0142	6.2000e-004	0.0000	18.0297
Unmitigated	5.1400e-003	0.0214	0.0578	2.0000e-004	0.0180	1.7000e-004	0.0182	4.8300e-003	1.6000e-004	4.9900e-003	0.0000	18.0142	18.0142	6.2000e-004	0.0000	18.0297

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	6.14	73.94	54.41	48,508	48,508
Total	6.14	73.94	54.41	48,508	48,508

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3300e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Unmitigated	1.3300e-003	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Total	**1.3300e-003**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**6.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	6.0000e-005
Total	**1.3300e-003**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**6.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.9428	1.8000e-004	4.0000e-005	3.9582
Unmitigated	3.9428	1.8000e-004	4.0000e-005	3.9582

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.87231	3.9428	1.8000e-004	4.0000e-005	3.9582
Total		**3.9428**	**1.8000e-004**	**4.0000e-005**	**3.9582**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.87231	3.9428	1.8000e-004	4.0000e-005	3.9582
Total		**3.9428**	**1.8000e-004**	**4.0000e-005**	**3.9582**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0568	3.3600e-003	0.0000	0.1408
Unmitigated	0.0568	3.3600e-003	0.0000	0.1408

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.28	0.0568	3.3600e-003	0.0000	0.1408
Total		**0.0568**	**3.3600e-003**	**0.0000**	**0.1408**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.28	0.0568	3.3600e-003	0.0000	0.1408
Total		**0.0568**	**3.3600e-003**	**0.0000**	**0.1408**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sailing Lake Access Road Improvements Project

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	3.25	Acre	3.25	141,570.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description.

Construction Phase - Project Description

Off-road Equipment - Project Description.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project Description.

Off-road Equipment -

Grading - Project Description.

Trips and VMT - Project Description.

Sailing Lake Access Road Improvements Project - Santa Clara County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	18.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	5.00	23.00
tblConstructionPhase	PhaseEndDate	8/23/2022	12/20/2022
tblConstructionPhase	PhaseEndDate	8/16/2021	10/29/2021
tblConstructionPhase	PhaseEndDate	7/28/2022	11/24/2021
tblConstructionPhase	PhaseEndDate	8/4/2021	8/30/2021
tblConstructionPhase	PhaseStartDate	7/29/2022	11/25/2022
tblConstructionPhase	PhaseStartDate	8/5/2021	8/31/2021
tblConstructionPhase	PhaseStartDate	7/5/2022	10/31/2021
tblGrading	MaterialExported	0.00	400.00
tblGrading	MaterialImported	0.00	1,980.00
tblOffRoadEquipment	HorsePower	78.00	81.00
tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Trenchers
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	248.00	250.00
tblTripsAndVMT	VendorTripNumber	23.00	0.00
tblTripsAndVMT	WorkerTripNumber	59.00	15.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0304	43.3821	26.8776	0.0496	18.4158	2.0544	20.4702	10.0237	1.8904	11.9141	0.0000	4,752.1313	4,752.1313	1.2921	0.0000	4,784.4326
2022	3.4347	34.5262	21.9758	0.0425	18.2306	1.6953	19.9258	9.9743	1.5662	11.5404	0.0000	4,117.4541	4,117.4541	1.2136	0.0000	4,147.7952
Maximum	**4.0304**	**43.3821**	**26.8776**	**0.0496**	**18.4158**	**2.0544**	**20.4702**	**10.0237**	**1.8904**	**11.9141**	**0.0000**	**4,752.1313**	**4,752.1313**	**1.2921**	**0.0000**	**4,784.4326**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.0304	43.3820	26.8776	0.0496	18.4158	2.0544	20.4702	10.0237	1.8904	11.9141	0.0000	4,752.1313	4,752.1313	1.2921	0.0000	4,784.4326
2022	3.4347	34.5262	21.9758	0.0425	18.2306	1.6953	19.9258	9.9743	1.5662	11.5404	0.0000	4,117.4541	4,117.4541	1.2136	0.0000	4,147.7952
Maximum	**4.0304**	**43.3820**	**26.8776**	**0.0496**	**18.4158**	**2.0544**	**20.4702**	**10.0237**	**1.8904**	**11.9141**	**0.0000**	**4,752.1313**	**4,752.1313**	**1.2921**	**0.0000**	**4,784.4326**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.3200e-003	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.1000e-004	7.1000e-004	0.0000		7.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1058	0.3714	1.0810	3.7300e-003	0.3339	3.0000e-003	0.3369	0.0891	2.8000e-003	0.0919		376.3834	376.3834	0.0123		376.6914
Total	**0.1131**	**0.3714**	**1.0813**	**3.7300e-003**	**0.3339**	**3.0000e-003**	**0.3369**	**0.0891**	**2.8000e-003**	**0.0919**		**376.3841**	**376.3841**	**0.0123**	**0.0000**	**376.6921**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.3200e-003	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.1000e-004	7.1000e-004	0.0000		7.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1058	0.3714	1.0810	3.7300e-003	0.3339	3.0000e-003	0.3369	0.0891	2.8000e-003	0.0919		376.3834	376.3834	0.0123		376.6914
Total	**0.1131**	**0.3714**	**1.0813**	**3.7300e-003**	**0.3339**	**3.0000e-003**	**0.3369**	**0.0891**	**2.8000e-003**	**0.0919**		**376.3841**	**376.3841**	**0.0123**	**0.0000**	**376.6921**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation	Trenching	7/1/2021	7/28/2021	5	20	Excavation of the existing downstream dam embankment
2	Site Preparation	Site Preparation	7/29/2021	8/30/2021	5	23	
3	Berm Construction	Building Construction	8/31/2021	10/29/2021	5	44	construction of a downstream earthfill berm to partial height of the dam, and construction of a 3.5-foot earthfill crest raise
4	Paving	Paving	10/31/2021	11/24/2021	5	18	Road improvements would include the placement of aggregate base on top of the heightened berm crest, followed by asphalt.
5	Planting	Site Preparation	11/25/2022	12/20/2022	5	18	As part of the proposed project, an approximately 100-foot planting area would be installed on the east side of the dam crest, along with two new irrigation lines.

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Sailing Lake Access Road Improvements Project - Santa Clara County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Planting	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Excavation	Trenchers	1	8.00	81	0.73
Excavation	Excavators	3	8.00	158	0.38
Berm Construction	Cranes	1	7.00	231	0.29
Berm Construction	Forklifts	3	8.00	89	0.20
Berm Construction	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Excavation	Rubber Tired Dozers	2	8.00	247	0.40
Berm Construction	Rubber Tired Dozers	1	8.00	247	0.40
Berm Construction	Generator Sets	1	8.00	84	0.74
Berm Construction	Welders	1	8.00	46	0.45
Berm Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Berm Construction	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Planting	Rubber Tired Dozers	3	8.00	247	0.40
Planting	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Berm Construction	12	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Planting	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3602	33.7276	21.8426	0.0377		1.7649	1.7649		1.6237	1.6237		3,650.9451	3,650.9451	1.1808		3,680.4649
Total	**3.3602**	**33.7276**	**21.8426**	**0.0377**		**1.7649**	**1.7649**		**1.6237**	**1.6237**		**3,650.9451**	**3,650.9451**	**1.1808**		**3,680.4649**

3.2 Excavation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0483	0.0286	0.3780	1.1700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		116.7016	116.7016	2.6500e-003		116.7679
Total	**0.0483**	**0.0286**	**0.3780**	**1.1700e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**116.7016**	**116.7016**	**2.6500e-003**		**116.7679**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3602	33.7276	21.8426	0.0377		1.7649	1.7649		1.6237	1.6237	0.0000	3,650.9451	3,650.9451	1.1808		3,680.4649
Total	**3.3602**	**33.7276**	**21.8426**	**0.0377**		**1.7649**	**1.7649**		**1.6237**	**1.6237**	**0.0000**	**3,650.9451**	**3,650.9451**	**1.1808**		**3,680.4649**

3.2 Excavation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0483	0.0286	0.3780	1.1700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		116.7016	116.7016	2.6500e-003		116.7679
Total	**0.0483**	**0.0286**	**0.3780**	**1.1700e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**116.7016**	**116.7016**	**2.6500e-003**		**116.7679**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0780	0.0000	18.0780	9.9325	0.0000	9.9325			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0780**	**2.0445**	**20.1224**	**9.9325**	**1.8809**	**11.8134**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0843	2.8506	0.6142	8.5100e-003	0.1900	9.0100e-003	0.1990	0.0521	8.6200e-003	0.0607		908.7730	908.7730	0.0401		909.7765
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0580	0.0343	0.4536	1.4100e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		140.0420	140.0420	3.1800e-003		140.1215
Total	**0.1422**	**2.8850**	**1.0678**	**9.9200e-003**	**0.3379**	**9.9100e-003**	**0.3478**	**0.0913**	**9.4500e-003**	**0.1007**		**1,048.8149**	**1,048.8149**	**0.0433**		**1,049.8980**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0780	0.0000	18.0780	9.9325	0.0000	9.9325			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0780**	**2.0445**	**20.1224**	**9.9325**	**1.8809**	**11.8134**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0843	2.8506	0.6142	8.5100e-003	0.1900	9.0100e-003	0.1990	0.0521	8.6200e-003	0.0607		908.7730	908.7730	0.0401		909.7765
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0580	0.0343	0.4536	1.4100e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		140.0420	140.0420	3.1800e-003		140.1215
Total	**0.1422**	**2.8850**	**1.0678**	**9.9200e-003**	**0.3379**	**9.9100e-003**	**0.3478**	**0.0913**	**9.4500e-003**	**0.1007**		**1,048.8149**	**1,048.8149**	**0.0433**		**1,049.8980**

3.4 Berm Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6997	37.1923	26.4996	0.0484		1.8251	1.8251		1.6985	1.6985		4,635.4297	4,635.4297	1.2894		4,667.6646
Total	**3.6997**	**37.1923**	**26.4996**	**0.0484**		**1.8251**	**1.8251**		**1.6985**	**1.6985**		**4,635.4297**	**4,635.4297**	**1.2894**		**4,667.6646**

3.4 Berm Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0483	0.0286	0.3780	1.1700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		116.7016	116.7016	2.6500e-003		116.7679
Total	**0.0483**	**0.0286**	**0.3780**	**1.1700e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**116.7016**	**116.7016**	**2.6500e-003**		**116.7679**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6997	37.1923	26.4996	0.0484		1.8251	1.8251		1.6985	1.6985	0.0000	4,635.4297	4,635.4297	1.2894		4,667.6646
Total	**3.6997**	**37.1923**	**26.4996**	**0.0484**		**1.8251**	**1.8251**		**1.6985**	**1.6985**	**0.0000**	**4,635.4297**	**4,635.4297**	**1.2894**		**4,667.6646**

3.4 Berm Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0483	0.0286	0.3780	1.1700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		116.7016	116.7016	2.6500e-003		116.7679
Total	**0.0483**	**0.0286**	**0.3780**	**1.1700e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**116.7016**	**116.7016**	**2.6500e-003**		**116.7679**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342		1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0940**	**10.8399**	**12.2603**	**0.0189**		**0.5788**	**0.5788**		**0.5342**	**0.5342**		**1,804.5523**	**1,804.5523**	**0.5670**		**1,818.7270**

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0644	0.0382	0.5040	1.5600e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		155.6022	155.6022	3.5400e-003		155.6906
Total	**0.0644**	**0.0382**	**0.5040**	**1.5600e-003**	**0.1643**	**1.0000e-003**	**0.1653**	**0.0436**	**9.2000e-004**	**0.0445**		**155.6022**	**155.6022**	**3.5400e-003**		**155.6906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0940	10.8399	12.2603	0.0189		0.5788	0.5788		0.5342	0.5342	0.0000	1,804.5523	1,804.5523	0.5670		1,818.7270
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0940**	**10.8399**	**12.2603**	**0.0189**		**0.5788**	**0.5788**		**0.5342**	**0.5342**	**0.0000**	**1,804.5523**	**1,804.5523**	**0.5670**		**1,818.7270**

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0644	0.0382	0.5040	1.5600e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		155.6022	155.6022	3.5400e-003		155.6906
Total	**0.0644**	**0.0382**	**0.5040**	**1.5600e-003**	**0.1643**	**1.0000e-003**	**0.1653**	**0.0436**	**9.2000e-004**	**0.0445**		**155.6022**	**155.6022**	**3.5400e-003**		**155.6906**

3.6 Planting - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.3747	34.4920	21.5114	0.0410		1.6943	1.6943		1.5653	1.5653		3,967.5099	3,967.5099	1.2105		3,997.7717
Total	**3.3747**	**34.4920**	**21.5114**	**0.0410**	**18.0663**	**1.6943**	**19.7606**	**9.9307**	**1.5653**	**11.4960**		**3,967.5099**	**3,967.5099**	**1.2105**		**3,997.7717**

3.6 Planting - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0600	0.0342	0.4644	1.5000e-003	0.1643	9.8000e-004	0.1653	0.0436	9.0000e-004	0.0445		149.9442	149.9442	3.1700e-003		150.0235
Total	**0.0600**	**0.0342**	**0.4644**	**1.5000e-003**	**0.1643**	**9.8000e-004**	**0.1653**	**0.0436**	**9.0000e-004**	**0.0445**		**149.9442**	**149.9442**	**3.1700e-003**		**150.0235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.3747	34.4920	21.5114	0.0410		1.6943	1.6943		1.5653	1.5653	0.0000	3,967.5099	3,967.5099	1.2105		3,997.7717
Total	**3.3747**	**34.4920**	**21.5114**	**0.0410**	**18.0663**	**1.6943**	**19.7606**	**9.9307**	**1.5653**	**11.4960**	**0.0000**	**3,967.5099**	**3,967.5099**	**1.2105**		**3,997.7717**

3.6 Planting - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0600	0.0342	0.4644	1.5000e-003	0.1643	9.8000e-004	0.1653	0.0436	9.0000e-004	0.0445		149.9442	149.9442	3.1700e-003		150.0235
Total	**0.0600**	**0.0342**	**0.4644**	**1.5000e-003**	**0.1643**	**9.8000e-004**	**0.1653**	**0.0436**	**9.0000e-004**	**0.0445**		**149.9442**	**149.9442**	**3.1700e-003**		**150.0235**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1058	0.3714	1.0810	3.7300e-003	0.3339	3.0000e-003	0.3369	0.0891	2.8000e-003	0.0919		376.3834	376.3834	0.0123		376.6914
Unmitigated	0.1058	0.3714	1.0810	3.7300e-003	0.3339	3.0000e-003	0.3369	0.0891	2.8000e-003	0.0919		376.3834	376.3834	0.0123		376.6914

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	6.14	73.94	54.41	48,508	48,508
Total	6.14	73.94	54.41	48,508	48,508

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.3200e-003	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.1000e-004	7.1000e-004	0.0000		7.6000e-004
Unmitigated	7.3200e-003	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.1000e-004	7.1000e-004	0.0000		7.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.1000e-004	7.1000e-004	0.0000		7.6000e-004
Total	**7.3200e-003**	**0.0000**	**3.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**7.1000e-004**	**7.1000e-004**	**0.0000**		**7.6000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.1000e-004	7.1000e-004	0.0000		7.6000e-004
Total	**7.3200e-003**	**0.0000**	**3.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**7.1000e-004**	**7.1000e-004**	**0.0000**		**7.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation