City of Belmont

Twin Pines Park Belmont Creek Restoration Project

Initial Study/Mitigated Negative Declaration

Prepared for:

City of Belmont
1 Twin Pines Lane

Belmont, CA 94002

Prepared by:

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September 2024

Montrose Environmental. 2024. Twin Pines Park Belmont Creek Restoration Project. Prepared for City of Belmont. March. (HWE 22.011). Oakland, CA.

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Acronyms and Abbreviations

§

°F	degrees Fahrenheit
µg/m3	micrograms per cubic meter

A

AB	Assembly Bill
af	acre-foot
amsl	above mean sea level

B

Belmont Creek	creek
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan
bgs	below ground surface
BMP	best management practice

C

City	City of Belmont
CAAQS	California Ambient Air Quality Standards
Cal EMA	California Emergency Management Agency
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CASGEM	California Statewide Groundwater Elevation Monitoring
CDFW	California Department of Fish and Wildlife
CDMG	California Department of Conservation, Division of Mines and Geology
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CGS	California Geological Survey
CNEL	community noise equivalent level
CWA	Clean Water Act
CY	cubic yard

D

dB	decibel
dBA	A-weighted decibel
dbh	diameter at breast height
DDT	dichloro-diphenyl-trichloroethane
DEIR	DRAFT ENVIRONMENTAL IMPACT REPORT
DTSC	[California] Department of Toxic Substances Control

E

EIR	environmental impact report
ESA	Endangered Species Act
F	
FEMA	Federal Emergency Management Agency
FHSZ	FIRE HAZARD SEVERITY ZONE
FTA	Federal Transit Administration
G	
GHG	greenhouse gas
GSA	groundwater sustainability agency
GSPS	GROUNDWATER SUSTAINABILITY PLAN
GWP	Global warming potential
H	
Hz	Hertz
I	
IS/MND	Initial Study/Mitigated Negative Declaration
K	
kV	kilovolt
kV/m	kilovolt per meter
kW	kilowatt
kW/m^2	kilowatt per square meter
L	
Ldn	Day-night sound level
Leq	equivalent sound level
LF	linear feet
Lmax	maximum sound level
Lmin	minimum sound level
LRA	local responsibility area
Lxx	percentile-exceeded sound level
m	
MCL	maximum contaminant level
MLD	Most Likely Descendant
MRZ	mineral resource zone
N	
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
NWP	Nationwide Permit
O	
OS	parks and open space

OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P	
Park	Twin Pines Park
Project or Proposed Project	Twin Pines Park Belmont Creek Restoration Project
PF	Public facility
PM	particulate matter
PM_{10}	particulate matter with aerodynamic radius of 10 micrometers or less
$PM_{2.5}$	particulate matter with aerodynamic radius of 2.5 micrometers or less
PP	Park/Plaza
PPV	peak particle velocity
PROS	Parks Recreation Open Space
PS	Public space
R	
RWQCB	Regional Water Quality Control Board
S	
SFBAAB	San Francisco Bay Area Air Basin
SGMA	Sustainable Groundwater Management Act
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SRA	state fire responsibility area
SHPO	State Historic Preservation Officer
SWPPP	Stormwater Pollution Prevention Plan
T	
TCR	tribal cultural resource
TMDL	TOTAL MAXIMUM DAILY LOAD
U	
U.S.	United States of America
USACE	U.S. Army Corps of Engineers
USFWS	U.S. FISH AND WILDLIFE SERVICE
UST	Underground storage tank
V	
VdB	vibration velocity in decibels
VHFHSZ	very high fire hazard severity zone
VC	Village core
VMT	vehicle miles traveled
VOC	VOLATILE ORGANIC COMPOUND
W	
WB	westbound
WQO	Water quality objective

Chapter 1
INTRODUCTION

The City of Belmont (City) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed Twin Pines Park Belmont Creek Restoration Project (Project or Proposed Project). The Proposed Project and its location are described in depth in Chapter 2, *Project Description*. This document was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 *et seq.*).

1.1 Intent and Scope of this Document

This IS/MND has been prepared in accordance with CEQA, under which the potential environmental effects of the Proposed Project are evaluated at the project level of analysis (CEQA Guidelines Section 15378). The City, as the lead agency under CEQA, will consider the Proposed Project's potential environmental impacts when considering whether to approve the Project. The IS/MND does not recommend approval or denial of the Proposed Project but provides decision-makers and the public with information on which to base an informed decision.

The site plans for the Proposed Project used to support the analysis in this IS/MND are at the 60% level of design. The City anticipates that the final design for the Proposed Project would include some modifications to these plans, and the environmental analysis has been developed with conservative assumptions regarding potential project impacts to accommodate some level of modification.

This IS/MND describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary, and the potential environmental impacts of the Proposed Project on, or with regard to, the following topics:

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

1.2 Public Involvement Process

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines Sections 15073 and 15105(b) require that the lead agency designate a period during the IS/MND process when the public and other agencies can provide comments on the potential impacts of the Proposed Project. Accordingly, the City is now circulating this document for a 30-day public and agency review period. The electronic version of this document is available online at: https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/451/938

To provide input on this project, please send comments to the following contact:

Sean Rose (S.R. Rose Engineering Inc.)
(On Behalf of City of Belmont)
1 Twin Pines Lane
Belmont, CA 94002
Email: sean@srroseengineering.com

During its deliberations on whether to approve the Proposed Project, the City will consider all comments received before 5:00 p.m. on the date identified in the Notice of Intent for closure of the public comment period.

1.3 Organization of this Document

This IS/MND contains the following components:

Chapter 1, *Introduction*, provides a brief description of the intent and scope of this IS/MND, the public involvement process under CEQA, and the organization of and terminology used in this IS/MND.

Chapter 2, *Project Description*, describes the Proposed Project including its purpose and objectives, the site where the Proposed Project would be constructed, the construction approach and activities, operation-related activities, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter also includes a brief environmental setting description for each resource topic and identifies the Proposed Project's anticipated environmental impacts, as well as any mitigation measures that would be required to reduce potentially significant impacts to a less-than-significant level.

Chapter 4, *Report Preparation*, provides a list of persons involved in preparing this IS/MND.

Chapter 5, *References*, provides a bibliography of printed references, web sites, and personal communications used in preparing this IS/MND.

Appendices. The following appendix materials are provided to support the environmental evaluation:

Appendix A	Regional and Local Laws, Regulations, and Policies
Appendix B	Air Quality and GHC Emissions Calculations
Appendix C	Special-Status Species List
Appendix D	Native American Correspondence Log
Appendix E	Mitigation Monitoring and Reporting Program

1.4 Impact Terminology

This IS/MND uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of *no impact* is made when the analysis concludes that the Proposed Project would not affect a particular environmental resource or issue.
- An impact is considered less than significant if the analysis concludes that there would be no substantial adverse change in the environment and that no mitigation is needed.
- An impact is considered *significant* if it would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by using specific significance criteria as the basis of evaluation. Mitigation measures are identified to reduce otherwise significant impacts to a less-than-significant level.

This IS/MND identifies particular mitigation measures that are intended to lessen Proposed Project impacts. The State CEQA Guidelines (14 CCR Section 15370) define mitigation as:

- avoiding the impact altogether by not taking a certain action or parts of an action;
- minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- reducing or eliminating the impact over time of preservation and maintenance operations during the life of the action; and
- compensating for the impact by replacing or providing substitute resources or environments.

Chapter 2
Project Description

2.1 Overview

The City proposes the Twin Pines Park Belmont Creek Restoration Project (Proposed Project or Project) to stabilize eroded sections of Belmont Creek in Twin Pines Park in Belmont, San Mateo County, California (**Figure 2-1,** Project Vicinity). The Project would improve and enhance a segment of Belmont Creek using biostabilization techniques. The Project would occur in one or two phases, depending on available funding (**Figure 2-2,** Project Location Map). Phase 1 would address 458 linear feet (LF) of the creek. Phase 2 would address the channel where the creek daylights at a concrete culvert upstream of the Phase 1 footprint, to approximately 1,600 LF downstream.

The Project would also include design considerations for a separate off-channel stormwater detention project that has a proposed inlet and outlet structure in the creek between the Proposed Project and the proposed location for the stormwater detention basin. While the two projects occur near each other, the Twin Pines Park Storm Water Detention Basin project is a stand-alone project with its own independent utility, funding source, and a separate CEQA compliance pathway.[1]

2.2 Proposed Project Location and Setting

The Project is located within the City of Belmont's 17-acre Twin Pines Park with a given address at One Twin Pines Way in Belmont, California, as shown on Figures 2-1 and Figure 2-2.

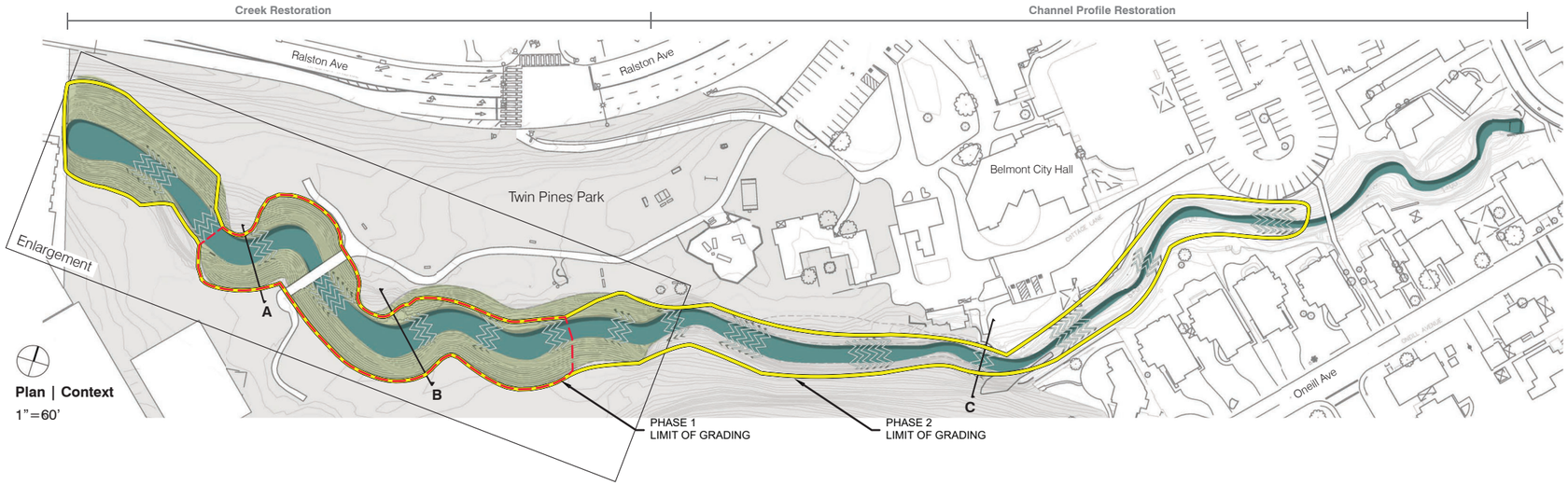
The Proposed Project area is located in the west portion of the park, comprising both banks of Belmont Creek. The Project site is bounded by Ralston Avenue on the north, city parking lots and buildings on the east, open space on the south, and picnic and playground areas to the west. The Project site is primarily within the banks and upland areas directly adjacent to the 1,600-foot-long section of Belmont Creek. The Project area supports non-native eucalyptus trees, a mix of other native tree species, and park facilities such as benches, pathways, and picnic areas.

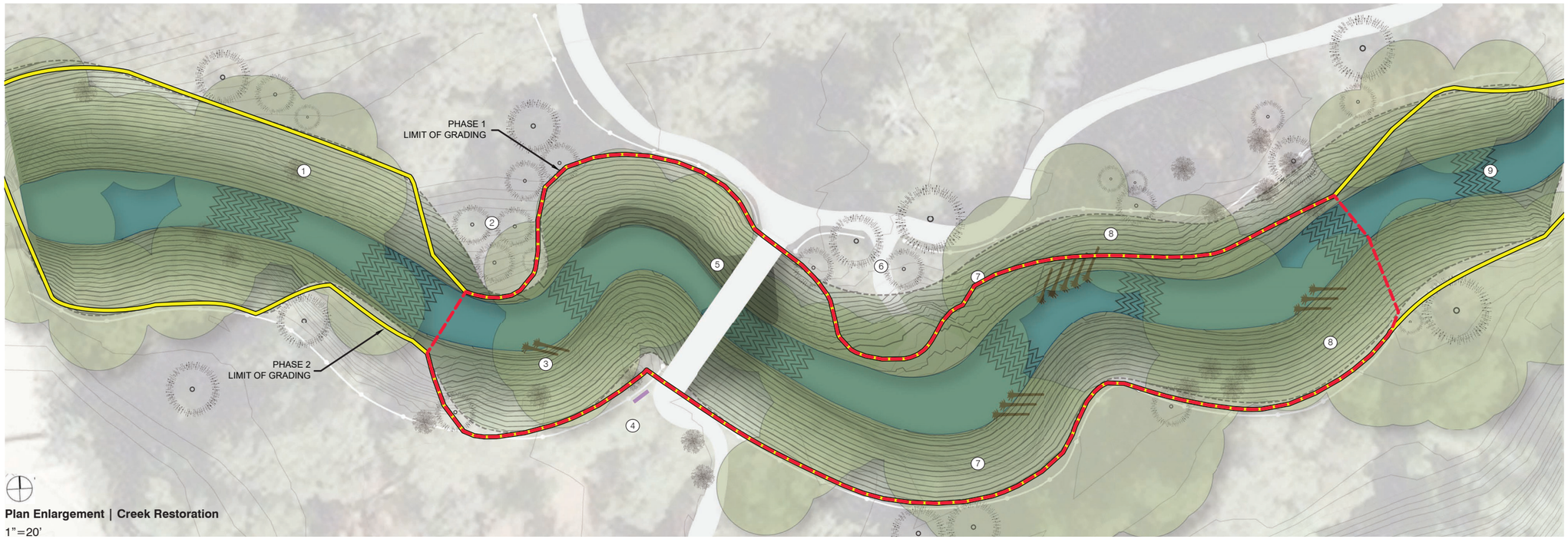
[1] For further information about the Twin Pines Park Storm Water Detention Basin project, see the City of Belmont website at https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/453/425.

Figure 2-1. Project Vicinity

Figure 2-1
Project Vicinity

Figure 2-2. Project Location Map





Phase 1
Phase 2

NOTES:

1. Remove eucalyptus
2. Preserve and protect native trees outside the limit of grading
3. Install woody debris to protect slope and provide habitat
4. Install interpretive elements
5. Protect bridge with rock slope protection
6. Improve creek access by regrading a maintenance path
7. Regrade bank slopes
8. Revegetatate banks with native vegetation
9. Construct riffles

Source: Restoration Design Group, Inc., 1/27/2023

Figure 2-2
Project Location Map

Twin Pines Park Belmont Creek Restoration Project

2.3 Proposed Project Purpose and Objectives

The Project's primary purpose is to stabilize eroding streambanks in Twin Pines Park. Additional Project objectives include:

- **Provide public safety.** The Project would improve public safety through stabilizing eroding streambanks, setting back steep, vertical banks to a more gradual slope angle, and creating a dedicated creek access point for patrons.
- **Reduce downstream flooding and sedimentation.** The Project would expand the channel cross-sectional area and create riffle-run-pool sequences that would help reduce overall streamflow velocity and store entrained sediment.
- **Enhance riparian habitat and natural resources.** The Project would improve riparian and aquatic habitat quality and complexity by developing geomorphic bed features (pools and riffles) along the stream channel, removing nonnative and invasive plant species, and replacing them with native plantings.
- **Improve water quality.** The Project would improve water quality by reducing channel erosion through the Project reach and sediment loading into the creek.

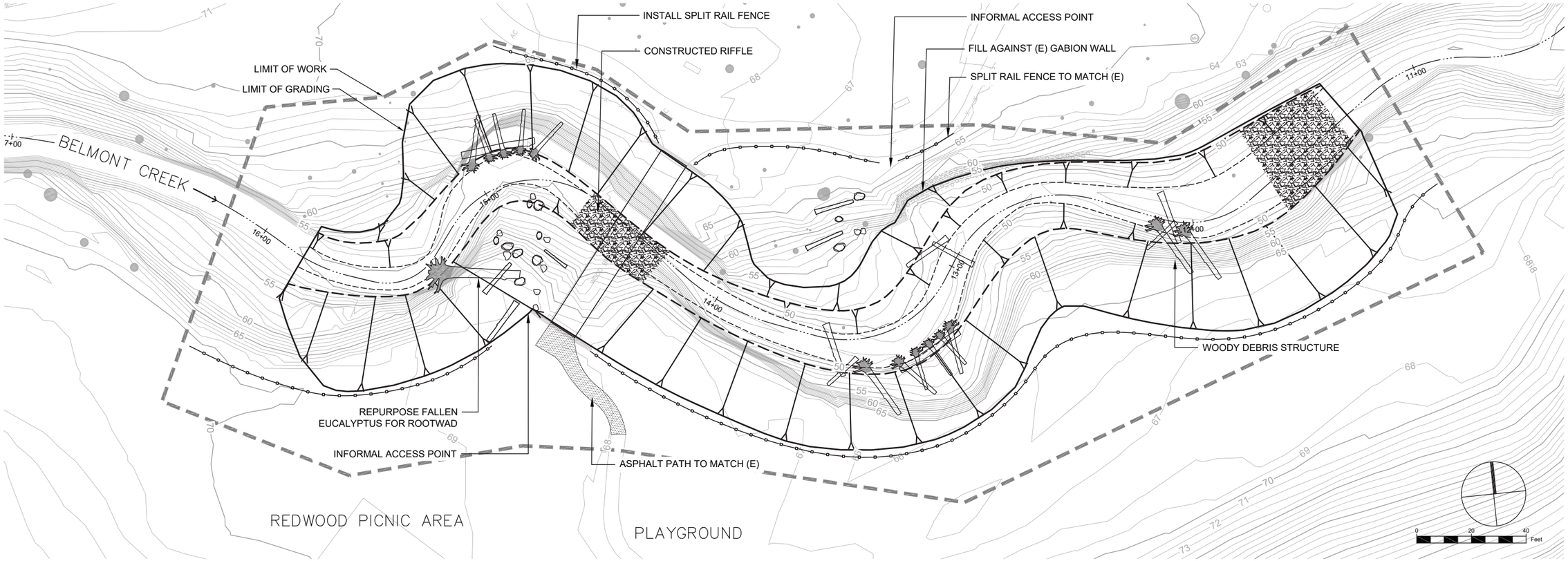
2.4 Project Components

The design and implementation of the Project are focused on regrading bank slopes to reduce the likelihood of future incision, improving water quality by reducing future erosion, enhancing native vegetation to improve stream habitat, improving creek access, and protecting the existing pedestrian bridge. Project components to achieve these objectives are described below.

At the time of this environmental analysis, only the design and environmental review of both phases is fully funded. Construction of one and/or both phases will require procurement of sufficient funding prior to project implementation. If funding for Phase 2 is received after construction of Phase 1 is complete, then construction of Phase 2 would commence at that later time of funding. If funding for Phase 2 is received before construction for Phase 1 starts, then Phase 2 would be implemented.

Project component locations for Phase 1 are shown on **Figure 2-3**, Project Components. Design plans for Phase 2 have not been advanced beyond the conceptual level at this time.

Figure 2-3. Project Components



PLAN
1" = 20'

LAYOUT & GRADING LEGEND

- LIMIT OF WORK (L.O.W.)
- LIMIT OF GRADING (L.O.G.)
- (E) MAJOR CONTOUR (5-FT)
- (E) MINOR CONTOUR (1-FT)
- RAIL FENCE
- BOTTOM OF CHANNEL (BC)
- EDGE OF CHANNEL (EC)
- ROOTWAD, LAYOUT BY O.R.
- WOODY DEBRIS STRUCTURE
- PLACED LOG
- SITE BOULDER, LAYOUT BY O.R.
- (E) GABION
- CONSTRUCTED RIFFLE
- ASPHALT PAVING

Source: Restoration Design Group, Inc., 7/14/2023

Figure 2-3
Phase 1 Project Components

2.4.1 Project Components by Phase

Phase 1 Components

Phase 1 would stabilize and enhance 458 LF of the creek bed and adjacent banks. The existing channel alignment would be maintained, except where it is necessary to relocate the low-flow channel away from previously eroded slopes.

The Project would widen the geometry of the active channel (bottom of channel below ordinary high-water elevation) to provide a dynamically stable channel less prone to incision over time. This work would coincide with bank grading to stabilize over-steepened banks and to accommodate the widened low-flow channel. Proposed re-graded slopes would be limited to a maximum bank steepness of 2H:1V, except where tying into existing conditions.

Soil generated from the bank stabilization work would be used to raise the channel bottom, elevating the channel bed to a more resilient and functional channel gradient and geometry. This design channel elevation is similar to geometry that existed prior to erosion over the last several decades, which lowered the channel bed, which in turn contributed to destabilizing the adjacent streambanks.

Riffles are stream features where accelerated and shallow streamflow passes over rocks, and the faster flows maintain sediment conveyance downstream. The Project includes constructed riffles at two select locations to provide streambed stability (grade control) and enable sediment transport continuity. Riffles are composed of riffle bed material (cobbles and gravel). The selected rock size for the constructed riffles would be based on the simulated (modelled) channel hydraulic conditions for design discharges. The intent is to construct a geomorphically stable riffle that would better persist under larger storms than a riffle constructed out of the existing silt and fine gravels, which would wash out under larger flows. However, the riffle design would not use boulders so large that it would prevent natural sediment dynamics and vegetation establishment over time. The Project includes placing rootwads, woody debris structures, logs, and boulders in the streambed to develop instream channel complexity and encourage pool creation in the stream. Together, the aim of these multiple features described above is to restore geomorphic processes and hydraulic conditions to a more similar condition than occurred prior to the channel bed incision and streambank erosion of recent years. In turn, restoring these physical processes that shape the stream channel would result in improved ecological and habitat conditions and complexity.

Existing recreational facilities would be protected in place or removed and salvaged where feasible, including a pedestrian bridge, signage, fencing, benches, picnic area furnishings, and a drinking water fountain. The Project would install a split rail fence to separate the creek area from the surrounding park—although pedestrian access to the creek would be maintained at an access point west of the Buckeye picnic center on the northwest side of the creek, and access would also be provided on the opposite side of the creek just upstream of the pedestrian bridge. The Project would repave the existing asphalt paths connecting the pedestrian bridge to the picnic areas, playground, parking lot, and Ralston Avenue.

The Project would also preserve an existing gabion wall located on the left bank (STA 12+40 to 12+90) to act as a retaining wall to reduce risk of slope failure and erosion at that location.

The materials generated by demolition would be off-hauled and disposed of at an off-site location. Phase 1 would remove approximately 1.05 tons of concrete and six loads of trash. Phase 1 would also

remove up to 58 trees equal to and greater than 6 inches in diameter at breast height (dbh). Of the 58 trees to be removed, 38 have been identified as native, and 20 have been identified as non-native and/or invasive. Where feasible, native trees and vegetation would be preserved. An estimated 35 removed trees would be salvaged for biotechnical stabilization treatments. Fourteen additional trees are located in construction areas but would be preserved and protected.

Phase 1 would import approximately 111 cubic yards of streambed material for riffles, seven logs, and twenty boulders for stabilization activities.

Phase 2 Components

Phase 2 encompasses all of the components described for Phase 1 (458 LF) and would stabilize and enhance an additional (approximately) 1,145 LF of the creek. The upstream extent of Phase 2 would begin at the concrete culvert outfall where Belmont Creek daylights from an underground concrete pipe and extend downstream approximately 1,600 LF. Bank grading and slope stabilization of over-steepened banks, widening of the low-flow channel, and installation of rootwads and woody debris structures would occur from the culvert outfall downstream, approximately 750 LF. In addition, streambed material would be placed along the channel bottom to raise the streambed elevation over the 1,600 LF segment of Phase 2. Roughened rock riffles would be installed periodically to create up to 15 riffle-run-pool sequences.

As with Phase 1, Phase 2 (and Phase 2 if implemented after Phase 1) would involve off-hauling materials during demolition and importing materials during construction. Design of Phase 2 has not been completed to a quantitative level of detail, but it is known that soil, concrete debris, trash, vegetation, and a chain link fence would be off-hauled and that streambed material for riffles, logs, and boulders would be imported either during Phase 1 or Phase 2.

2.4.2 Construction Equipment

Project construction would involve: clearing and grubbing; removing existing debris; excavation; and hauling of soil, debris, and material on- and off-site. Specific pieces of equipment would be determined by the construction contractor, but are anticipated to include the following types of equipment:

- excavators (e.g., Caterpillar 336F)
- bulldozers (e.g., Caterpillar D8)
- soil compactors
- skid steer
- haul trucks
- water truck
- portable generators
- bucket truck (for tree removal)
- manual and powered hand tools, weed-eaters, mowers, etc.

2.4.3 Construction Access and Staging Areas

Construction vehicles and equipment would access the Project area from Twin Pines Lane and directly from Ralston Avenue on the western side of the park. Vehicle access within the park would follow the existing pedestrian pathways. Access into the creek would be within the limits of grading. All staging areas would be located within the City right-of-way or City property within Twin Pines Park. These staging areas would provide materials and equipment storage, construction trailers, employee parking, and hazardous materials storage and containment during Project construction.

2.4.4 Site Preparation

Site preparation would include vegetation clearing and grubbing of the Project area and staging areas prior to grading or excavation activities. Clearing and grubbing of the site would be conducted using standard excavators and hand labor.

The channel is an intermittent stream in most years, conveying streamflow seasonally during the winter and spring months. However, flow may persist into the summer months during wet years, augmented by nuisance water and other sources. In addition, perennial pools may be present in the Project area during a range of water years. Dewatering would be needed for both Phase 1 and Phase 2 in all areas where the creek would be regraded.

Construction would occur during the summer, when water levels are lowest. The Project would include a temporary cofferdam installed upstream of the construction area. Water would be conveyed from the cofferdam downstream of construction via gravity flow or pump in order to keep the construction site dry.

Construction-related activities would require the need for off-site hauling and disposal of materials. The construction contractor would determine the disposal site, assumed to be located 20 miles away, for the purposes of environmental analysis. To the extent feasible, suitable graded soil would be reused on site. In addition, construction would require import of materials. Rock and other materials would be delivered to the Project site by conventional haul trucks (approximately 15 cubic yards [cy] per load).

It is anticipated that approximately 17 truck trips would be needed for demolition and construction of Phase 1 to facilitate site grading and material off-haul, material deliveries, and worker truck trips. While a quantitative analysis for Phase 2 (and Phase 2 if implemented after Phase 1) cannot currently be completed, approximately 139 truck trips are likely to be required for the demolition and construction of Phase 2, and 155 trips are expected if Phase 2 is implemented after Phase 1.

2.4.5 Construction Timing and Schedule

In-channel ground disturbance activities for Phase 1 (or for Phase 2 if funding is procured) would be anticipated to occur between June 2025 and October 2025. Construction of Phase 1 would require an estimated 7 months (including in-channel work, out-of-channel work, and planting), and Phase 2 construction would require approximately 10 months. Limbing of trees and removal of trees growing outside the waters of the U.S. may occur prior to the June 2025 start date to avoid and minimize impacts to nesting birds. This estimated schedule is based on the design engineer's professional judgment, past reference projects, and environmental impact avoidance and minimization considerations. However, the actual construction start date would depend on regulatory authorization and permit conditions.

Construction activities would occur Monday through Friday and would comply with the City of Belmont Ordinance Code for noise, which limits construction hours to 8:00 a.m. to 5:00 p.m. weekdays. No nighttime work is anticipated.

2.4.6 Revegetation and Habitat Enhancement

The Project includes revegetating the riparian corridor with native tree species such as box elder (*Acer negundo*), California buckeye (*Aesculus californica*), coast live oak (*Quercus agrifolia*), big-leaf maple (*Acer macrophyllum*), and willows (*Salix spp.*). Shrubs and groundcovers include California sagebrush

(*Artemisia californica*), coffeeberry (*Frangula californica*), creek dogwood (*Cornus sericia spp. serecia*), and California blackberry (*Rubus ursinus*). **Table 2.4-1** presents the plant species palette for habitat enhancement.

Table 2.4-1. Plant Species Palette* for Habitat Enhancement

Species Name	Common Name	Revegetation Zone for Planting
Live Stakes		
Cornus sericea	Red Osier dogwood	Willow/Dogwood
Salix spp.	Willows	Willow/Dogwood
Large Shrubs		
Calycanthus occidentalis	Spice bush	Riparian
Ceonothus thyrisflorus	Ceanothus	Chaparral
Heteromeles arbutifolia	Toyon	Chaparral
Medium Shrubs and Perennials		
Baccharis pilularis	Coyote brush	Coastal Scrub, Chaparral
Eriogonum fasciculatum	California Buckwheat	Chaparral
Muhlennergia rigens	Deergrass	Coastal Scrub
Rubus ursinus	Blackberry	Understory
Salvia melifera	Black sage	Chaparral
Small Grasses / Forbs / Shrubs		
Artemesia californica	California sagebrush	Coastal Scrub, Chaparral
Carex nudata	Dudley's sedge	Riparian
Carex praegracilis	California field sedge	Riparian
Clinopodium douglasii	Yerba buena	Understory
Eriogonum latifolium	Coast buckwheat	Coastal Scrub
Iris douglasiana	Douglas iris	Coastal Scrub
Juncus patens	Common rush	Understory
Juncus phaeocephalus	Brownhead rush	Riparian
Salvia spathacea	Hummingbird sage	Understory
Solidago velutina californica	California goldenrod	Chaparral
Vitis californica	California grape	Understory

Notes: *Planting palette may change based on resource agency input and plant availability.

Table 2.4-2 shows a potential seed mix for hydroseeding areas. Actual seed mix is dependent on regulatory agency approval.

Table 2.4-2. Plant Species Palette for Hydroseeding*

Scientific Name	Common Name
Hordeum brachyantherum	Meadow Barley
Elymus glaucus	Blue Wildrye
Elymus triticoides,	Creeping Wildrye
Festuca microstachys	Small Fescue
Festuca rubra	Red Fescue
Stipa pulchra	Purple Needlegrass
Trifolium willdenovii	Tomcat Clover

*Seed mix may change; however, it would remain either locally native species or a sterile erosion control mix.

2.5 Construction Best Management Practices

Specific construction methods would be determined by the construction contractor but would comply with the environmental protection and mitigation measures determined through the regulatory approval and authorization process (permitting).

Project construction would utilize and implement best management practices (BMPs) to avoid and minimize adverse effects on people and the environment. BMPs would be implemented before, during, and after construction, as specified. The BMPs for the Project are identified in **Table 2.5-1**.

Table 2.5-1. Applicable Construction BMPs for the Project

Number	Title	BMP Description
BMP-1	Construction Work Windows	▪ Ground-disturbing activities in the channel will occur during the dry season (June 15 through October 15 or as allowed by permits). The construction work window may be extended provided that there is no measurable precipitation forecasted in the National Weather Service 72-hour forecast and that it is consistent with the terms of regulatory permits and approvals. ▪ Work activities will occur during daylight hours and will be limited to 8 a.m.–5 p.m. ▪ No work shall be conducted during or within 24-hours of a rain event (0.5 inches in a 24-hour period).
BMP-2	Area of Disturbance	▪ Ground disturbance within the channel will be kept to the minimum footprint necessary to complete Project construction. ▪ Work activities will be confined to approved construction work areas, and staging areas and access routes.
BMP-3	Erosion and Sediment Control	▪ At no time shall silt-laden runoff be allowed to leave the project site within the waterway. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. ▪ Erosion control measures will be installed according to manufacturer's specifications. Appropriate erosion control measures include, but are not limited to, the following: silt fences, straw bale barriers, erosion control blankets and mats, and soil stabilization measures (e.g., tackified straw with seed, jute blankets, broadcasting, and hydroseeding). ▪ Erosion control fabrics will consist of natural fibers that will biodegrade over time and are wildlife-friendly. No plastic or other non-porous material will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff. ▪ All temporary construction-related erosion control methods (e.g., silt fences) shall be removed at the completion of construction. ▪ All soils disturbed or exposed during construction activities will be seeded and stabilized using erosion control measures, such as erosion control fabric or hydromulch, or re-planted per the Revegetation Plan. Areas below the OHWM are exempt from this BMP. ▪ All areas disturbed during construction will be seeded prior to October 15th or the end of the dry season construction window.

Table 2.5-1. Applicable Construction BMPs for the Project

Number	Title	BMP Description
BMP-4	Fill, Spoils, and Stockpiled Materials	Temporary fill materials, excavated spoils that have not yet been hauled off site, and stockpiled material not moved within 14 days will be isolated with silt fence, filter fabric, and/or straw bales/fiber rolls. Silt fence and/or fiber rolls will be placed at any locations where work could result in loose sediment that could enter the stream. The silt fence/fiber rolls will be maintained and kept in place for the duration of the project. Any sediment or debris captured by the fence/rolls will be removed before fence/rolls are pulled.
BMP-5	On-site Hazardous Materials Management	▪ An inventory of all hazardous materials used (and/or expected to be used) at the worksite and the end products that are produced (and/or expected to be produced) after their use will be maintained by the worksite manager. ▪ As appropriate, containers will be properly labeled with a "Hazardous Waste" label and hazardous waste will be properly recycled or disposed of off-site. ▪ Exposure of chemicals to precipitation will be minimized by storing chemicals in watertight containers or in a storage shed (completely enclosed) with appropriate secondary containment to prevent any spillage or leakage. ▪ Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and will not be allowed to enter surface waters. ▪ All toxic materials, including waste disposal containers, will be covered when they are not in use and located as far away as possible from a direct connection to the storm drainage system or surface water. ▪ If hazardous materials are encountered at the Project site, the Contractor will remove and dispose of them according to the Spill Prevention and Response Plan (see BMP-6).
BMP-6	Spill Prevention and Response Plan	To minimize the potential adverse effects due to the release of chemicals, fuels, lubricants, and non-storm drainage water into waterways, the City or the Contractor shall develop a Spill Prevention and Response Plan to be implemented by the Contractor and all field personnel. The plan will contain guidelines for cleanup and disposal of spilled and leaked materials at the project site. The plan will include, but not be limited to, the following measures:

Table 2.5-1. Applicable Construction BMPs for the Project

Number	Title	BMP Description
		1. Contractor's designated field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills. 2. Equipment and materials for cleanup of spills will be available on site, and spills and leaks will be cleaned up immediately and disposed of according to the following guidelines: a) For small spills on impervious surfaces, absorbent materials will be used to remove the spill, rather than hosing it down with water. b) For small spills on pervious surfaces such as soil, the spill will be excavated and properly disposed of rather than being buried. c) Absorbent materials will be collected and disposed of properly and promptly. 3. Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means. 4. Spill response kits will be on hand at all times while hazardous materials are in use (e.g., at crew trucks and other logical locations). All field personnel will be advised of these locations. 5. The Contractor will routinely inspect the work site to verify that spill prevention and response measures are properly implemented and maintained.
BMP-7	Vehicle and Equipment Maintenance	▪ Servicing of vehicles shall be conducted in designated staging areas or maintenance roads outside the top of bank of Belmont Creek to avoid contamination through accidental drips and spills. ▪ Fueling of equipment and vehicles will take place a minimum of 50 feet from the top of the creek bank. ▪ Incoming equipment will be checked for leaking oil and fluids. No equipment servicing will take place in the channel. If emergency repairs are required, only those repairs necessary to move equipment to a more secure location shall be permissible. ▪ All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will not be permitted. ▪ Vehicle and equipment washing can occur on site only as needed to prevent the spread of sediment, pathogens, or exotic/invasive species. No runoff from vehicle or equipment washing will be allowed to enter water bodies without being subjected to adequate filtration (e.g., vegetated buffers, hay wattles

Table 2.5-1. Applicable Construction BMPs for the Project

Number	Title	BMP Description
		or bales, and silt screens). Other proper trackout systems can be used to prevent the spread of sediment from the site.
BMP-8	Dust Management Controls and Air Quality Protection	The Contractor will implement the following applicable Bay Area Air Quality Management District's (BAAQMD's) Basic Construction Mitigation Measures to reduce emissions of fugitive dust and equipment exhaust: ▪ 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 visible mud or dirt trackout 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 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. ▪ All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. ▪ All trucks and equipment, including their tires, shall be washed off prior to leaving the site. ▪ Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel. ▪ Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. ▪ All vehicle speeds on unpaved roads shall be limited to 15 mph. ▪ 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 [13 CCR Section 2485]).

Table 2.5-1. Applicable Construction BMPs for the Project

Number	Title	BMP Description
		▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
BMP-9	Work Site Housekeeping	The Contractor shall maintain a neat and orderly job site and properly dispose of all trash on a daily basis. Following construction, all construction debris will be removed from the work area.
BMP-10	Minimize Spread of Weeds and Invasive Species	▪ All ground disturbing equipment used within the channel will be washed (including wheels, tracks, and undercarriages) both before and after being used at the site (see also BMP-7). ▪ Invasive exotic species that occur within the Project area shall be removed and properly disposed of off-site during initial site preparation and grading. ▪ All erosion control materials used on site, such as straw wattles, mulch, and fill material, will be certified weed free. ▪ All revegetation efforts shall include only local plant materials native to the Project area.
BMP-11	Reduce Wildfire Ignition Risk	a) "All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors. b) During the high fire danger period (April 1–December 1), work crews will: ▪ Have appropriate fire suppression equipment available at the work site. ▪ Keep flammable materials, including flammable vegetation slash, at least 10 feet away from any equipment that could produce a spark, fire, or flame. ▪ Not use portable tools powered by gasoline-fueled internal combustion engines within 25 feet of any flammable materials unless a round-point shovel or fire extinguisher is within immediate reach of the work crew (no more 25 feet away from the work area)"

2.6 Permits and Approvals

The Proposed Project would require regulatory authorizations and permits from the U.S. Army Corps of Engineers (USACE), the San Francisco Bay Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board, the California Department of Fish and Wildlife (CDFW), and consultation with both U.S. Fish and Wildlife Service (USFWS) and the State Historical Preservation Office (SHPO). The permits and regulatory compliance requirements for the Proposed Project, along with the responsible party or permitting agency are described in **Table 2.6-1** below.

Table 2.6-1. Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
U.S. Army Corps of Engineers (USACE), San Francisco District	Clean Water Act (CWA) Section 404	Regulates placement of dredged and fill materials into Waters of the United States.	Nationwide Permit (NWP) No. 27, Aquatic Habitat Restoration, Enhancement, and Establishment Activities
San Francisco Bay Regional Water Quality Control Board (RWQCB)	CWA Section 401 with Waste Discharge Requirements	Water quality certification for placement of materials into Waters of the United States and Waters of the State.	401 Water Quality Certification
	CWA Section 402	National Pollutant Discharge Elimination System (NPDES) program regulates stormwater and construction discharges.	State Water Board's Construction General Permit Order 2009-0009-DWQ; a Stormwater Pollution Prevention Plan (SWPPP) is required.
California Department of Fish and Wildlife (CDFW), Bay-Delta Region	Fish and Game Code (F&G Code) Section 1600	Applies to activities that would substantially modify a river, stream, or lake.	Lake and Streambed Alteration Agreement (1602 permit)
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act (ESA)	USACE must consult with USFWS if threatened or endangered species may be affected by the Proposed Project.	USACE to conduct Informal Consultation under CWA 404 permit process
State Historic Preservation Officer (SHPO)	National Historic Preservation Act (NHPA) Section 106	USACE must consult with SHPO if historic properties or prehistoric archaeological sites may be affected by the Proposed Project.	USACE to conduct SHPO Consultation under CWA 404 permit process

Table 2.6-1. Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
State Water Resources Control Board (SWRCB)	Construction General Permit Order 2009-0009-DWQ	Applies to Projects that disturb one (1) or more acres of soil.	Construction General Permit

Chapter 3
ENVIRONMENTAL CHECKLIST

This chapter of the Initial Study/Mitigated Negative Declaration (IS/MND) assesses the environmental impacts of the Twin Pines Park Belmont Creek Restoration Project (Proposed Project or Project) based on the environmental checklist provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

1.	**Project Title**	Twin Pines Park Belmont Creek Restoration Project
2.	**Lead Agency Name and Address**	City of Belmont 1 Twin Pines Lane, Belmont, CA 94002
3.	**Contact Person, Phone Number and Email**	Sean Rose (S.R. Rose Engineering Inc.) (650) 400-1462, sean@srroseengineering.com
4.	**Project Location and Assessor's parcel number (APN)**	Belmont Creek, Twin Pines Park, San Mateo County APN: 045-170-080
5.	**Property Owner(s)**	City of Belmont
6.	**General Plan Designation**	Public/Community Facilities
7.	**Zoning**	Public Space (PS), Park/Plaza (PP), Public Facility (PF), Single Family Residential 6000 square feet (R1B), Village Core (VC)
8.	**Description of Project**	See Chapter 2, *Project Description,* for more information.
9.	**Surrounding Land Uses and Setting**	Undeveloped, recreational, commercial, and residential uses; see Chapter 2, Project Description, for more information

10.	**Other Public Agencies whose Approval or Input May Be Needed**	▪ U.S. Army Corps of Engineers ▪ San Francisco Bay Regional Water Quality Control Board ▪ California Department of Fish and Wildlife, Bay-Delta Region ▪ U.S. Fish and Wildlife Service ▪ State Historic Preservation Officer ▪ State Water Resources Control Board
11.	**Hazards or Hazardous Materials**	No hazardous materials release sites are known to occur in or near the Project area.
12.	**Native American Consultation**	The City sent consultation letters eight tribes on February 13, 2023, in accordance with AB 52.

This chapter of the IS/MND assesses the environmental impacts of the Proposed Project based on the environmental checklist provided in Appendix G of the CEQA Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section (3.1 through 3.21) provides a brief overview of regulations and regulatory agencies that address the resource and describes the existing environmental conditions for that resource to help the reader understand the conditions that could be affected by the Proposed Project. Relevant local laws, regulations, and policies are described in Appendix A. In addition, each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by the Proposed Project, as indicated by the checklist on the following pages.

1	☐ Aesthetics	12	☐ Mineral Resources
2	☐ Agriculture and Forestry Resources	13	☐ Noise
3	☐ Air Quality	14	☐ Population/Housing
4	☒ Biological Resources	15	☒ Public Services
5	☒ Cultural Resources	16	☒ Recreation
6	☐ Energy	17	☒ Transportation
7	☐ Geology/Soils	18	☒ Tribal Cultural Resources
8	☐ Greenhouse Gas Emissions	19	☐ Utilities/Service Systems
9	☒ Hazards and Hazardous Materials	20	☒ Wildfire
10	☐ Hydrology/Water Quality	21	☒ Mandatory Findings of Significance
11	☐ Land Use/Planning		

Determination

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of sources of information cited in this document and the comments received; conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site.

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 to 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 (EIR) 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 _____ Date _____

Name: Nisha Patel
City of Belmont, Public Works Director

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3.1 AESTHETICS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from 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 that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

National Scenic Byway Program

The National Scenic Byway Program is administered by the Federal Highway Administration and was established to preserve scenic but less-traveled roadways. A national scenic byway is a road recognized by the U.S. Department of Transportation for one or more of six intrinsic qualities. Intrinsic qualities include archeological, scenic, cultural, historic, natural, and recreational.

State Laws, Regulations, and Policies

California Scenic Highway Program

The California Scenic Highway Program was established through Senate Bill 1447 (Farr) in 1963 to preserve and enhance the natural beauty of California (Caltrans 2008). This bill added sections 260 through 263 to the Streets and Highways Code, which places the Scenic Highways Program under the jurisdiction of Caltrans. The program is composed of a list of designated and eligible highways, a process by which designation may occur, a process by which designation may be withdrawn, and coordinators who review and recommend eligible highways for designation to the Caltrans Director. Scenic highways are evaluated for inclusion based on whether a landscape demonstrates natural scenic or agricultural beauty, whether existing visual intrusions significantly impact the view, whether there is strong local support, and whether the length of the highway is longer than a mile.

3.1.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on aesthetics.

Visual Character and Quality of the Site

The Proposed Project is located within the City of Belmont (City). Notable scenic attributes of the City include stretches of wide-open space, views of San Francisco Bay, and wooded hillsides containing the bulk of the residential neighborhoods within the City (City of Belmont, 2017).

The area in the vicinity of the Proposed Project site is undeveloped and defined by the nature of Belmont Creek. The bulk of the site is within Twin Pines Park (Park) and is therefore surrounded by trees, open recreation space, footpaths, recreational accessory buildings, and uses such as a playground. The easternmost segment of the Phase 2 Project site, which extends beyond the Park, is lined by trees and closely bordered by non-recreational uses, primarily commercial and residential.

Light and Glare

There are no existing sources of glare within the boundaries of the Proposed Project. However, there are many existing sources in the Park and nearby urban areas. These include street lights, safety lighting, and light spillage from interior lighting from windows and open doors. Daytime sources include glare from glass and metal surfaces in the area.

Scenic Highways and Corridors

There are no state scenic highways or federal byways within the vicinity of the Proposed Project (Caltrans, 2018). Interstate 280 (I-280) is both the closest officially designated scenic highway and closest eligible scenic highway to the Proposed Project, approximately two miles southwest. The closest scenic corridor is Junipero Serra, approximately 1.85 miles southwest of the Project site (County of San Mateo, 2023).

Viewer Groups and Sensitivity

The primary viewers of development on the site for both Phase 1 and Phase 2 would be visitors to Twin Pines Park, particularly pedestrians along the nearby walking trail. For Phase 2, primary viewers would also include residents of the neighboring residential dwellings and visitors and employees of the neighboring commercial buildings.

Due to proximity and duration of time spent in the area, it is expected that users of the recreational space and local residents would be most sensitive to changes to the viewshed. It is expected that visitors and employees of local commercial buildings would be less sensitive due to reduced proximity and length of time in the area. Finally, there are several roadways in the vicinity of the Proposed Project, and a cycling track along Ralston Avenue (City of Belmont, 2019). However, it is expected that views of the Project site for passing motorists, cyclists, and pedestrians from roadways would be limited due to the height and density of trees in the area. When also taking into consideration the speed of travel for cyclists and motorists, it is expected they would be the least sensitive group to changes to the viewshed.

3.1.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on aesthetics that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. Adverse effects on scenic vistas

A scenic vista is generally considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. Presently, there are no designated scenic vistas in the Project vicinity. Therefore, the Proposed Project would not have an adverse effect on a scenic vista. There would be **no impact**.

b. Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

The Project site is not visible from the closest state scenic highway (I-280), which is approximately 2 miles away. Therefore, the Proposed Project site is not a scenic resource with respect to I-280. Project construction would therefore not damage scenic resources within a state scenic highway. There would be **no impact**.

c. Conflict with applicable zoning and other regulations governing scenic quality

As previously described, the site is not visible from any scenic highways and is not located in the vicinity of features that are specifically designated as having scenic significance. However, regulations relating to scenic resources within the City place emphasis on the protection of open space for reasons including the protection of scenic areas and visual integrity (City of Belmont, 2017). Further, the Twin Pines Park Master Plan documents the importance of Twin Pines Park as an aesthetic resource to the local community (City of Belmont, 2019a). With regard to specific scenic regulations, the City of Belmont General Plan 2035 focuses on preserving scenic areas, improving the visual quality of trails and bikeways, encouraging the planting of native trees, and

minimizing visual impacts on the natural riparian environment along waterways (City of Belmont, 2017). The Draft Belmont Parks Recreation Open Space (PROS) Master Plan encourages actions to ensure the use of walking paths to be a pleasant experience and specifically names "Twin Pines Park Belmont Creek Restoration", the Proposed Project, as one of the current ongoing projects that supports the goals of the PROS plan (City of Belmont, 2023). While construction of the project may result in degradation of the scenic quality of the area, these effects will be temporary and will resolve once construction is complete. Overall, upon completion, the Proposed Project would generally be in accordance with local regulations governing scenic quality, as the Project involves replacing non-native species with native plant species, enhancing the riparian habitat, repaving existing pedestrian walkways, and improving local pedestrian access. The completion of the Project would improve the scenic quality of the area. Therefore, impacts would be **less than significant**.

d. New sources of substantial light or glare

The Proposed Project would not include the installation of lighting or construction of buildings that would be a source of substantial light or glare. Construction activities would take place between the hours of 8:00 a.m. and 5:00 p.m. during the day; therefore, no construction-related lighting would be required. Finally, it is expected that potential sources of glare from metal or glass construction equipment components during daylight hours would be largely screened from view by topography and existing vegetation. Therefore, impacts would be **less than significant**.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☒
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 Regulatory Setting

The following sections describe federal and state, regulations, and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies regarding agriculture and forestry resources are applicable to the Proposed Project.

State Laws, Regulations, and Policies

California Department of Conservation – Farmland Mapping and Monitoring Program

Developed by the California Department of Conservation (DOC), the Farmland Mapping and Monitoring Program (FMMP) provides consistent, timely, and accurate data for use in assessing agricultural land resource status in California. The program utilizes a combination of geographic information systems (GIS), aerial imagery, local agency comments, and other relevant information to combine soil quality data and current land use information to produce Important Farmland maps.

The FMMP maps out five different farmland categories as well as urban and other land (DOC 2023):

Prime Farmland – lands with the best combination of physical and chemical features able to sustain long-term production of crops. The land must be cropped and supported by a developed irrigation water supply that is dependable and of adequate quality during the grow season. It must also have been used for production during the previous 4 years.

Farmland of Statewide Importance – lands similar to Prime Farmland but with minor shortcomings such as greater slope or less ability to store moisture.

Unique Farmland – soils of lower quality that are used for producing California's leading agricultural crops. These lands are usually irrigated but may include non-irrigated orchards or vineyards.

Farmland of Local Importance – lands such as dryland grains and irrigated pastures that are not considered Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

Grazing Land – land on which the existing vegetation is suited to the grazing of livestock.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (DOC 2023a). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

3.2.2 Discussion of Checklist Responses

The following sections provide an analysis of impacts on agricultural and forestry resources that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a, e. Convert farmland to non-agriculture use, or result in conflicts with or loss of agricultural or forest lands

According to the DOC California Important Farmland Finder, the proposed Project is located solely on urban and built-up land (DOC 2022). No prime farmland, unique farmland, or farmland of statewide Importance would be converted by, or conflict with, Proposed Project activities. As a result, the Project would not convert existing farmland to non-agricultural use. A portion of the Project area is on land defined as hardwood forest by the City of Belmont; however, Project activities would be largely limited to the footprint of Belmont Creek and would not alter the land use type or result in the conversion or loss of forest land (City of Belmont, 2017). As a result, there would be **no impact** on to farmland, forest land, or agricultural land. b-d. Conflict with existing zoning for agriculture use, Williamson Act Contract, forest land or timber land, or result in the loss of forest land or the conversion of forest land to non-forest use.

The Project area is zoned mostly as public space, with a small portion as park/ plaza land (City of Belmont, 2017), and does not intersect with any Williamson Act contract parcels (DOC 2023b). As stated above, a part of the Project area is classified as hardwood forest; however, Project activities would not alter the land type and thus would not lead to the loss or conversion of forest lands. The Project would also not convert farmland, conflict with existing zoning Williamson Act contracts, or alter land use designations or farmland/timberland classifications at either the local or state level. Therefore, the proposed Project would have **no impact** on land zoned for agricultural use, Williamson Act contract land, or forest land.

3.3 AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal and State Laws, Regulations, and Policies

The Clean Air Act (CAA) is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, known as the National Ambient Air Quality Standards (NAAQS), for seven criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), ground-level ozone (O_3), and lead. Of these criteria, pollutants, particulate matter, and ground-level ozone pose the greatest threats to human health.

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. CARB has enacted numerous regulations regulating mobile sources, such as off-road construction equipment and on-road vehicles, that are more stringent than the federal regulations.

The Proposed Project is located in San Mateo County, which is within the San Francisco Bay Area Air Basin (SFBAAB). The Bay Area Air Quality Management District (BAAQMD) manages air quality in the basin for attainment and permitting purposes and has established thresholds of significance for project emissions of criteria pollutants. **Table 3.3-1** provides recommended significance criteria for analysis of air quality impacts, including cumulative impacts. The BAAQMD recommends implementing best management practices (BMP) for all projects to reduce fugitive dust emissions. With implementation of fugitive dust BMPs, BAAQMD considers the impact of fugitive dust emissions to be less than significant.

TABLE 3.3-1. BAAQMD AIR QUALITY THRESHOLDS OF SIGNIFICANCE (Project Level)

Pollutant	Daily Emissions (Pounds Per Day)	Annual Emissions (Tons Per Year)
ROG	54	10
NO_X	54	10
PM_{10} (Exhaust)	82	15
$PM_{2.5}$ (Exhaust)	54	10
$PM_{10}/PM_{2.5}$ (Fugitive Dust)	BMPs	None
Local CO	None	None

Source: BAAQMD, 2022

Note: BAAQMD = Bay Area Air Quality Management District; BMP = Best Management Practice; CO = carbon; NO_x = nitrogen dioxide; $PM_{2.5}$ =-particulate matter 2.5 microns in size or smaller; PM_{10} =-particulate matter 10 microns in size or smaller; ROG = reactive organic gas

The SFBAAB is currently in non-attainment of the state and federal ozone standards, state PM10 standards, and state and federal PM2.5 standards. The SFBAAB is in attainment or unclassified for all other pollutants. The CAA and the California Clean Air Act require areas that are designated nonattainment to reduce emissions until federal and state standards are met.

The BAAQMD has also established screening criteria that specify an acceptable distance between sensitive receptors and common sources of odors, such as landfills and wastewater treatment plants, as shown in **Table 3.3-2** below. BAAQMD specifies that an odor source with five or more confirmed complaints per year averaged over three years would be considered to have a significant impact on receptors within the screening distance. BAAQMD acknowledges that a lead agency has discretion under CEQA to use other established odor detection thresholds or other significance thresholds for CEQA review.

TABLE 3.3-2. BAAQMD Odor Source Thresholds

Odor Source	Minimum Distance for Less than Significant Odor Impacts (in miles)
Wastewater treatment plant	2
Wastewater pumping facilities	1
Sanitary Landfill	2
Transfer Station	1
Composting Facilities	1
Petroleum Refinery	2
Asphalt Batch Plant	2
Chemical Manufacturing	2
Fiberglass Manufacturing	1
Painting/Coating Operations	1
Rendering Plant	2
Coffee Roaster	1
Food Processing Facility	1
Confined animal facility/feed lot/ dairy	1
Green waste and recycling operations	1
Metal smelting plants	2

Source: BAAQMD, 2022.

Toxic Air Pollutants

The USEPA and CARB regulate various stationary, area, and mobile sources of toxic air pollutants. The USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), also known as hazardous air pollutants (HAPs), at the federal level. In addition, the USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles.

Corporate Average Fuel Economy Standards

The USEPA and National Highway Traffic Safety Administration (NHTSA) set standards for passenger cars and light trucks for the Corporate Average Fuel Economy (CAFE) standards and greenhouse gas (GHG) emissions standards. In March 2020, NHTSA and the USEPA revised these standards under the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which increases the stringency of fuel economy and carbon dioxide standards by 1.5 percent in stringency each year for model years 2021 through 2026. This is less than previous standards issued in 2012, which would have had an increase of about 5 percent per year. The USEPA has granted the CARB permission to establish emissions for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger-vehicle fuel specifications. Airborne toxic control measures (ATCMs) are implemented to address sources of TACs.

Mostly recently, the NHTSA announced new CAFE standards, which require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks by model year 2026. These standards will create an annual rise in fuel efficiency of 8 percent for years 2024-2025 and a 10 percent increase for the year 2026. The new standards aim to make vehicle miles per gallon more efficient and further reduce transportation emissions.

In-use Off-road Diesel Vehicle Regulation

In 2007, CARB adopted a regulation to reduce diesel particulate matter (DPM) and oxides of nitrogen (NOx) emissions from in-use, off-road, heavy-duty diesel vehicles in California. The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. In December 2011, the regulation was amended to modify the compliance dates for performance standards and establish requirements for compliance with verified diesel emission control strategy technologies that reduce PM and/or NOx emissions.

In 2008, CARB approved a regulation to substantially reduce emissions of DPM, NOx, and other pollutants from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance standards and requirements by 2023. Affected vehicles included on-road, heavy-duty, diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds. The regulation was updated in 2011 and 2014 to provide more compliance flexibility and reflect the impact of the 2008 economic recession on vehicle activity and emissions. Heavy-duty trucks used for project construction activities would be required to comply with this regulation.

In 2022, CARB added additional amendments to the Off-Road Regulation, which aim to further reduce emissions from off-road vehicle use. The amendment, which went into effect on October 1st, 2023, requires the use of R99 or R100 renewable diesel for California fleets with very limited exceptions.

Airborne Toxic Control Measures

CARB regulates TACs by requiring implementation of various ATCMs, which are intended to reduce emissions associated with toxic substances. The following ATCMs may be relevant to the Proposed Project.

- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM for Stationary Compression Ignition Engines
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines – Standards for non-vehicular Diesel Fuel.

3.3.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on air quality.

The Project site is located in San Mateo County, within Twin Pines Park in the City of Belmont. The maximum temperatures range (in degrees Fahrenheit [°F]) from the high 50s to the mid-70s, while the minimum temperatures are from the mid-40s to the high 50s. The mean annual precipitation is between 20 and 25 inches, and the winds are typically mild (Climate Data, 2019).

Ozone and fine particle pollution, or PM2.5, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution is a problem in the winter. In San Mateo County, ozone rarely exceeds health standards set forth by the BAAQMD, and PM2.5 exceeds the standard approximately one day per year, as the County regularly gets an influx of fresh marine air from the nearby Pacific Ocean (BAAQMD, 2017).

The surrounding area has a mix of land uses such as recreation, residences, and open space. There are several residential homes along the boundary of the Project area off of Oneill, Paloma, and Talbryn Avenues. Additionally, there are multiple apartment complexes located northwest of the Project area, a Memory Care Facility located just west of the Project area, and several features of Twin Pines Park within 300 feet of the Project site such as picnic areas, the Twin Pines Lodge event center, the Twin Pines Park Senior and Community Center, and the Twin Pines Art Center.

3.3.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on air quality that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

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

If a project would create population and/or employment growth beyond what is accounted for in an applicable air quality plan, then it is considered to be in conflict with or in obstruction of that plan under CEQA. This is because unpredicted growth could generate emissions that are not included in the plan emissions budget. As stated in 3.14, *Population and Housing*, and 3.15, *Public Services*, the Proposed Project would not involve the construction of residential, commercial, or industrial buildings and, as a result, would have no impact on long-term population or employment growth.

The Proposed Project is located within the SFBAAB and falls under the jurisdiction of the BAAQMD. The SFBAAB is a state and federal non-attainment area for O_3 and PM2.5 and a state non-b. attainment area for PM10. BAAQMD's Final 2017 CAP, titled *Spare the Air, Cool the Climate*, describes how BAAQMD will reduce emissions of TACs and continue to make progress toward attaining state and federal air quality standards (BAAQMD, 2023b). These proposed measures include controlling PM emissions from paving operations, fugitive dust, trackout during construction, and bulk material handling and transport. The City of Belmont General Plan Conservation Element focuses on protecting local air quality and reducing air pollutants (see Appendix A for more information). Specific policies related to protecting air quality include ensuring that all construction and grading activities minimize short-term impacts to air quality by following applicable BMPs and mitigation measures and requiring project applicants to comply with the most current Bay Area Clean Air Plan by following the Plan's recommended Transportation Measures (TCMs) (City of Belmont, 2017).

In order to comply with the above polices, the contractor would implement BMP-8, Dust Management Controls and Air Quality Protection. This BMP would regulate the transport of dust-causing materials and equipment exhaust in line with the BAAQMD policies outlined above (refer to Chapter 2 Project Description for more specific BMP information). The contractor would also comply with CARB's updated 2023 fleet rules that require the use of renewable diesel for offroad vehicle use, as well as the TCMs that are outlined above. The Proposed Project would not obstruct or conflict with the implementation of any applicable air quality plan and would not create long-term growth that could affect the existing emissions budget. Therefore, the Proposed Project would have a **less than significant impact** with respect to conflicts with existing air quality plans.

b. Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area

Construction activities of the Proposed Project would result in emissions of criteria air pollutants due to exhaust from operating construction equipment, sediment and material hauling, and worker trips, as well as from grading and excavation and travel on unpaved roads. In order to evaluate the net increase of criteria pollutants from the Proposed Project, emission estimates were calculated using the California Emission Estimator Model (CalEEMod), version 2022.1.1.19**,** as well as the information provided in Chapter 2, *Project Description*. Modeling was completed using conservative assumptions for equipment, scheduling, and haul routes and compares the calculated average daily emissions for the Proposed Project to the threshold limits set by the BAAQMD. For the purpose of this analysis, the modelling inputs assume both phases would occur simultaneously for a total of 10 months in order to provide the most conservative emissions estimates possible. The associated modeling calculations are detailed in **Appendix B, Air Quality and Greenhouse Gas Emission Calculations.** Modeled emissions are shown in **Table 3.3-3.**

Table 3.3-3. Estimated Criteria Pollutant Emissions for the Proposed Project

	POLLUTANT						
	ROG	**NO_X**	**CO**	**PM_{10} EXHAUST**	**PM_{10} FUGITIVE**	**$PM_{2.5}$ EXHAUST**	**$PM_{2.5}$ FUGITIVE**
Unmitigated Construction Emissions (lb/day)							
Average Total Daily Emissions	0.91	7.78	7.37	0.33	2.65	0.31	1.34
BAAQMD Daily Emissions Threshold (lbs/day)	54	54	None	82	BMPs*	54	BMPs*
Exceed Threshold?	No	No	No	No	No	No	No

Source: Appendix A.

Note: lb/day = pounds per day.

* BMPs indicates that no calculation is required because compliance with BMPs is considered by BAAQMD to reduce the emission to below the threshold.

Specific maintenance activities have not been determined but would be minimal and implemented only on an as-needed basis. They would not require the use of construction equipment and would have a negligible effect on air quality.

As shown in Table 3.3-3 above, the estimated unmitigated average daily emissions for the Proposed Project associated with construction activities are smaller than the BAAQMD threshold for all evaluated criteria pollutants. Criteria pollutants PM2.5 and PM10 from fugitive dust would be minimized by the implementation of BMP-8 and would also fall under the threshold limit set forth by the BAAQMD. Since the modeled emissions from the Proposed Project do not exceed the BAAQMD quality emission thresholds, the Project's emissions would not be cumulatively considerable. As a result, according to the criteria pollutant emissions from the Proposed Project would have a **less than significant** impact.

c. Expose sensitive receptors to substantial pollutant concentrations

Construction activities from the Proposed Project could generate TACs. Specifically, the use of off-road equipment could produce diesel particulate matter (DPM) as a result of exhaust emissions. As discussed, maintenance would be minimal; accordingly, the production of TACs would be temporary and would only occur during the construction period. As previously mentioned, the model analyzed the entirety of Phase 2, and in addition, Phase 1, concurrently for a total period of 10 months. It was modeled this way to give the most conservative estimate. As described in Chapter 2, *Project Description*, Phase 1 or Phase 2 could be implemented, or, alternatively, Phase 2 could be implemented after Phase 1, with a period of time in between when Phase 1 ends and Phase 2 starts. Because modeling assumes Phase 1 and Phase 2 would occur at once, which is more intensive than the activities that are proposed, actual Project emissions would be equal to or lower than what was modeled.

As mentioned earlier, the Project is located within Twin Pines Park, which contains two (2) picnic areas, two (2) playgrounds, the Twin Pines Park Senior and Community Center, the Twin Pines

Lodge event center, and the Twin Pines Art Center, all within approximately 300 feet of the Project area. Additionally, the Silverado Belmont Hills Memory Care facility is located within 300 feet of the Project area, and Alpha Apartments, 1000 South Road Apartments, and Woodmont Apartment Homes are located within approximately 420, 550, and 730 feet of the Project area, respectively. Lastly, there are several residential homes located approximately 50 feet southeast of the Project area along Oneill Avenue and homes located along Paloma and Talbryn Avenue that are within approximately 200 and 400 feet from the Project area, respectively.

Despite the presence of multiple sensitive receptors within close proximity to the Project area, as discussed in Criteria B, all criteria pollutants generated by the Project would fall well below the BAAQMD allowable threshold. The Air Quality Thresholds of Significance at the project level were developed by the BAAQMD in order to "ensure that no individual project (or source) creates a significant adverse impact and that no sensitive receptor endures a significant adverse impact" (BAAQMD, 2023a). Because all generated pollutants would occur temporarily and are not considered a significant risk to sensitive receptors based on the allowable levels set by the BAAQMD, it is not likely that there would be substantial effects as a result of emissions generated by the Proposed Project. Furthermore, the implementation of BMP 8, which focuses on the reduction of fugitive dust and equipment exhaust, would further reduce any negative effects to sensitive receptors to a **less than significant** level.

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

During construction, the Project would generate oil and diesel fuel odors as a result of equipment usage and asphalt paving. However, these odors would be temporary and limited to the construction period. Additionally, as shown above in Table 3.3-2, the BAAQMD outlines specific land uses as most likely to generate objectionable odors within their *CEQA Air Quality Guidelines* (BAAQMD, 2023a). As described in Chapter 2, *Project Description*, the Proposed Project consists of the stabilization of a creek within a park; this type of land use does not fall within the BAAQMD land uses identified above. Therefore, the Proposed Project would not generate objectionable odors that would affect a substantial number of people, and impacts would be **less than significant.**

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the DFG or USFWS?	☐	☐	☒	☐
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 HCP?	☐	☐	☐	☒

3.4.1 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] § 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The USFWS and the NMFS share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC § 1532). Section 7 of the ESA (16 USC § 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which non-federal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in "take" of endangered or threatened species, subject to specific conditions. An HCP must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in the taking of, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits the destruction of occupied nests. The USFWS is responsible for overseeing compliance with the MBTA.

The Migratory Bird Treaty Reform Act amends the MBTA so that nonnative birds or birds that have been introduced by humans to the United States or its territories are excluded from protection under the MBTA.

Clean Water Act

Clean Water Act (CWA) Section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR § 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of USACE under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of State water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In

California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code §§ 1900–1913) authorizes the CDFW to designate plants as endangered or rare and prohibits the taking of any such plants except as authorized in limited circumstances.

CESA (California Fish and Game Code §§ 2050–2098) prohibits State agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is State-listed as endangered, threatened, or designated as a candidate for such listing. CDFW may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code §§ 3503 and 3513 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, §§ 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds; § 5515 lists fully protected fish; §4700 lists fully protected mammals; and §5050 lists fully protected amphibians.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (known as the Porter-Cologne Act), passed in 1969, dovetails with CWA (refer to discussion of the CWA above). It established SWRCB and divided the State into nine regions, each overseen by a RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the State's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, the SWRCB manages water rights and regulates Statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter-Cologne Act requires RWQCBs to develop water quality control plans (also known as Basin Plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the

standards necessary to protect and support those beneficial uses. Basin Plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met.

3.4.2 Environmental Setting

The Project site is located along Belmont Creek, in Twin Pines Park, a 17-acre park in the city of Belmont. The Project site's immediate vicinity is primarily comprised of mixed evergreen forest, non-native Eucalyptus groves, and riparian habitat. These habitats are dominated by California bay (*Umbellularia californica*), eucalyptus (*Eucalyptus spp.*), and subdominant species, including a mix of other native trees, species such as coast live oak (*Quercus agrifolia*), California sycamore (*Platanus racemosa*), coast redwood (*Sequoia sempervirens),* California buckeye (*Aesculus californica*), and black walnut (*Juglans hindsii*). Non-native trees such as black locust (*Robinia pseudoacacia*), acacia (*Acacia spp*.), Canary Island date palm (*Phoenix canariensis*), and English walnut (*Juglans regia*) are also present. The understory is variable in composition but is heavily dominated by invasive English ivy (*Hedera helix*), other non-native forbs, grasses, and vines, as well as bare ground. These habitats are present throughout the Project site within the banks and upland areas of Twin Pines Park. The canopy ranges from relatively closed to open. The canopy is more open within the riparian habitat. In the riparian areas, the understory is dominated by non-native vines such as greater periwinkle (*Vinca major*) and English ivy. California blackberry (*Rubus ursinus*) is also a dominant understory species in some areas. Some native shrubs, such as spice bush (*Calycanthus occidentalis*) and creeping snowberry (*Symphoricarpos mollis*), are also present.

The Belmont Creek watershed drains approximately 3.1 square miles, discharging into the tidally influenced Belmont Slough, which is a tributary to San Francisco Bay (Horizon, 2022a; BioAssesment Services, 2007; Michael Baker International, 2019). Belmont Creek is an intermittent stream that is located in western portion of the park and Project site. The low flow channel is approximately 10 to 20 feet wide throughout the length of the study area. Narrowing of the channel over the years as a result of eroding streambanks has resulted in the degradation of habitat quality for aquatic plants and wildlife. The channel contains reaches with cobble ranging from one to four inches. Small pools are present downstream of culvert outfall areas and along the outside of bends downstream. A section of concrete wall armor is present adjacent to the Twin Pines Park buildings downstream of the footbridge.

Landscaped and developed habitat consisting of park facilities including Twin Pines Park buildings, parking lot, benches, pathways, playgrounds, and picnic areas is located along the northern portion of the Project site. The dominant trees are native species such as coast live oak, coast redwood, and California buckeye. Non-native trees, such as blue gum eucalyptus, ginkgo (*Ginkgo biloba*), Canary Island date palm, southern magnolia (*Magnolia grandiflora*), and Peruvian pepper tree (*Schinus mole*), are planted within the parking lots and park infrastructure. The understory is predominately bare ground with some minor components of non-native herbaceous plants.

3.4.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on air quality that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

Where applicable, the text prescribes mitigation that would reduce an impact to less than significant with mitigation.

a. Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species

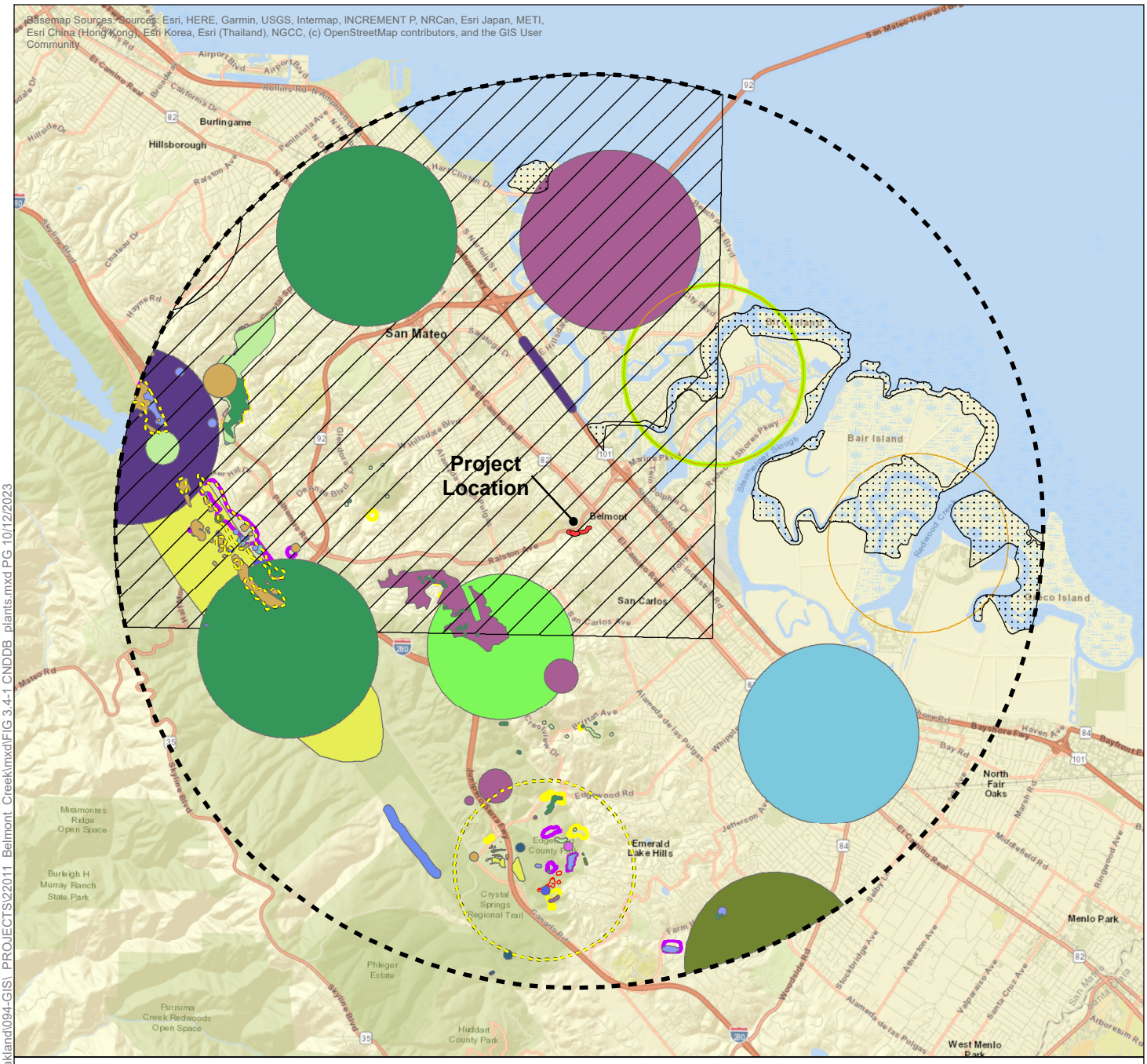
Special-Status Species

For the purposes of this assessment, special-status species are those that are listed as rare, species of concern, candidate, threatened, endangered, or fully protected by the USFWS, CDFW, or NMFS. The following resources were consulted and reviewed to identify special-status species with the potential to occur in the vicinity of the Project area:

- USFWS IPaC Trust Resources Report for the Project Area (USFWS, 2023a)
- California Natural Diversity Database (CNDDB) query of federally listed species in the nine U.S. Geological Survey (USGS) quadrangles containing and surrounding the Project area (CDFW, 2023; see **Appendix C**)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California query for the nine USGS 7.5-minute quadrangles containing and surrounding the Project area (CNPS, 2023; see Appendix C)
- Draft Biological Resources Twin Pines Park Belmont Creek Restoration Project (Horizon Water & Environment 2022a)

These data sources were reviewed to develop the list of special-status species and their potential to occur within the existing Project area, including the Project site, **Figure 3.4-1** shows CNDDB occurrences of special-status plant species within 5 miles of the Project site. **Figure 3.4-2** shows CNDDB occurrences of special-status wildlife species within 5 miles of the Project site.

Figure 3.4-1. Special Status Plant Species Occurrences



\\meg.montrose-env.com\shares\094-Oakland\094-GIS_PROJECTS\22011_Belmont_Creek\mxd\FIG 3.4-1 CNDDB_plants.mxd PG 10/12/2023

Plant Species Name

- Choris' popcornflower
- Crystal Springs lessingia
- Franciscan onion
- Hillsborough chocolate lily
- Kings Mountain manzanita
- Marin western flax
- Northern Coastal Salt Marsh
- Point Reyes salty bird's-beak
- San Francisco campion
- San Francisco collinsia
- San Francisco owl's-clover
- San Mateo thorn-mint
- San Mateo woolly sunflower
- Serpentine Bunchgrass
- arcuate bush-mallow
- bent-flowered fiddleneck
- chaparral ragwort
- coastal marsh milk-vetch
- fountain thistle
- fragrant fritillary
- saline clover
- short-leaved evax
- western leatherwood
- white-rayed pentachaeta
- woodland woollythreads

Source: CDFW, CNDDB, July 2023 update

N

0 1 2

Miles

Project Site (Phase 1 & Phase 2)

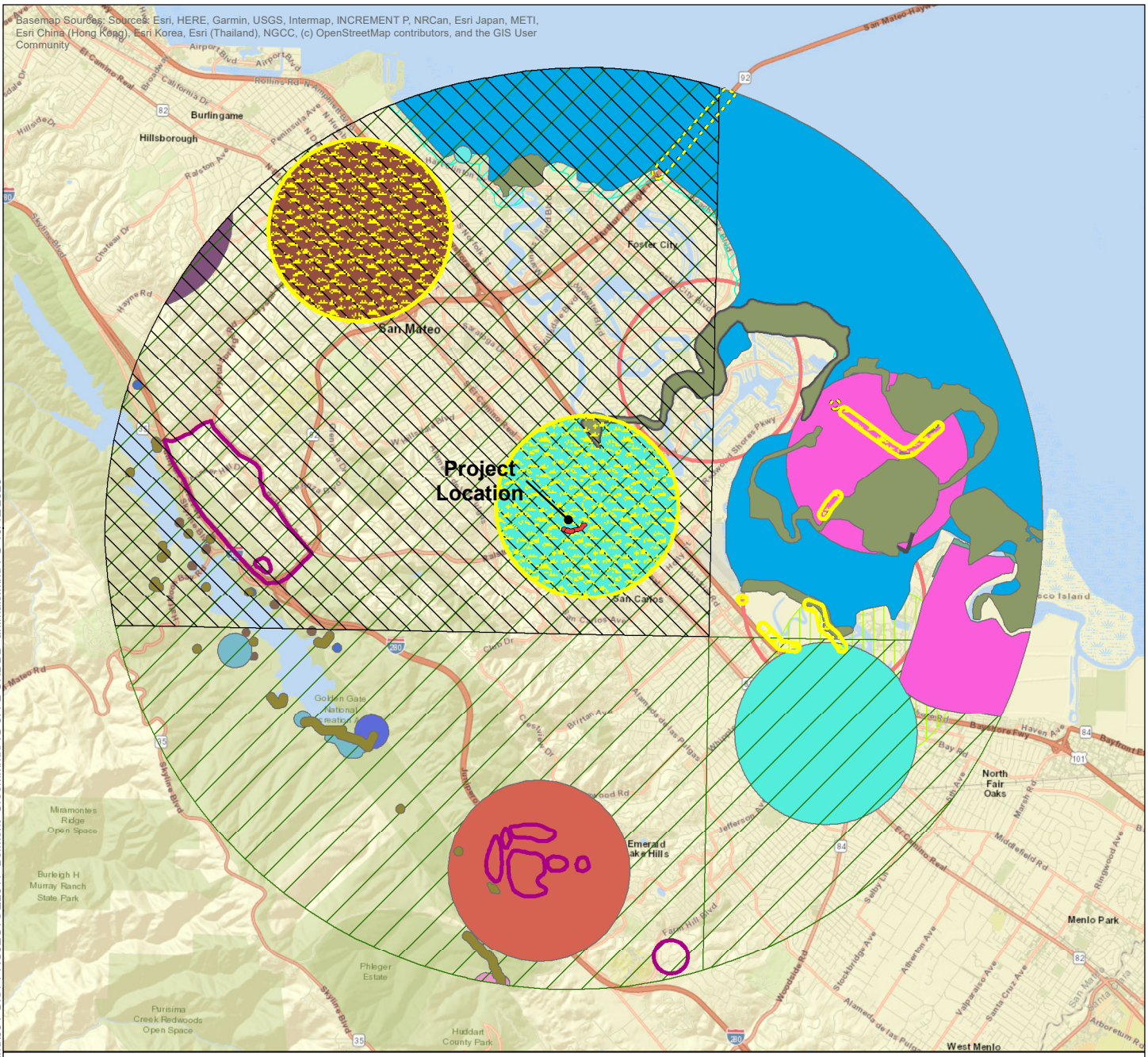
5-mile Radius

Figure 3.4-1
Special Status Plant Species Occurences

MONTROSE ENVIRONMENTAL

Twin Pines Park Belmont Creek Restoration Project

Figure 3.4-2. Special Status Animal Species Occurrences



\\meg.montrose-env.com\shares\094-Oakland\094-GIS_PROJECTS\22011_Belmont_Creek\mxd\FIG 3.4-2 CNDDB_animals.mxd PG 10/12/2023

Animal Species Name

- Alameda song sparrow
- American peregrine falcon
- Bay checkerspot butterfly
- California Ridgway's rail
- California black rail
- California least tern
- California red-legged frog
- Edgewood Park micro-blind harvestman
- Edgewood blind harvestman
- Myrtle's silverspot butterfly
- Pacific walker
- Ricksecker's water scavenger beetle
- San Francisco dusky-footed woodrat
- San Francisco gartersnake
- Santa Cruz black salamander
- Santa Cruz kangaroo rat
- burrowing owl
- double-crested cormorant
- great blue heron
- green sturgeon - southern DPS
- hoary bat
- longfin smelt
- northern harrier
- obscure bumble bee
- pallid bat
- salt-marsh harvest mouse
- salt-marsh wandering shrew
- saltmarsh common yellowthroat
- short-eared owl
- western bumble bee
- western pond turtle
- western snowy plover
- white-tailed kite
- yellow rail

Source: CDFW, CNDDB, July 2023 update

N

0 1 2

Miles

Project Site (Phase 1 & Phase 2)

MONTROSE ENVIRONMENTAL

Figure 3.4-2
Special Status Animal Species Occurences

Twin Pines Park Belmont Creek Restoration Project

The potential for special-status species to occur in areas affected by the proposed Project was evaluated according to the following criteria:

- **None**: indicates that the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
- **Not Expected**: indicates situations where suitable habitat or key habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
- **Possible**: indicates the presence of suitable habitat or key habitat elements that potentially support the species.
- **Present**: indicates that either the target species was observed directly or its presence was confirmed by diagnostic signs during field investigations or in previous studies in the area.

Special-status plant and animal species tables and their potential to occur in the Project area are listed in Tables C-1 and C-2 in Appendix C. No Critical Habitat is designated within or near the Project area (USFWS 2023b).

Database search queriers identified 73 special-status plant species and 53 wildlife species as having the potential to occur in the general region of the Project area (CDFW 2023, CNPS 2023, and USFWS 2023a). Although these resources identified special-status species as having the potential to occur in the general vicinity of the Proposed Project, the Project area may not provide suitable habitat conditions to support these species. Most special-status species identified during the database queries were determined to be absent from the Project area because of a lack of suitable habitat and/or isolation from known populations by urbanization and associated barriers to dispersal. Therefore, there is no potential for Project-related impacts on these species, and these species are not discussed further.

Following the desktop analysis, it was determined that three (3) special-status plant species and six (6) special-status wildlife species showed some potential to occur in the Project area:

- bent-flowered fiddleneck (*Amsinckia lunaris*), CRPR Rank 1B.1.
- San Francisco collinsia (*Collinsia multicolor*), CRPR Rank 1B.1.
- western leatherwood (*Dirca occidentalis*), CRPR Rank 1B.1.
- Monarch butterfly (*Danaus plexippus*), federal candidate
- western pond turtle (*Emys marmorata*), federal candidate, CA species of special concern
- pallid bat (*Antrozous pallidus*), CA species of special concern
- Townsend's big-eared bat (*Corynorhinus townsendii*), CA species of special concern
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens),* CA species of special concern
- white-tailed kite (*Elanus leucurus*), CA fully-protected

For this reason, a site-specific habitat assessment was conducted to evaluate the likelihood for these special-status species to occur in the Project area based on regional and local physical, hydrological, and ecological conditions, and if so, assess the potential Project impacts on those species, individually and as a population.

Targeted and/or protocol level surveys for special-status plants were not conducted. If any of these special-status plants were present within the Project area, project construction could result in the removal, trampling, or crushing of individual special-status plants; improperly controlled runoff, sediment, or hazardous materials could enter potential special-status plant habitat; or invasive species could be introduced into special-status plant populations. The Project would adhere to BMPs listed in Table 2-2, including BMP-1: Construction Work Windows; BMP-2: Area of Disturbance; BMP-3: Erosion and Sediment Control; BMP 4: Fill, Spoils, and Stockpiled Materials; BMP-5: On-site Hazardous Materials Management; BMP 6: Spill Prevention and Response Plan; BMP-7: Vehicle and Equipment Maintenance; BMP 8: Dust Management Controls and Air Quality Protection; BMP-9: Work Site Housekeeping; and BMP-10: Minimize Spread of Weeds and Invasive Species. In addition, **Mitigation Measure BIO-1** would be implemented to survey for, and if detected, minimize direct and indirect impacts to special-status species.

> **Mitigation Measure BIO-1: Special-Status Plant Surveys**
>
> Prior to ground disturbance, appropriately timed rare plant bloom surveys shall be conducted by a qualified biologist to identify any special-status plant species that may occur within the Project area. Should special-status plants be observed on site, a 15-foot buffer shall be placed around the plant. A smaller buffer may be allowed based on specific site conditions and proximity to Project activities. If the plant is observed within the Project footprint and cannot be avoided, consultation with CDFW may be required to determine appropriate mitigating actions.

Implementation of Mitigation Measure BIO-1 would ensure that direct and indirect impacts to special-status plants species are reduced to **less than significant level with mitigation**.

The likelihood of special-status wildlife species to occur in the Project area are describe below:

- **Monarch butterfly**. Eucalyptus groves in the Project area provide ostensibly suitable over-wintering habitat for monarch. However, known over-wintering sites in San Mateo County are located along the Pacific coastline with the nearest documented location in Half Moon Bay, approximately 9 miles west. In addition, the species host plants, milkweeds (*Asclepias* spp.), are absent from the Project area. Therefore, although there is a low potential for this species to occur in the Project area during the winter months, the likelihood of Project impacts to this species is not expected as the Project would primarily occur between June and October and no activities would occur during the winter.
- **Western pond turtle**. A CNDDB occurrence record for this species occurs within three miles of the Project area within the Belmont Creek watershed (CDFW, 2023). Suitable aquatic habitat to support this species is present in the Project area in isolated pools. However, the potential for this species to occur in the Project area is not expected as Belmont Creek is culverted directly upstream and downstream of the Project area and is

disconnected from other potentially suitable habitats for this species. In addition, dense urbanization around Twin Pines Park prevents overland distribution to the site.

- **Pallid bat** and **Townsend's big-eared bat**. No current CNDDB occurrence records of special-status bats occur within five miles of the Project area. The riparian corridor and park setting provide potential habitat for bat species. Both pallid bat and Townsend's big-eared bat are extremely sensitive to anthropogenic noise and disturbance and the human disturbance related to park facilities, operations, and recreational usage significantly reduces the potential for roosting within the Project area. However, roosting habitat (e.g., buildings and structures, exfoliating bark, tree cavities, hollows, and cracks) for special-status bats is available in and near the Project area. If any of these special-status bats are present within the Project area, more specifically in trees to be removed during Project implementation, construction activities could result in the harm of individual special-status bats as well as potential maternity colony and suitable roosting habitat.
- **San Francisco dusky-footed woodrat**. There are no occurrence records for this species in Twin Pines Park and dense urbanization around the park restricts species dispersal. Further, no woodrat house structures were detected during multiple reconnaissance and topographical surveys. However, suitable habitat for woodrats is present in the Project area and, if present, construction activities and vegetation removal along the riparian corridor could affect this species.
- **White-tailed kite and nesting birds**. Suitable foraging habitat for white-tailed kite is absent from the Project area. However, although considered a low likelihood, there is potential for this species to nest within the park due to the open space area north of Ralston Avenue which may provide foraging opportunities for this species. If white-tailed kite are nesting in Twin Pines Park, Project construction and/or tree removal could affect this species.

In addition, other bird species protected under the MBTA and California Fish and Game Code §§ 3503 and 3513 have the potential to occur within the Project area. The MBTA and the California Fish and Game Code prohibit the take of migratory birds as well as disturbance of the active nests of most native birds. The habitat within the vicinity of Project site could support nests of multiple migratory bird species, including raptors. Additionally, construction-related noise or other disturbance could result in the abandonment of an active nest in vegetation adjacent to or near the Project area.

If any of these special-status wildlife species were present within the Project area and/or Twin Pines Park, Project construction activities could result in the harm of individuals and special-status species and/or their habitat. Compliance with the BMPs listed in Chapter 2 (BMP-1 through BMP-9) during construction would minimize the potential for runoff, sediment, or hazardous materials to enter special-status amphibian and reptile habitat by requiring work to be conducted in the dry season, minimizing the work area, conducting erosion and sediment control activities, properly maintaining vehicles, and developing a Spill Prevention and Response Plan. Even with implemented BMPs, impacts to individual species and special-status species habitat may be significant. To further avoid and minimized potential impacts to special-status

wildlife, **Mitigation Measures BIO-2** (Pre-construction Wildlife Surveys), **BIO-3** (Roosting Bat Surveys), and **BIO-4** (Nesting Birds Surveys) would be implemented.

Mitigation Measure BIO-2: Pre-construction Wildlife Surveys

A qualified biologist shall conduct a pre-construction survey for wildlife and special-status species no more than 5 days prior to ground disturbance. Should special-status species be identified within the Project area, USFWS or CDFW may need to be consulted prior to ground disturbance, depending on the species observed.

Mitigation Measure BIO-3: Roosting Bat Surveys

To minimize potential impacts on bat maternity colonies during the maternity season (March 15 – July 31) or non-reproductive roosting bats during the non-maternity season (August 1 – March 14), a qualified biologist will conduct a pre-construction survey(s) for roosting bats prior to the onset of ground-disturbing activities. The biologist shall inspect for evidence of bat use within suitable habitat, such as guano, urine staining, or oil staining. If evidence of use is observed, or if high-quality roost sites are present in areas where evidence of bat use might not be detectable (such as a tree cavity), an evening emergence survey and/or a nocturnal acoustic survey may be necessary to determine if a bat colony is present and to identify the specific location of the bat colony.

- If no active maternity colony or non-breeding bat roost is located, Project work can continue as planned.
- If an active maternity colony or non-breeding roost is located, the Project work will be modified to avoid disturbance of the roosts, if feasible.
- If an active maternity colony is located and Project work cannot be modified to avoid removal or disturbance of the colony location, disturbance will be scheduled to take place outside the maternity roost season (March 15– July 31), and a non-disturbance buffer zone (determined by a qualified biologist) will be implemented during the maternity roost season.
- If an active non-breeding bat roost is located and Project work cannot be modified to avoid removal of the occupied tree, the tree will be removed using a two-day phased method as follows: Day 1, under supervision of a qualified biologist, tree limbs not containing suitable bat roosting habitat will be removed; then, Day 2, the rest of the tree can be removed.

Mitigation Measure BIO-4: Nesting Birds Surveys

To the extent feasible, construction activities should be scheduled to avoid the nesting season for birds. The nesting season for most birds in San Mateo County extends from February 1 through August 31, inclusive. If Project activities are scheduled to take place outside the nesting season, impacts to nesting birds would be avoided. If it is not possible to schedule Project activities outside the nesting season, then the following measures will be implemented:

- A qualified biologist will conduct pre-construction survey(s) for nesting birds. These surveys shall be conducted no more than seven days prior to the initiation of Project activities, including tree and vegetation removal. During these surveys, the biologist shall inspect all trees and other potential nesting habitats (e.g., shrubs, ruderal grasslands, and structures) in and immediately adjacent to the construction areas for nests.

- If an active nest is found sufficiently close to work areas to be disturbed by these activities, a non-disturbance buffer zone will be established around the nest at the biologist's discretion and in accordance with regulatory permits and conditions to ensure that no nests of species protected by the MBTA and California Fish and Game Code shall be disturbed during project implementation. Buffers zones will remain until the birds have fledged or the nest is no longer active as determined by a qualified biologist.

Implementation of Mitigation Measures BIO-2, BIO-3, and BIO-4 would ensure that direct and indirect impacts to special-status wildlife species would be **less than significant with mitigation**.

b. Substantial adverse effect on any riparian habitat or other sensitive natural community

Potential aquatic resources were delineated within the Project area (Horizon Water and Environment, 2022b). A total of 0.609 acres of potentially jurisdictional non-wetland waters of the U.S. and a total of 1.71 acres of waters of the state were delineated along the Belmont Creek corridor. Belmont Creek is classified as riverine, intermittent, streambed, and seasonally flooded (Cowardin code R4SBC) (USFWS, 2023c).

While Project construction would occur within riparian habitat of Belmont Creek, which is considered a sensitive habitat by CDFW, the Project would enhance the riparian habitat and stabilize eroding streambanks of Belmont Creek. The main component of the Project would be restoration activities in the stream to improve and enhance habitat and ecological conditions along Belmont Creek by widening the geometry of the active channel (bottom of channel below ordinary high-water elevation) to provide a dynamically stable channel less prone to incision over time. Project implementation would result in temporary and permanent impacts to Belmont Creek along the length of the Project area. Temporary impacts would include channel dewatering, vegetation removal, and minor grading activities. Permanent impacts would occur due to excavation to lay back banks and expand the channel cross section, the placement of fill for rock, riffle sequences and to elevate the streambed surface, and for buried log and rootwads complexes. The Project includes revegetating the riparian corridor with native tree species, shrubs and herbaceous species.

Phase 1 would stabilize and enhance 455 LF of the creek bed and adjacent banks. If Phase 2 is implemented, it will encompass all the components of Phase 1 and would stabilize and enhance an additional (approximately) 1,145 LF of the creek.

Implementation of BMPs listed in Chapter 2 (BMP-1 through BMP-9) during construction would minimize potential impacts to sensitive natural communities by requiring work to be conducted

in the dry season, minimizing the work area, conducting erosion and sediment control activities, and minimizing the spread of invasive weeds.

Overall, the Project would have a beneficial impact on riparian habitat. Therefore, Project-related impacts on sensitive riparian habitat would be **less than significant**.

c. Substantial adverse effects on state or federally protected wetlands

Potential aquatic resources were delineated within the Project area (Horizon Water and Environment, 2022b). No potential jurisdictional wetlands were delineated. Belmont Creek (0.609 acres) was delineated as potentially jurisdictional non-wetland waters of the U.S. Overall, the Project would have a beneficial impact on non-wetland waters. The Project would have **no impact** on federally protected wetlands.

d. Substantial interference with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites

Belmont Creek does not provide migratory habitat for native fish species and Belmont Creek has not been identified as supporting historical salmon populations (Leidy et al., 2005; Leidy, 1984).

A number of resident and migratory wildlife species, notably birds, can utilize adjacent/nearby riparian areas such as Waterdog Lake Park, and Hidden Canyon Park, including Twin Pines Park. The Project area along with nearby parks (noted above) are located within riparian habitat within Belmont Creek watershed. The Project area is surrounded by developed and urban area and does not provide a significant wildlife corridor for terrestrial wildlife species. Accordingly, the Project is not anticipated to impede the movement by resident or migratory wildlife due the project work occurring in Belmont Creek. Furthermore, Mitigation Measures BIO-2, BIO-3, and BIO-4 would further avoid and reduce any potential impacts on resident or migratory wildlife. Therefore, impacts on wildlife movement and use of native wildlife nursery sites would be **less than significant**.

e. Conflict with local policies or ordinances protecting biological resources

The City has adopted a tree ordinance (Chapter 25 of the Belmont City Code). A tree removal permit is required to remove any regulated tree, defined as coast live oak, valley oak, coast redwood, madrone (*Arbutus menziesii*), bay laurel and buckeye having a single main stem or trunk of 10 inches or more diameter at breast height (dbh), all other species with a main stem or trunk of 14 inches or more dbh; and multi-stemmed trees totaling 18 inches or more dbh.

The Project involves tree removal and would require a permit under the City's tree ordinance. Project Phase 1 would remove up to 58 trees, 38 native and 20 non-native and/or invasive. Where feasible, native trees and vegetation would be preserved and protected. If Phase 2 is implemented, native trees and vegetation would be preserved and protected where feasible but would also be subject to the City's tree ordinance. The Project includes revegetating the riparian corridor with native tree species willows, and creek dogwood, which is included on the City's list of Preferred Tree Species for replacement trees (City of Belmont, 2017). Therefore, impacts related to conflict with the Tree Ordinance would be less than significant.

The General Plan for the City of Belmont and Belmont Village Specific Plan contains numerous goals, policies, and action items to protect biological resources (Appendix A). Implementation of Mitigation Measures BIO-1 through BIO-4, and compliance with the BMPs listed in Chapter 2 (BMP-1 through BMP-9) would further minimize impacts by protecting biological resources such as sensitive native habitat, vegetation communities, special-status species, and local native and wildlife species. Therefore, impacts would be **less than significant**.

f. Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP

The Project is located within the Pacific Gas and Electric Company (PG&E) Bay Area Operations and Maintenance HCP. However, the Proposed Project is not a PG&E-covered activity under their HCP and thus would not conflict with the HCP's conservation strategy. The Project area is not within the area covered by any other HCPs, and therefore the Project would not conflict with provisions adopted by an HCP, Natural Community Conservation Plan, or other approved local, regional, or State HCP. There would be **no impact**.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of 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 dedicated cemeteries?	☐	☒	☐	☐

The term "cultural resources "refers to sites, objects, buildings, structures, burials, and cultural landscapes. Cultural resources can also be classified as built-environment resources, archaeological resources, and human remains. Built-environment resources generally refer to above-ground designed, constructed, and landscape features and include buildings, structures, objects, and districts. Archaeological resources generally refer to deposits, structural features, and objects below ground. Human remains are also addressed in this section.

The following discussion regarding cultural resources is adapted from the following technical reports prepared by Environmental Science Associates:

- Twin Pines Park, San Mateo County, California: Archaeological and Architectural Resources Inventory Report, 2022
- Twin Pines Park Storm Water Capture Project, San Mateo County, California: Archaeological Testing Results Report, 2023

3.5.1 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

This project is required to comply with Section 404 of the Clean Water Act and, as such, will be required to comply with the following federal regulations:

National Historic Preservation Act and Section 106

The NHPA of 1966 establishes the role and responsibilities of the federal government in historic preservation. Toward this end, the NHPA directs agencies to (1) identify and manage historic properties under their control; (2) undertake actions that will advance the act's provisions; and avoid actions contrary to its purposes; (3) consult with others while carrying out historic preservation activities; and (4) consider the effects of their actions on historic properties.

Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on potential effects. The regulations that implement Section 106 and an outline of the historic preservation review process are provided at 36 CFR Part 800.

Some degree of review under Section 106 must be conducted for all federal projects, including federally assisted, federally licensed, or federally funded projects. If a project is subject to federal jurisdiction and the project is an "undertaking," as defined at 36 CFR Part 800.16(y), with the potential to cause effects on historic properties (36 CFR Part 800.3[a]), Section 106 of the NHPA must be addressed to consider the effect of the undertaking on any district, site, building, structure, or object included in or eligible for inclusion in the NRHP (i.e., historic properties).

National Historic Preservation Act and National Register of Historic Places

The National Register was authorized by Section 101 of the NHPA as the nation's official list of cultural resources worthy of preservation. Properties listed in the National Register of Historic Places (NRHP) consist of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Properties listed in or eligible for listing in the National Register are considered in planning and environmental review; the effects of such properties are primarily addressed under Section 106.

The criteria for determining a resource's eligibility for a National Register listing are defined in 36 CFR Part 60.4 and are as follows:

> ...the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of significant people in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, important information in prehistory or history.

Under Criteria A, B, and C, the National Register places an emphasis on a resource appearing as it did during its period of significance to convey historical significance; under Criterion D, properties convey significance through the information they contain.

National Register Bulletin How to Apply the National Register Criteria for Evaluation states that in order for a property to qualify for listing in the National Register, it must meet at least one of the National Register criteria by (1) being associated with an important historic context and (2) retaining historic integrity of those features necessary to convey its significance (National Park Service 1997). The historic context of a resource will define the theme(s), geographical limits, and period of significance by which to evaluate a resource's significance (National Park Service 1997:7).

Generally, cultural properties must be 50 years of age or older to be eligible for listing on the National Register. According to the National Park Service (1997:2), "properties that have achieved significance within the past 50 years shall not be considered eligible" unless such properties are "of exceptional importance."

State Laws, Regulations, and Policies

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Although not specifically inclusive of paleontological resources, these criteria may also help define "a unique paleontological resource or site" (refer to Section 3.7).

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA § 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historical resources are those that are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code § 5024.1(l));
- Included in a local register of historic resources (Public Resources Code § 5020.1(k)) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code § 5024.1(g); or
- Determined by a lead agency to be historically significant.

CEQA Guidelines § 15064.5 also prescribe the processes and procedures found under Health and Safety Code § 7050.5 and Public Resources Code § 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within a project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines § 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

California Register of Historical Resources

Public Resources Code § 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the NRHP, including properties evaluated under Section 106 of the NHPA. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of important people in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction; represent the work of an important creative individual; or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

3.5.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on cultural resources.

Pre-Contact Setting

The prehistory of the Program area reflects information known about the indigenous population from the time the region was first populated with humans until the arrival of the first Europeans, who recorded their journeys. The prehistoric record is derived from over a century of archaeological research, and while much has been gleaned from these studies, large gaps in the data record remain. The following prehistoric culture sequence, derived from Milliken et al. (2010:114-118), briefly outlines the prehistory of the San Francisco Bay region.

The Early Holocene (Lower Archaic; 8000 to 3500 B.C.) is considered a time when populations continued to be very mobile as they practiced a foraging subsistence pattern around the region. Artifacts that characterize this period include the millingslab and handstone to process seeds, as well as large, wide-stemmed, and leaf-shaped projectile points.

The Early Period (Middle Archaic; 3500 to 500 B.C.) is marked by the appearance of cut shell beads in the archaeological record, as well as the presence of a mortar and pestle for processing acorns. House floors with postholes indicate substantial living structures, which suggests a move toward establishing a more sedentary lifestyle and an increasing population.

The Middle Period, which includes the Lower Middle Period (Initial Upper Archaic; 500 B.C. to A.D. 430) and Upper Middle Period (Late Upper Archaic; A.D. 430 to 1050), appears to be a time when geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens are recorded from this period. The addition of milling tools, obsidian and chert concave-base projectile points, and the occurrence of sites in a wider range of environments suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages. Around A.D. 430, a "dramatic cultural disruption" occurred, as evidenced by the sudden collapse of the Olivella saucer bead trade network.

The Initial Late Period (Lower Emergent; A.D. 1050 to 1550) reflects a social complexity that had developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments.

The Terminal Late Period (Upper Emergent; A.D. 1550 to circa 1750) generally represents the indigenous cultures that were encountered by the Spanish when they first arrived in San Francisco Bay.

Ethnography

The population indigenous to the Program area spoke a language referred to as Costanoan, a derivative from a Spanish term for "coast people." Costanoan, which consisted of six known languages and various dialects within those languages, was spoken over a broad territory that

included all of the San Francisco Peninsula, along the east and south of San Francisco Bay, and south to Monterey Bay, Salinas Valley, and the area around Hollister. Those residing in the San Francisco Peninsula and the project area spoke the Ramaytush dialect of San Francisco Bay Costanoan (Milliken et al., 2009:33-35).

The Costanoan peoples, also referred to as the Ohlone, Mutsun, or Rumsen, depending on geography, were not a united cultural or political entity (Milliken et al., 2009:2-4). Rather, there were strong differences, not only in language but also in culture, between the San Francisco and Monterey Bay occupants. Political affinity was based on the tribelet, which was comprised of one or more villages within a specific geographic territory (Levy, 1978:487).

The tribelet territory was 10 to 12 miles in diameter and contained a population of 200 to 400 people living among four or five villages (Milliken et al. 2009:99). Those living in the project area resided in large villages along permanent streams in locations that allowed access to the diverse resources found in the tidal marshlands, the valley floor, and the hills (Milliken et al., 2010:106; Moratto, 2004:225).

Seven local Costanoan tribes lived entirely within modern-day San Mateo County. Along the bay were the *Urebure* of San Bruno, the *Ssalson* in San Mateo, and the *Lamchin* at Redwood City. The coastal groups included the *Aramai* in San Pedro Valley, the *Chiguan* in Half Moon Bay, the *Cotegen* along Purisima Creek, and the *Oljon* at San Gregorio. Three other tribes were partially in San Mateo County but also spilled over into more southern counties. These included the *Puichun,* who were on the bay front at San Francisquito Creek, and the *Olpen,* who lived in the mountains above the *Puichun* at the headwaters of San Francisquito Creek. The third group, the Quiroste, lived on the coast in the area of Point Ano Nuevo (Milliken et al., 2009:87-89). Numerous village locations throughout San Mateo County have been identified for some of these groups (Milliken et al. 2009:4-5).

History

In 1850, with the statehood of California, Charles Angelo opened a roadhouse at the junction of Canada del Diablo and the San Francisco-San Jose Road to serve the San Francisco to San Jose stage line. This began the settlement of what would eventually become Belmont, with Mezes dividing his property in the area into the town's first subdivision in the fall/winter of 1853. Mezes established his home in Belmont and encouraged his San Francisco acquaintances to build country houses in the area. These large country homes characterized the land use from the mid-1860s through the turn of the century. In 1863, the San Francisco and San Jose Railroad Line was established, running the length of the peninsula with a stop in Belmont. The arrival of the railroad opened up access to Belmont and San Francisco from that which had previously been restricted to wagons or boats. In 1867, a railroad station was constructed in Belmont, and the village experienced a gradual expansion in population and development (City of Belmont, 1991; (ESA, 2022: 16).

During the first half of the twentieth century, the City of Belmont was home to five sanitariums that treated nervous disorders. The quiet, scenic ambiance, coupled with the presence of the railroad and close proximity to nearby larger cities, made Belmont a popular setting for sanitariums (City of Belmont, n.d). (ESA, 2022: 17).

In 1915, Annette S. Alexander purchased land that was later turned into the Alexander Sanitarium in 1924, just west of what is now Twin Pines Park, to treat mental disorders. In 1948, the Alexander Sanitarium had housing for seventy-five patients, a swimming pool, a bowling green, and tennis courts. The Alexander Sanitarium operated until 1973, when it was closed and taken over by the Belmont Hills Psychiatric Center. (ESA, 2022: 17).

Cultural Resources Studies

ESA prepared a cultural resource inventory and evaluation report to provide an assessment of potential cultural resource impacts for the Twin Pines Park Storm Water Capture Project (Storm Water Project) and the Belmont Creek Restoration Project (current Project) (ESA, 2022). The study area for the Storm Water Project included the area represented by Phase 1 and Phase 2 of the current Restoration Project (ESA, 2022). In addition, ESA was retained to provide archaeological services to further identify and characterize potential subsurface archaeological resources for the purposes of the Storm Water Project (ESA, 2023). The following summarizes the results of these studies as they relate to the Project area and the Project actions.

Archival Search

A records search was requested at the Northwest Information Center (NWIC), Sonoma State University, by ESA in November 2021 for the purposes of the Twin Pines Park projects (the Storm Water Project and the Belmont Creek Restoration Project). The records search included the Project area and a 0.25-mile search radius. Previous surveys, studies, and archaeological site records were accessed as they pertained to these areas. Records were also accessed and reviewed in the Directory of Properties in the Historic Property Data File for San Mateo County, the *National Register of Historic Places*, the *California Register of Historic Resources*, the *California Inventory of Historic Resources* (1976), the *California Historical Landmarks* (1996), the *California Points of Historical Interest* (1992), the Caltrans State and Local Bridge Survey, *Built Environment Resource Directory* (BERD), and other standard reference sources.

The NWIC determined a total of six previously recorded cultural resources are located within 0.25 miles of the Project area:

- Two resources, P-41-000152 and C-331, have been previously recorded within the Project area. P-41-000152 is a large prehistoric archaeological site; C-331 is a historic-era architectural resource that has only been informally documented.
- The remaining four cultural resources were recorded within a quarter-mile of the Project area: P-41- 001878, -002006, -002361, and -002496. All the resources identified within the quarter-mile radius are historic-era architectural resources that will not be affected by the project actions.

The resource P-41-000152 (CA-SMA-150), which intersects with the Project area, was first recorded in 1973 by R.G. Hansen and Sally Salzman (1973). Hansen and Salzman described the cultural materials identified as a mortar fragment, worked chert, and several Olivella shell beads. Only a very rough map of the resource with an “X” to mark the location was included in this site record recording (Hansen and Salzman, 1973). Additional efforts to better characterize and delineate the resource have been conducted since that time, which include Holman (1984) and Wiberg (1986). More recently, Cartier (2003) conducted ten augers in the vicinity of those

conducted by Holman (1984) around Belmont City Hall and the parking lot south of the building. Seven of the augers contained cultural materials, including midden, shell, and fire-affected rock (FAR). Further, Cartier (2004) reported on the results of monitoring that was conducted during the construction of the Belmont City Hall, which resulted in the identification of several human burials along with habitation debris. Cartier (2004) also conducted radiocarbon dating of the site and confirmed that the occupation dates to 2,780 and 2,700 years Before Present (BP). Cartier (2004) concluded, based on these findings, that P-41-000152 should be considered eligible for the NRHP and CRHR.

The previously identified resource, C-331, was informally recorded as Twin Pines Park and the former sanitarium. Informally recorded resources are those records provided to the NWIC that do not have sufficient detail to establish what the cultural resource in question is, where it is, and so forth; therefore, they are not considered further here. For the purposes of this discussion, the record associated with C-331 will be considered synonymous with Twin Pine Park itself.

Native American Communication

ESA conducted the initial outreach for the Storm Water Project by submitting a sacred land file request to the Native American Heritage Commission (NAHC) on August 17, 2022. A response was received from the NAHC on September 29, 2022, which indicated the results of the sacred lands search were negative for this location. The NAHC also provided a list of eight tribes and tribal contacts with a traditional and cultural affiliation with the Project area for notification pursuant to Public Resources Code § 21080.3.1 (Assembly Bill 52). Letters were sent to each contact on February 13, 2023, by the City of Belmont (City) to elicit any concerns or information regarding any known tribal cultural resources within the Belmont Creek Restoration Project area. In June 2023, two responses were received: from Andrew Galvan, Chairperson with the Ohlone Indian Tribe, and Monica Arellano, Vice Chairperson with the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area. During the subsequent testing of the known archaeological resource for the Storm Water Project, the NAHC declared that the Muwekma Tribe is the Most Likely Descendent (MLD) for the Project. The City, as the CEQA Lead Agency, will continue to provide information to the Tribe as planning proceeds. Coordination with tribes is described further in Section 3.18, “Tribal Cultural Resources.”

Archaeological and Architectural Resource Surveys and Results

ESA conducted a cultural resource survey of the Project Area during the survey efforts associated with the Storm Water Project (2022). The survey employed an intensive survey strategy of all visible ground surface within the boundaries of Twin Pines Park and the banks of Belmont Creek, where accessible. The surface visibility was significantly diminished due to landscaping and hardscaping throughout. No surface evidence of P-41-000152, the archaeological resource previously identified within the park boundaries, was observed during the survey. One historic-era archaeological resource, designated ESA-TP-01, was identified during the survey. ESA-TP-01 is comprised of the concrete foundation of a former building on the southern bank of Belmont Creek in the southeastern portion of Twin Pines Park.

The resource ESA-TP-O1 and Twin Pines Park itself were recorded as part of the ESA survey (ESA 2022). The resource ESA-TP-01 is located on the south bank of Belmont Creek in the

southeastern portion of Twin Pines Park; this resource consists of a board-pressed aggregate concrete irregular foundation with a brick retaining wall on the uphill (northwestern side) of the foundation and a patio with modern-threading bolts and nails. A scatter of colorless and green bottle glass fragments was sparsely scattered around the foundation. ESA (2023) concluded that this resource does not qualify as a historic resource under CEQA; further, this resource does not appear to intersect the Project area.

Twin Pines Park is a 19.55-acre municipal park in the City of Belmont, located alongside Ralston Avenue, southwest of 6th Avenue. The park abuts Belmont Creek and includes picnic areas, a playground, trails, the Belmont Historical Society Museum in the Manor House, the Belmont Parks and Recreation Building, and the Belmont Senior and Community Center. It was established in 1975. As a result of the evaluation of this resource, ESA (2023) recommends that Twin Pines Park is not eligible for listing in the NRHP and CRHR because the park reflects typical suburban municipal development and does not possess any significant associations with important trends or people in California history, nor does it appear to have any uniqueness of design or have the potential to yield significant information about California history. Therefore, it is not considered a historic property or historic resource (ESA, 2023).

ESA also identified six architectural resources, Creekside Studios, Cottage, Fisher House/Parks and Recreation Office, Lodge Building, Manor House, and Twin Pines Park, within the larger study area for the Storm Water Project (ESA 2022). None of these resources, with the exception of Twin Pines Park itself, are located within the Project area. In addition, ESA evaluated each structure and resource, and none were considered to qualify as historical resources under CEQA, with the exception of the Manor House. This resource has been treated as eligible for the NRHP by the City, and there is supporting documentation reflective of its eligibility (ESA 2022).

As discussed above, although no surface evidence of P-41-000152 was identified during pedestrian surveys, ESA recommended further testing of the site, especially due to the presence of previously identified human remains, and to determine whether any component of the site would be impacted by the proposed Storm Water Project[1](ESA 2023). The results of ESA's investigation, which yielded substantial midden deposits and human remains, is limited to the primary center of the habitation for this site. Additional auguring conducted by ESA (2023) and previously by Wiberg (1986) west of the City Hall area and within the vicinity of the Project area for the Restoration Project in Twin Pines Park resulted in negative findings south of Belmont

[1] ESA conducted an archaeological testing program within the parking lot of Belmont City Hall in July 2023. This testing program placed two trenches within the City Hall parking lot and encountered intact midden deposits from between 50 centimeters below ground surface (cm bgs) to 250 cm bgs (or 5-feet) in Trench 1 and then encountered human remains at 120 cm bgs, after which further excavation was stopped. Following identification of human remains and per protocols outlined in the ATP (and per State law), ESA contacted the San Mateo County Coroner to notify them of the human remains (Coroner Case No. 23-01020), who in turn notified the California NAHC of the find. The NAHC appointed Chairperson Monica Arellano of the Muwekma Ohlone Tribe of the San Francisco Bay Area (Tribe) as the MLD for the human remains.

Creek (ESA 2023; Wiberg 1986); however, some auger samples did yield midden deposits north of Belmont Creek to the northwest of the Project area (Wiberg 1986).

3.5.3 Discussion of Checklist Responses

The following sections provide an analysis of the impacts of the resources discussed above that may result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines. Where applicable, the text prescribes mitigation that would reduce an impact to less than significant with mitigation.

a. Adverse change in the significance of a historical resource

A cultural resource review was conducted to address the responsibilities of the CEQA, as codified in Public Resource Code sections 5097 and its implementing guidelines 21082 and 21083.2. As stated above, two potential historical resources were identified within the Project area: C-331 and Twin Pines Park itself. The informally recorded C-331 lacks sufficient detail to be considered further; however, it is assumed to represent Twin Pines Park, which was recorded by ESA and was recommended to lack significance as a historical property or historic resource (ESA 2022). No other historical resources were identified during the survey of the Project area (ESA 2022). Therefore, **no impact** to historic resources (built environment) will result from the proposed project.

However, historical resources that are archaeological in nature may be accidentally discovered during Project construction; archaeological resources are discussed further in Section 3.5.3(b) below.

b. Adverse change in the significance of an archaeological resource

One archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, has been identified within the Project area, designated as P-41-00152. As discussed in the section above, the site that includes the Project area represents a long-term indigenous habitation of the area, likely for about 3,500 years, and has been recommended to be eligible for listing in the NRHP and CRHR as an historic property and historical resource under Criterion 4/D for its potential to yield important information regarding California prehistory (ESA 2023). The most recent testing and evaluation of the site indicates the densest concentration of the site is located within the existing parking area and under the Belmont City Hall buildings; the site has less concentration west of this area. Evidence of midden deposits were identified north of Belmont Creek above the Redwood Picnic Area (ESA 2023; Wiberg 1986). However, midden was not identified south of this area and into the Project area and its surroundings. Further, the Project area is limited to the very steep banks of the Belmont Creek in a discrete area of the watercourse and ground disturbance associated with construction would not extend into flatter terrain surrounding the restoration area. Intact deposits associated with this site are not expected in the Project area due to the high energy water events of the past and the natural erosion along the banks of Belmont Creek, which would also not sustain human habitation or activity.

Although no significant impact to this historic resource is expected to result from Project activities, if archaeological remains are accidentally discovered that are determined eligible for listing in the CRHR/NRHP, and Proposed Project activities would affect them in a way that would

render them ineligible for such listing, a significant impact would result. Accordingly, given the proximity to previously recorded elements of this site, the implementation of **Mitigation Measure CUL-1** requiring an archaeological and Tribal monitoring program is recommended. In addition, implementation of **Mitigation Measures CUL-2** would require that work stop should any archaeological remains be discovered during construction.

Mitigation Measure CUL-1: Conduct Archaeological and Tribal Cultural Monitoring

Prior to the initiation of ground disturbing activity within the Project area, the City shall retain a qualified archaeologist and a Tribal monitor to conduct monitoring of ground-disturbing activity. Because the NAHC had previously appointed the Muwekma Ohlone Tribe of the San Francisco Bay Area (Tribe) as the MLD for the Storm Water Project, it would be likely a representative of this Tribe would serve as the Tribal monitor in this case.

In the event that cultural resources are exposed during construction, the monitor shall be empowered to temporarily halt activities in the immediate vicinity of the discovery while it is evaluated for significance. An Environmental Sensitive Area shall be installed around the find to protect during further investigation of the find is conducted. If the archeologist determines that the cultural resources exposed potentially contribute to the eligibility of site P-41-000152 or are unique archeological resources as defined by Section 21083.2 of CEQA, then the archeologist shall consult with the City and the Tribal monitor before conducting additional excavations or similar investigation techniques, such as auguring or shovel test pits, to confirm whether the find has significance and may be further impacted by project actions. If they do not contribute to the eligibility of P-41-000152, or are not "unique," then no further mitigation would be required. Unique cultural resources shall be determined based on the criteria set forth in Section 21083.2 of CEQA. If the find is determined to be significant or likely contributes to the eligibility of P-41-000152, the archaeologist, Tribal monitor, and the City will meet to determine the appropriate avoidance measure for the situation.

If it is infeasible to avoid impacts to the site that have been determined to be eligible individually for listing on the CRHR or the NRHP or may contribute to the significance of P-41-000152, additional research including, but not necessarily limited to, archaeological excavation shall be conducted (CCR Section 15126.4 (b)(3)(C)). This work shall be conducted by a qualified archaeologist and be conducted following the research design and recommendations provided by the *Twin Pines Storm Water Capture Project, San Mateo County, California: Archaeological Testing Results Report (ESA 2023).*

Mitigation Measure CUL-2: Stop Work in the Event of an Archaeological Discovery

If evidence of any subsurface archaeological features or deposits is discovered during construction-related earth-moving activities (e.g., lithic scatters, midden soils, historic era farming, or construction materials), all ground-disturbing activity in the area of the discovery shall be halted within 100 feet of the find until a qualified archaeologist and Native American representative from a traditionally and culturally affiliated tribe, as appropriate, can assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of

cultural objects, leaving objects in place within the landscape, and returning objects to a location within the project area where they will not be subject to future impacts.

If after evaluation, a resource is considered significant or is considered a tribal cultural resource, all preservation options shall be considered as required by CEQA (see Public Resources Code 21084.3), including possible capping, data recovery, mapping, or avoidance of the resource. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. If artifacts are recovered from significant prehistoric archaeological resources or tribal cultural resources, the first option shall be to transfer the artifacts to an appropriate tribal representative. If possible, accommodations shall be made to re-inter the artifacts at the Project site. Only if no other options are available will recovered prehistoric archeological material be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.

Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce impacts related to currently unknown archaeological resources to a **less-than-significant level with mitigation**.

c. Disturbance of any human remains, including those interred outside of formal cemeteries

Given the location of the Project area within the banks of Belmont Creek, the discovery of human remains is not anticipated during construction of the Proposed Project. However, given the Project's proximity to several identified instances of human remains within the boundaries of the identified site, P-41-000152 that intersects the adjacent Storm Water Project, there is the possibility that human remains could be discovered during excavation activities. Should any such remains be discovered during construction, **Mitigation Measure CUL-3** shall be followed.

Mitigation Measure CR-3: Protect Native American Human Remains

Consistent with the California Health and Safety Code and the California Native American Historical, Cultural, and Sacred Sites Act, if suspected human remains are found during project construction, all work shall be halted within 100 feet of the finds, and the San Mateo County Medical Examiner shall be notified, pursuant to California Public Resources Code Sections 5097.94, 5097.98, and 5097.99, to determine the nature of the remains. The coroner shall examine all discoveries of suspected human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she shall contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall then assign a most likely descendant (MLD) to serve as the main point of Native American contact and consultation. Following the coroner's findings, the MLD, in consultation with the State, shall determine the ultimate treatment and disposition of the remains. If the NAHC concurs that the Muwekma Ohlone Tribe of the San Francisco

Bay Area should continue as the MLD for this Project, similar to that role with the Storm Water Project, the recommendations provided for the treatment of human remains outlined in the *Twin Pines Storm Water Capture Project, San Mateo County, California: Archaeological Testing Results Report* (ESA 2023) shall be followed.

Implementation of Mitigation Measures CUL-3 would reduce any potential impact on human remains to **less-than-significant with mitigation**.

3.6 ENERGY

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

3.6.1 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

No federal regulations are applicable to energy in relation to the Proposed Project.

State Laws, Regulations, and Policies

Warren-Alquist Act

The 1974 Warren-Alquist Act (P.R.C. § 25000 et seq.) established the California Energy Commission (CEC) and created a State policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Legislature continues to amend the Act to address pressing energy needs and issues, and the CEC publishes an updated version of the Act each year. The 2022 edition of the Warren-Alquist Act was published in January 2022.

3.6.2 Environmental Setting

The following discussion describes the environmental setting that is relevant to impacts that could result from Project implementation.

California leads the nation in electricity generation from renewable resources (solar, geothermal, and biomass resources) and is the seventh largest producer of crude oil among the 50 states (U.S. Energy Information Administration (EIA), 2022). California has the second highest total energy consumption in the U.S. but one of the lowest energy consumption rates per capita

due to its mild climate and energy efficiency programs (EIA, 2022). A comparison of California's energy-consuming end-use sectors indicates that the transportation sector is the greatest energy consumer, followed by industrial, residential, and commercial in that order (EIA, 2022). California is the largest consumer of jet fuel in the U.S. and the second largest consumer of motor gasoline (EIA, 2022).

3.6.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on energy that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a., b. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency

The Proposed Project would require the consumption of energy (fossil fuels) for construction equipment, worker vehicles, and truck trips. **Table 3.6-1** shows the estimated total fuel use from construction equipment, worker vehicles, and truck trips. The calculations used to develop these estimates are presented in Appendix A.

TABLE 3.6-1 PROJECT FOSSIL FUEL USE

Source Type	Gasoline Fuel Use (Gallons)	Diesel Fuel Use (Gallons)
Construction On-Road Vehicles	566	1,097
Construction Off-Road Equipment	n/a	37,773
Total for Construction	**566**	**38,869**

Source: Appendix A

The Proposed Project's energy consumption is necessary to implement the bank stabilization and restoration activities along Belmont Creek. These activities would not cause wasteful, inefficient, and unnecessary consumption of energy, a substantial increase in energy demand, or the need for additional energy resources. As a result, the Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy.

In addition, the Proposed Project activities would not conflict with any of the goals, policies, or implementation actions identified in the applicable plans, such as BAAQMD's 2017 Clean Air Plan, because the Proposed Project would not create any additional future energy demands over current conditions and would be completed as efficiently as possible. Thus, the Proposed Project would not conflict with any plans relating to renewable energy or energy efficiency and would be considered **less than significant**.

3.7 GEOLOGY, SOILS, AND SEISMICITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
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), 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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

Clean Water Act

Activities discharging pollutants from a point source to a body of water in the United States are subject to the National Pollutant Discharge Elimination System (NPDES) permitting program, as authorized by the federal CWA, established in 1972. The NPDES permitting program has been delegated to the State of California for implementation through the SWRCB and nine RWQCBs. Under the NPDES program, any construction project that would result in the disturbance of 1 or more acres would require compliance with the state's NPDES General Permit for stormwater discharges associated with the construction activity.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) has a specific standard dedicated to trenching and excavation safety, 1926 Subpart P – Excavations (29 CFR 1926.650-652). This standard provides regulations and requirements for ensuring the safety of workers involved in excavation operations, including design by a registered professional engineer, limits on slope angles, and soil types.

State Laws, Regulations, and Policies

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code § 2621 et seq.), also known as the Alquist-Priolo Act, was passed in 1972 to mitigate the hazard of surface faulting to structures intended for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps depicting those zones. The maps are distributed to all affected cities, counties, and State agencies for their use in planning and controlling new or renovated construction. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is identified, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet) (DOC, 2023). Under the Alquist-Priolo Act, an active fault is one that has ruptured in the last 11,000 years.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resource Code §§ 2690-2699.6) is intended to reduce the threat to public safety resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The Seismic Hazards Mapping Act highlights the need to identify and map seismic hazard zones to allow cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations that reduce and mitigate those hazards to protect public health and safety. Cities and counties are required to regulate development within mapped Seismic Hazard Zones (DOC, 2023).

General Permit for Construction Activities

The State of California adopted the Construction General Permit, Order No. 2012-0006-DWQ, amending Order No. 2009-0009-DWQ, effective July 17, 2012. SWRCB Water Quality Order 2012-0006-DWQ (Construction General Permit) regulates construction site stormwater management. Projects that will result in stormwater discharges and also disturb 1 or more acres of soil, or disturb less than 1 acre, but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the Construction General Permit for discharges of stormwater associated with construction activity. The General Permit requires the preparation of a Project-specific Stormwater Pollution Prevention Plan (SWPPP) to minimize any potential stormwater impacts to surface waters. This program is further discussed in Section 3.11. Construction activities that are subject to this permit include clearing, grading, and ground disturbance (stockpiling or excavation), but do not include regular maintenance activities performed to restore the original grade of the disturbed area.

Permit applicants are required to submit a Notice of Intent (NOI) to the SWRCB and to prepare a SWPPP. The SWPPP identifies BMPs that must be implemented to reduce construction effects on receiving water quality based on pollutants. BMPs are directed at implementing sediment and erosion control measures and other measures to control chemical contaminants. The SWPPP must also include descriptions of the BMPs to reduce pollutants in stormwater discharges after all construction phases have been completed at the site (post-construction BMPs). The SWPPP must contain a visual monitoring program, a chemical monitoring program for “nonvisible” pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the site discharges directly to a waterbody listed on the CWA Section 303(d) list of waterbodies impaired for sediment.

California Building Standards Code

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation directly related to construction in California.

The City has adopted the 2022 California Building Code, California Code of Regulations, Title 24, Part 2, as the Building Code of the City of Belmont (Chapter 7, Article IV, Division 1, Section 7-22.

Public Resources Code Section 5097.5

Public Resources Code § 5097.5 defines a misdemeanor as any unauthorized disturbance or removal of a historic or prehistoric ruin, burial ground, or archaeological or vertebrate paleontological site on public lands,[2] without the express permission of the public agency having jurisdiction over the lands. This protection includes fossilized footprints, inscriptions, or other archaeological, paleontological, or historical features on public land.

3.7.2 Discussion of Checklist Responses

The following sections provide an analysis of impacts on geology and soils that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Seismic-related rupture of a known earthquake fault

No known active faults cross the Project area. In addition, neither construction nor operation of the Project would increase likelihood of surface fault rupture. Therefore, the Project would not increase risk of loss, injury, or death involving seismic-related surface fault rupture. There would be **no impact**.

ii. Strong seismic ground shaking

The Project area is located in a region known to be seismically active, with the potential for large earthquakes. Faults of regional importance include the San Andreas fault approximately 3 miles west of the Project site, the Hayward fault approximately 15 miles east of the Project site, and the San Gregorio fault approximately 11 miles west of the Project site. All of these faults are capable of generating strong ground shaking.

However, neither construction nor operation of the Project would increase likelihood of seismic ground shaking. Therefore, the Project would not increase risk of loss, injury, or death involving seismic ground shaking. There would be **no impact**.

iii. Seismic-related ground failure, including liquefaction

Soil liquefaction results from loss of strength that could occur due to earthquake ground shaking. Soils most susceptible to liquefaction are clean, loose, saturated, poorly graded sands and silts. The California Geological Survey (CGS) has compiled Seismic Hazard Zone Reports,

[2] As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

including maps that depict where historical occurrences of liquefaction were reported or where local geological, geotechnical, and groundwater conditions indicate a potential for permanent ground displacements. The Seismic Hazard Zone Map for the San Mateo Quadrangle indicates that the Project area is susceptible to liquefaction (CGS, 2018).

The Project involves placement of rock and boulders to create riffle formations at various locations along the creek bed. With strong seismic ground shaking, it is possible that the soil underlying these materials would liquefy and the position of the boulders could settle or shift. However, the materials are not part of a structure for human habitation. Movement of these materials would not increase the risk of exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death. The impact related to seismically induced liquefaction would be **less than significant**.

iv. Landslides

The creek bed is located at the bottom of deeply incised, steep slopes that have resulted from erosion over decades. While the creek bed is not in an area recognized as being susceptible to landslides (CGS 2018; City of Belmont, 2017), earth moving during construction would loosen soils and change the angle of the bank slopes during construction, potentially destabilizing the steep banks. In cases of strong seismic ground shaking during construction activities, these destabilized slopes could be subject to localized landslides within the creek channel.

Following Project construction, bank slopes would be less steep than under existing conditions. Specifically, the Project would create more stable slopes (maximum of 2H:1V or flatter as compared to existing 1.5:1 or 1.25:1). Further, excavation would typically occur approximately 4 feet above the streambed with no excavation at the bank toe, with streambed material being placed on the channel bottom to raise the surface elevation approximately 4 feet. This would result in a shorter bank height, which would also increase overall bank stability. Where logs/rootwads would be installed, the native bank material above the log would be removed to facilitate log/rootwad installation before backfilling the upper slope with compacted, suitable native material. When completed, the log/rootwads structures would increase the strength and stability of the lower bank slopes while also increasing resistance from fluvial sheer forces. Therefore, the risk of slope failure would be less than under existing conditions.

The impact related to seismically induced landslide under both construction and operations would be **less than significant**.

b. Substantial soil erosion or the loss of topsoil

Project construction activities, including vegetation removal, excavation and grading of the bank slopes, placement of excavated soils as fill on the bank slopes to achieve the desired final slope, and placement of sediment into the creek bed, would have the potential to contribute to increased erosion during the construction period. In addition, stockpiling excavated soils before they are placed in their permanent locations could result in increased erosion of those stockpiles.

However, the Project would adhere to best management practices specified in **Table 2-3**. These include BMP-1 (Construction Work Windows), which specifies that the Project would be constructed during the dry season, minimizing risk of water erosion; BMP-2 (Area of

Disturbance); BMP-3 (Erosion and Sediment Control); and BMP-4 (Fills, Spoils, and Stockpiled Materials). In addition, dewatering would be required to ensure that the creek bed is dry to facilitate in-channel construction. As discussed in Chapter 2, water from upstream would be conveyed and discharged to the channel downstream of the work area via gravity flow or pump in order to keep the construction site dry, minimizing risk of erosion during construction. Further, as discussed in Section 3.10, Hydrology and Water Quality, because both Phase 1 and Phase 2 of the Project would disturb an area greater than 1 acre, in accordance with the SWRCB's Construction General Permit, a Stormwater Pollution Prevention Plan (SWPPP) would be required that includes erosion control and hazardous materials management measures. The risk of erosion during construction is minimal.

Proposed treatments (e.g., streambed raising; installation of riffles and creation of pools; and placement of rootwads, woody debris structures, logs, and boulders) would stabilize areas where severe streambank erosion has occurred and protect the bank from future erosion. The Project would thus have a beneficial effect compared to existing conditions. Long-term maintenance would be limited to vegetation management, minor pavement repair, in-channel vegetation management using hand tools, and limited herbicide application to control growth of invasive species.

Accordingly, the impact related to soil erosion and loss of topsoil during construction and operations would be **less than significant.**

c. Location on a geologic unit or soil that is unstable or that would become unstable as a result of the Proposed Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse

Risks associated with liquefaction and landslides are addressed under (a) above.

Lateral spreading is the lateral, or sideways, movement of sloping and saturated soil that results from seismically induced liquefaction. The Project consists of grading and filling steep slopes to reduce their gradient. Because the Project site is located on soil that is susceptible to liquefaction, strong seismic ground shaking could induce lateral spreading on these steep slopes. However, the Project would not change the likelihood of lateral spreading over baseline conditions. Instead, bank slopes would be less steep than under existing conditions. Further, the Project would adhere to requirements specified in OSHA's standards (29 CFR 1926.650-652). In addition, adherence to current CBC standards for grading activities would reduce the potential for lateral spreading during construction activities.

Subsidence is the gradual lowering of the ground surface through soil compression as a result of removing subsurface materials, such as substantial pumping of groundwater or petroleum, freeze-thaw cycles, or decomposition of dense layers of organic material. Collapse can occur when subsurface conduits, tunnels, pipes, or caves compress and fail, resulting in ground surface collapse due to subsurface erosion, chemical weathering or dissolution of rock types, or subsurface material extraction. The Project would not involve subsurface resource extraction nor significant changes in local groundwater resources that may expose organic materials. Therefore, the Project would not increase risk of subsidence nor collapse.

The impact related to location on unstable soil or geologic units is **less than significant**.

d. Location on expansive soil, creating substantial direct or indirect risks to life or property

Soils at the Project site have been mapped as Los Gatos loam, with 30 to 75 percent slopes (NRCS, 2003; n.d.). This soil map unit has low expansiveness (NRCS n.d.). While the Project would place boulders and rocks in the streambed, the soil map unit comprising the streambed has low expansiveness. The Project would not create substantial direct or indirect risks to life or property. There would be **no impact**.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater

The Project does not involve installation or use of septic tanks or alternative wastewater disposal systems. There would be **no impact**.

f. Destruction of a unique paleontological resource, site, or unique geological feature

Paleontological resources are the preserved remains or traces of remains of ancient organisms. Geologic units that contain paleontological resources in one geographic location are likely to contain paleontological resources in another geographic location. Therefore, the likelihood of finding paleontological resources at a site depends on the geologic unit(s) underlying the site and its likelihood of yielding.

Underlying geological units include Quaternary alluvium (Q) and Franciscan Formation, specifically chert. The Quaternary alluvium deposits are too young to yield paleontological resources (SVP, 2010). The Franciscan Formation has yielded only three vertebrate fossils (Hilton, 2003): two Ichthyosaurus and one Plesiosaurus. Fossils other than the abundant microfossils are rare in this geologic unit.

For the Project, ground disturbance would occur only during the construction period, so impacts on paleontological resources and unique geologic features are considered only during construction. Project excavation activities would predominantly occur along the top of the channel banks and at relatively shallow depths within the soil profile. Project impacts to rock layers would be minimal and the underlying geological units would have a low likelihood of yielding significant paleontological resources during earth moving activities. Further, there are no unique geological features in the Project area. The geologic units in the area are common and widespread.

The impact on paleontological resources and geologic features would be **less than significant**.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

The U.S. Environmental Protection Agency (USEPA) has developed federal regulations to reduce greenhouse gas (GHG) emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs. As discussed in Section 3.3, Air Quality, the USEPA and National Highway Traffic Safety Administration (NHTSA) set standards for passenger cars and light trucks for the Corporate Average Fuel Economy standards and GHG emissions standards. In March 2020, NHTSA and the USEPA revised these standards under the Safer Affordable Fuel-Efficient Vehicles Rule, which increases the stringency of fuel economy and carbon dioxide standards by 1.5 percent in stringency each year for model years 2021 through 2026. This is less than previous standards issued in 2012, which would have had increases in stringency of about 5 percent per year.

State Laws, Regulations, and Policies

In recent years, California has enacted numerous policies and plans to address GHG emissions and climate change. In 2006, the California State Legislature enacted Assembly Bill (AB) 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. SB 32, a follow-up to the California Global Warming Solutions Act of 2006 (AB 32), similarly calls for a Statewide GHG emissions reduction to 40 percent below 1990 levels by December 31, 2030. Subsequent executive orders and bills (AB 1279 and SB 100) have revised the overall goal to Statewide carbon neutrality by 2045 and net negative emissions thereafter. The CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional regulations.

These include the low-carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the renewable portfolio standard, which requires electricity suppliers to increase the amount of electricity generated from renewable sources. CARB has implemented a mandatory reporting regulation and a cap-and-trade program for large emitters of GHGs.

California's 2017 Climate Change Scoping Plan outlines the strategies that will be implemented to reach the 2030 goal, and the 2022 Scoping Plan for Achieving Carbon Neutrality lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279 (CARB, 2017; CARB, 2022a). Strategies discussed in these plans include increasing building efficiency, increasing renewable power production, using clean and renewable fuels, transitioning to zero-emission vehicles, enhancing walkable and bikeable communities with transit, cleaner freight and goods movement, reducing emissions of pollutants with high global warming potential (GWP), capping emissions from key sectors, investing in communities to reduce emissions, capturing and storing carbon through the State's natural and working lands, and using a variety of mechanical approaches.

3.8.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on GHGs.

Global climate change is already affecting ecosystems and societies throughout the world and is caused, in part, by the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide [CO_2], methane, NO_2, and chlorofluorocarbons) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. Consequently, the cumulative analysis is the same as the discussion concerning proposed Project impacts. GHG emissions are typically reported in terms of CO_2e, which converts all GHGs to an equivalent basis, considering their GWP compared to CO_2.

In 2020, total California GHG emissions were 369.2 million MT of CO_2e (CARB 2022b). That is 35.3 MT CO_2e below 2019 levels and 61.8 million MT CO_2e below the 2020 GHG limit set by AB 32. This represents a per capita GHG emission rate of 9.3 MT CO_2e per person. Much of the large decline compared to 2019 was very likely due to impacts of the COVID-19 pandemic. In 2020, the transportation sector of the California economy saw a decrease in emissions of 26.6 MT CO_2e, but remained the largest source of emissions, accounting for approximately 37 percent of the total emissions. Emissions from the electricity sector accounted for 16 percent of the 2020 inventory, a decline largely due to low-GHG electricity making up a larger share of imports.

In 2005, the City of Belmont emitted approximately 167,648 MT CO_2e, with the transportation and residential sectors contributing the greatest share (City of Belmont 2017). In order to comply with AB 32 and the BAAQMD guidelines for GHG emission reductions, the City of Belmont created a goal to reach an emissions reduction target of 15 percent below the 2005 baseline level by 2020 and 50 percent below the baseline by 2035.

3.8.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on GHGs that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. Generate a net increase in greenhouse gas emissions which may have a significant impact on the environment

The Proposed Project would generate GHG emissions during construction as a result of the combustion of fossil-fueled construction equipment, material hauling, and worker trips. Construction-related emissions were estimated using CalEEMod version 2022.1.1.20. Project construction assumptions, including equipment usage, schedule, and haul routes used for this analysis, were based on the Project description. In total, it was estimated that the emissions for the construction activities of the Proposed would be 287 MT CO_2e. Maintenance and operations of the Proposed Project would be very minimal and would not change GHG emissions from pre-Project levels.

As mentioned in Appendix A, the BAAQMD does not have a recommended threshold for construction GHG emissions. However, the modeled GHG emissions from the proposed Project would be well below the BAAQMD's operational threshold of 1,100 MT CO_2e per year, which is in line with the 2020 goal established in AB 32. The BAAQMD recently adopted new GHG significance thresholds for land use projects and plans; however, these thresholds are not applicable to the Project because they apply to buildings or projects that include trip generation and do not apply to infrastructure projects such as creek stabilization activities (BAAQMD 2023). Because implementation of the proposed Project would take place after 2020, this GHG analysis considers the operational bright-line threshold in order to evaluate whether the Project would make substantial progress toward these future goals. In absence of guidance from the BAAQMD for construction emissions, the relevance of an appropriate threshold for post-2020 GHG emissions must be considered.

Sacramento Metropolitan Air Quality Management District (SMAQMD) initially conducted a similar analysis of the CEQA projects that would be captured by establishing a bright-line threshold for the 2020 goals. Recently, SMAQMD updated its analysis and determined that the existing bright-line threshold would still capture over 98 percent of GHG emissions (SMAQMD, 2020). Thus, it would be reasonable to assume that an updated analysis by the BAAQMD would find that projects would continue to achieve a high capture rate of total GHG emissions with use of this bright-line threshold. This conclusion supports the continued use of 1,100 MT CO_2e as a significance threshold post-2020 and indicates that continued progress toward the 2030 and 2050 goals is likely to be maintained with this bright-line threshold.

As mentioned above, the estimated emissions of the Proposed Project would be 287 MT CO_2e, which falls within the assumed bright-line threshold. Therefore, it is unlikely that Project would produce greenhouse gas emissions that would have a significant impact on the environment. Project impacts related to the generation of GHG emissions would be **less than significant**.

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

The Proposed Project would comply with both local and Statewide GHG emission reduction plans and regulations. California implemented AB 32 in order to lower GHG emissions back to 1990 levels by the year 2020. Additionally, SB 32 outlined an overall goal to reduce California's GHG emissions to 40 percent below 1990 levels by the year 2030, and AB 1279 and SB 100 have revised the goal to Statewide carbon neutrality by the year 2045. The Proposed Project would not hinder the State's goals set forth by any of the above policies because the Project would result only in GHG emissions from temporary construction activities and would not establish any new permanent sources of GHG emissions.

Additionally, the City of Belmont *Climate Action Plan* outlines specific strategies and goals to reach its outstanding target of lowering City GHG emissions from the 2005 baseline level by 50 percent by the year 2035. The Proposed Project would be consistent with the goal to reduce emissions from transportation by implementing BMP 8, which outlines measures to promote air quality protection, such as reducing construction vehicle idling times. Additionally, Proposed Project activities would be consistent with the City's goal to increase the diversion of solid waste from landfills. For the reasons detailed here and in item (a) above, the Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gas emissions. Therefore, this impact would be **less than significant**.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
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, it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. Be 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 and 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 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to hazards and hazardous materials in relation to the Proposed Project.

State Laws, Regulations, and Policies

Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the RCRA and the State Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment.

California Occupational Safety and Health Administration

California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations in the State. Cal/OSHA regulations concerning the use of hazardous materials in the workplace, as detailed in Title 8 of the CCR, include requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.

Cal/OSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees at hazardous waste sites. The hazard communication program requires that Safety Data Sheets be available to employees and that employee information and training programs be documented.

Regional Water Quality Control Board

The SWRCB and RWQCBs regulate hazardous substances, materials, and wastes through a variety of State statutes, including, for example, the Porter-Cologne Water Quality Control Act, Cal. Water Code § 13000 et seq., and the underground storage tank cleanup laws (Cal. Health and Safety Code §§ 25280-25299.8). RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Any person proposing to discharge waste within any region must file a report of waste discharge with the appropriate regional board.

3.9.2 Environmental Setting

Existing Hazards and Hazardous Materials

Table 3.9-1 shows the nearby hazardous materials sites that have not been indicated as closed as documented by Geotracker (SWRCB, 2023) or as needing no further action by EnviroStor (DTSC, 2023) that are located within one mile of the Project site.

TABLE 3.9-1. HAZARDOUS MATERIALS SITES NEAR THE PROJECT SITE

Site Name	Type of Site	Contaminants of Concern	Potential Media of Concern
815 Old Country Road	Voluntary Cleanup	Benzene, Dichloroethane, Tetrachloroethylene, trichloroethylene	soil vapor
Delta Star Inc	Certified O&M	1, 2, Dichloroethylene, Chlorobenzene, Polychlorinated Biphenyls, Vinyl Chloride	Other groundwater (uses other than drinking water)
Harbor Boulevard	Above Ground Storage Tank	TPH-Diesel, Volatile Organics	Indoor Air, Other groundwater (uses other than drinking water), soil, soil vapor
642 Quarry Road	Open- Long Term	Benzene, Gasoline, Naphthalene, Tetrachloroethylene	Soil vapor
401-597 Quarry Road	Open-Long Term	None specified	None specified
Richard's Dry Cleaners	Open- Site Assessment	Tetrachloroethylene	None specified
Putnam Honda	Open – Remediation	Polychlorinated Biphenyls, Volatile Organics	Other groundwater (uses other than drinking water), soil
Peninsula Laboratories	Open – Remediation	Other chlorinated hydrocarbons, trichloroethylene, waste oil/ motor/ hydraulic/ lubricating	Other groundwater (uses other than drinking water), soil
Former Baron-Blakeslee (Purex)	Open – Remediation	trichloroethylene	Other groundwater (uses other than drinking water), soil
Circraft, Inc	Open – Remediation	Tetrachloroethylene, trichloroethylene	Under investigation
Brusco Property	Open- Assessment and Interim Remedial Action	Tetrachloroethylene	None specified
B & H Technical Ceramics	Open- Eligible for Closure	Gasoline, toluene, trichloroethylene	Other groundwater (uses other than drinking water)

Notes:

a SWRCB, 2023

b DTSC, 2023

Airports

San Carlos Airport is located approximately 1.25 miles east of the Project site.

Wildfire Hazards

As the Project Site is located within an urban area, the City of Belmont, it is located within a Local Responsibility Area (LRA). It is not classified as a fire hazard zone by either the County of San Mateo (2023) or by CAL FIRE (2023b). The closest Fire Hazard Severity Zone (FHSZ) (Very High) is located approximately 0.75 miles to the southwest (County of San Mateo, 2023). In the County Community Wildfire Plan, the area around the Project Site is not identified as being in a Wildland Urban Interface (CAL FIRE San Mateo, 2018).

Sensitive Receptors

There are several schools in the vicinity of the Project site:

- Peninsula School for Boys is located approximately 1,500 feet to the west;
- Compass High School is located approximately 2,300 feet to the west;
- Notre Dame Elementary School is located approximately 2,700 feet to the west;
- Notre Dame High School is located approximately 2,100 feet to the west;
- Charles Armstrong School is located approximately 2,500 feet to the southwest;
- Mariposa Upper Elementary School is located approximately 3,200 feet to the southwest;
- Tierra Linda Middle School is located approximately 3,500 feet to the southwest;

The nearest residences are located approximately 250 feet to the north and 450 feet to the south. The nearest hospital, Carlmont Medical Center, is located approximately 0.93 miles to the west. MBSR Sutter Health is located approximately 0.98 miles to the east.

3.9.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on aesthetics that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

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

As described in Chapter 2, construction would involve clearing and grubbing; removing existing concrete debris and trash; bank stabilization activities; and hauling of soil, debris, and material on- and offsite. Accordingly, Project construction would potentially require the routine transfer, use, storage, or disposal of hazardous materials used during typical construction activities. During construction, hazardous materials typically associated with construction activities, such as fuel, oil, and lubricants, would be used when operating construction equipment. The Project would comply with all relevant federal, State, and local statutes and regulations related to transport, use, storage, or disposal of hazardous materials during construction, and all materials designated for disposal would be evaluated for appropriate federal and State hazardous waste criteria. During routine transport and use of equipment, small amounts of fuel and oil could be accidentally released. Implementation of BMP 3 (Erosion and Sediment Control), BMP-4 (Fills, Spoils, and Stockpiled Materials), BMP-5 (On-site Hazardous Materials Management), BMP-6 (Spill Prevention and Response Plan), BMP-7 (Vehicle and Equipment Maintenance), and BMP-9 (Work Site Housekeeping) would require the safe handling, storage, and disposal of chemicals used during the construction phase. A summary of these measures is included in Table 2-3 in Chapter 2.

There are no known hazardous release or contaminated sites in or near the Project work area; therefore, construction would not require special handling of excavated soils nor materials. In addition, any spoils or other on-site soils that become contaminated by products used by heavy

construction equipment (e.g., from a hydraulic fluid leak) would be hauled offsite for disposal at a permitted landfill.

Operation and maintenance activities may require the use of a minor amount of hazardous materials (i.e., the use of fuel to power access vehicles); however, all hazardous materials used during operation and maintenance would comply with existing federal, State, and local regulations. The Proposed Project would not produce hazardous emissions or handle acutely hazardous materials, substances, or waste. Overall, through compliance with relevant regulatory requirements regarding the transport, use, storage, and disposal of hazardous materials during construction and operation, this impact **would be less than significant**.

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

Potential releases of hazardous materials to the environment through reasonably foreseeable upset and accident conditions could result from releases from the routine use of hazardous materials during construction. As discussed in Response (a) above, Project construction would require the use of certain hazardous materials, such as fuels and oils. Spills of these hazardous materials could result in a significant hazard to the public or environment if not handled properly. However, the use of hazardous materials would comply with all applicable laws and regulations. BMPs implemented as part of the proposed Project would ensure the safe handling, storage, and disposal of chemicals used during the construction process. Specifically, BMP-5, BMP-6, BMP-7, and BMP-9 would be implemented to address accidental releases of hazardous materials.

The Project site is not located on a known area of active hazardous materials contamination (DTSC 2023, SWRCB, 2023). One site within 1,000 feet of the Project site, the Belmont 76 Service Center T10000003510 at 995 Ralston Avenue in Belmont) was the location of a leaking underground storage tank, but the cleanup was completed and the case was closed in 2014 (SWRCB, 2023). In addition, as discussed in Response (d) below, the Project area is not located on a hazardous site listed pursuant to Government Code § 65962.5. Operation and maintenance activities associated with the proposed Project would use a minor amount of hazardous materials, such as lubricants. However, the use of hazardous materials would comply with all applicable laws and regulations. With compliance with all applicable laws and regulations and the implementation of these BMPs, potential impacts to the public or environment through accidental release of hazardous materials would be **less than significant**.

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

As outlined in the environmental setting section above, there are no schools located within 0.25 miles (1,320 feet) of the Project site. The Project would have **no impact**.

d. Located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, create a significant hazard to the public or the environment

The Project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Therefore, the Project would not create a significant hazard to the public or the environment. There would be **no impact**.

e. Located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a private airport or public airport and result in a safety hazard or excessive noise for people residing or working in the study area

San Carlos Airport is located approximately 1.25 miles to the east. However, the Project would not construct any structures, would not create a safety hazard, and would not result in an increase use of areas near the airport that would result in excessive noise for people working in the vicinity of the Project area. The Project would have a **less than significant** impact.

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

Project construction would require use of Ralston Avenue and Twin Pines Lane by construction equipment and hauling trucks accessing the site. However, Project construction would not involve large numbers of construction personnel, and Project operation would not introduce new users to the Project area. Project construction would not impair emergency response or interfere with implementation of an adopted emergency response plan or emergency evacuation plan. The Project impact on adopted emergency response plans or emergency evacuation plans would be **less than significant**.

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

Project activities would clear and grub the Project site prior to construction, which would reduce the potential for accidental wildfire ignition by removing flammable vegetation. The Project site is located in an urbanized area and is within the existing service area for Belmont Fire Protection District. The Project area would not significantly exacerbate wildfire risks or potentially expose Project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. Therefore, the impact would be **less than significant**.

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Proposed 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;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters. It established the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters (United States Environmental Protection Agency [USEPA] 2023a). The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972 and came to be commonly known as the "Clean Water Act" at that time (USEPA, 2023a). Under the CWA, the USEPA has implemented pollution control programs, such as setting wastewater standards for industry. The USEPA has also developed national water quality criteria recommendations for pollutants in surface waters (USEPA, 2023a).

Different sections of the CWA address different aspects of surface water pollution control, with some responsibilities under CWA being delegated to the states. Relevant sections of the CWA are described below.

Section 303(d), Impaired Water Bodies

Under CWA Section 303(d), states are required to identify and make a list of water bodies that are polluted. In California, this responsibility falls to the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). In addition to identifying impaired water bodies, states must identify the pollutants causing the impairments, establish priority rankings for waters on the list, and develop a schedule for development of control plans to improve water quality, including development of total maximum daily loads (TMDLs).

Neither Belmont Creek nor Belmont Slough are listed as impaired under Section 303(d); however, the Lower San Francisco Bay, to which Belmont Creek ultimately discharges, is listed as impaired for numerous pollutants, including chlordane, dichlorodiphenyldichloroethane (DDT), dieldrin, dioxin compounds (including 2,3,7,8-TCDD), furan compounds, invasive species, mercury, polychlorinated biphenyls (PCBs), PCBs (dioxin-like), and trash (SWRCB, 2022).

Section 404, Permits for Fill Placement in Waters and Wetlands

CWA Section 404 regulates the discharge of dredged and fill materials into "waters of the United States," or jurisdictional waters, which include oceans, bays, rivers, streams, lakes, ponds, and wetlands. Before any actions that may discharge dredged or fill material into surface waters or wetlands are carried out, a delineation of jurisdictional waters of the U.S. must be completed, following USACE protocols (USACE 1987), in order to determine whether the project area encompasses wetlands or other waters of the United States that qualify for CWA protection. For actions that will discharge dredged or fill material into waters of the United States, a permit must be obtained from the USACE, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

The basic premise of the Section 404 permitting program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment, or (2) the nation's waters would be significantly degraded (USEPA 2023b).

In other words, applicants must first show that steps have been taken to avoid impacts to wetlands, streams and other aquatic resources; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts (USEPA 2023b). For most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or state basis for particular categories of activities (USEPA 2023b). For proposed activities that have potentially significant impacts, an individual permit is required.

Section 401, Water Quality Certification

Section 401 of the CWA specifies that the SWRCB or applicable RWQCB must certify that any federal action meets water quality standards (23 CCR Section 3830, et seq.). Under California's policy of no net loss of wetlands, the SWRCB and RWQCBs require mitigation for dredge and fill impacts to wetlands and waterways. As described below (see "Section 404, Permits for Fill Placement in Waters and Wetlands"), dredge and fill activities in wetlands and waterways that impact waters of the U.S. require a CWA Section 404 permit from the U.S. Army Corps of Engineers (USACE). These permits trigger the requirement to obtain a Section 401 certification, which must be obtained prior to issuance of a CWA Section 404 permit.

Section 402, Permits for Stormwater Discharge

CWA Section 402 regulates facilities that discharge pollutants into waters of the United States (U.S.) through the National Pollutant Discharge Elimination System (NPDES). Under the NPDES, all facilities discharging pollutants from any point source[3] into waters of the U.S. must obtain a NPDES permit. While originally focused on municipal and industrial discharges from pipes or other point sources, Section 402 of the CWA was amended in 1987 to include stormwater discharges, which may be non-point source in nature. Phase I of the NPDES Storm Water Program imposed permitting requirements on several types of stormwater discharges, including certain industrial activities, medium (i.e., serving 100,000 to 250,000 people) and large (serving greater than 250,000 people) municipal separate sanitary sewer systems (MS4s), and construction sites disturbing 5 or more acres. Phase II of the Storm Water Program regulations, issued in 1999, expanded permitting requirements to include small (serving less than 100,000 people) MS4s, construction sites of 1 to 5 acres, and other certain previously exempt industrial facilities.

State Laws, Regulations, and Policies

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (also known as the Porter-Cologne Act), passed in 1969, established the SWRCB and divided the state into nine hydrogeologic regions, each

[3] A point source is defined as any identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack.

overseen by an RWQCB. In conjunction with the federal CWA, the Porter-Cologne Act is the principal law governing water quality regulation in California. The Porter-Cologne Act requires that each RWQCB develop a water quality control plan (also known as a Basin Plan) to identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. Waters of the State are defined differently than waters of the U.S., described above under CWA Section 404, and include any surface water or groundwater, including saline waters, which are within the boundaries of the state.

The Porter-Cologne Act also implements many provisions of the CWA, such as the NPDES permitting program, described above under "Federal Laws, Regulations, and Policies." Any entity discharging or proposing to discharge materials that could affect water quality must file a report of waste discharge with the applicable RWQCB.

San Francisco Bay Basin Plan

The Proposed Project is located within the San Francisco Bay Region, under the jurisdiction of the San Francisco Bay RWQCB. In accordance with the Porter-Cologne Act, the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin identifies beneficial uses and water quality objectives for surface and ground waters within the Region (San Francisco Bay RWQCB 2023). Beneficial uses for surface waters potentially affected by the Proposed Project are shown in **Table 3.10-1**.

Table 3.10-1. Beneficial Uses for Surface Waters Potentially Affected by the Proposed Project

Water Body	Beneficial Uses											
	IND	COMM	SHELL	EST	MIGR	RARE	SPWN	WARM	WILD	REC-1	REC-2	NAV
Belmont Creek								E	E	E	E	
Belmont Slough				E		E	E		E	E	E	
San Francisco Bay Lower	E	E	E	E	E	E	E		E	E	E	E

Notes: E = Existing beneficial use

Source: San Francisco Bay RWQCB 2023

The Basin Plan identifies a number of narrative and numeric water quality objectives (WQOs) to support beneficial uses in the Region. Of most relevance to the Proposed Project and impact analysis are the following (San Francisco Bay RWQCB, 2023):

- Oil and Grease. Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
- Sediment. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Controllable water quality factors shall not cause a detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life.

- Turbidity. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU.

Construction General Permit

Most construction projects that disturb 1 acre of land or more are required to obtain coverage under the SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ; adopted on September 8, 2022 – "Construction General Permit"), which requires the applicant to file a public notice of intent to discharge stormwater and to prepare and implement a SWPPP. The SWPPP must include a site map and a description of the proposed construction activities; demonstrate compliance with relevant local ordinances and regulations; and present the BMPs that will be implemented to prevent soil erosion and discharge of sediment and other construction-related pollutants to surface waters.

The SWPPP may include BMPs to control erosion at the source, such as through minimizing soil disturbance, preserving existing vegetation where feasible, and stabilizing and revegetating disturbed areas as soon as possible after grading or construction activities. Temporary soil stabilization measures/practices that could be utilized include covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding (SWRCB, 2009). Additionally, the SWPPP would include sediment control measures, which would be used to capture any soil that becomes eroded. This may include perimeter control measures, such as installing silt fences or placing straw waddles below slopes (SWRCB, 2009). The SWPPP would also include good site housekeeping measures to reduce potential hazardous material releases or other pollutant discharges. Permittees are further required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and that they are effective in controlling the discharge of construction-related pollutants.

Municipal Regional Stormwater NPDES Permit

The Municipal Regional Stormwater NPDES permit (Order R2-2022-0018) (San Francisco Bay RWQCB 2022) covers municipal stormwater discharges from the majority of Bay Area counties and cities, including the City of Belmont, which has joined with other cities and jurisdictions within San Mateo County to form the San Mateo Countywide Water Pollution Prevention Program. The Municipal Regional Stormwater NPDES permit establishes discharge prohibitions, annual reporting requirements, construction site controls, water quality monitoring, pesticide toxicity control, trash load reductions, and provisions to address existing TMDLs established for the Bay. The purposes of these measures are to control and reduce the levels of pollution in both stormwater and non-stormwater discharges to storm drains and watercourses; gather concentration and loading information for a number of pollutants of concern; and ensure the implementation of appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects.

California Statewide Groundwater Elevation Monitoring Program

In 2009, the California State Legislature amended the California Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California. Pursuant to this amendment, DWR established the California Statewide Groundwater Elevation Monitoring (CASGEM) Program.

The Proposed Project is located within the Santa Clara Valley Groundwater Basin, San Mateo Plain Subbasin (DWR No. 2-009.03), which is designated as very low priority by DWR (DWR, 2023).

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), passed in 2014, became law in 2015 and created a legal and policy framework to locally manage groundwater sustainably. The SGMA allows local agencies to customize groundwater sustainability plans (GSPs) to their regional economic and environmental conditions and needs and establish new governance structures known as Groundwater Sustainability Agencies (GSAs).

As noted above, the Proposed Project would be located within the San Mateo Plain Subbasin, which is very low priority (DWR, 2023), and thus a GSA is not required to be formed or a GSP prepared.

3.10.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on hydrology and water quality.

Topography and Climate

As described in Chapter 2, *Project Description,* the Proposed Project is located within the City of Belmont's 10-acre Twin Pines Park. The Proposed Project area is located in the western portion of the park and includes the Belmont Creek channel. The Project site is bounded by Ralston Avenue on the north, city parking lots and buildings on the east, open space of the south, and picnic and playground areas to the west.

In the immediate Project vicinity, elevations range from about 60 feet above mean sea level (amsl) to roughly 300 feet amsl. Moving west, beyond the Project site, towards the headwaters of Belmont Creek (located just east of Crystal Springs Reservoir), elevations reach roughly 700 feet amsl. As indicated above, within the Project site itself, the terrain is hilly, with the largely incised banks of Belmont Creek creating steep slopes rising to adjacent upland areas.

Being located in the San Francisco Bay Area, the Project site is characterized by a Mediterranean climate, with a marked wet (typically, November to April) and dry (typically, May to October) season and relatively mild temperatures year-round. Temperature and precipitation data for the station closest to the Project site are provided in **Table 3.10-2**.

Table 3.10-2. Climate Normal Data for Redwood City, California

	Minimum Temperature (°F)	Average Temperature (°F)	Maximum Temperature (°F)	Average Precipitation (in.)
January	40.3	50.1	59.8	3.14
February	42.1	52.4	62.6	2.98
March	44.6	55.1	65.5	2.71
April	47.1	58	68.8	1.2
May	50.5	61.6	72.7	0.32
June	54.5	67	79.6	0.14
July	57.3	69.1	81	0
August	57.4	68.9	80.4	0
September	54.9	67.3	79.8	0.12
October	50.2	62.7	75.2	0.83
November	44.1	54.8	65.6	1.34
December	40.1	49.6	59.2	2.94

Source: National Oceanic and Atmospheric Administration 2023

Surface Water Hydrology and Quality

Belmont Creek drains a watershed area of approximately 3.1 square miles. From its headwaters, Belmont Creek flows through Waterdog Lake and then several underground culverted sections before reaching Twin Pines Park. Downstream of the Project site, Belmont Creek flows through a harbor area and ultimately to San Francisco Bay via Belmont Slough. No stream gages are installed or maintained along Belmont Creek; thus, flow data is not available. Nevertheless, the flow in Belmont Creek is known to be intermittent in most years, conveying streamflow seasonally during the winter and spring months. However, flow may persist into the summer months during wet years, augmented by nuisance water and other sources.

The Project site is located along Belmont Creek, and the Proposed Project involves modifications to the creek itself. Thus, runoff from all portions of the Project site and adjacent upland areas would be expected to drain to the creek.

As noted above, neither Belmont Creek nor Belmont Slough are listed as impaired for any pollutants on the CWA Section 303(d) list. Water quality data is limited for these waterbodies, but generally, given that Belmont Creek passes through dense urban areas, it would be expected that this creek would exhibit adverse water quality characteristics, such as from trash, sediment, pesticides, etc.

Stormwater

The primary storm drainage conveyance through the City of Belmont is Belmont Creek, which conveys 60 percent of the City's storm runoff (City of Belmont 2023). The creek receives runoff from surrounding areas via a variety of storm drains and stormwater facilities. In total, the City's storm infrastructure consists of 28 miles of storm drain pipes (comprised variously of corrugated metal pipe, reinforced concrete pipe, and high-density polyethylene pipe [HDPE] and polyvinyl chloride [PVC] pipe) and two storm pump stations (City of Belmont 2023).

Additionally, as noted in Chapter 2, *Project Description,* the City is currently in the process of developing the Twin Pines Park Storm Water Detention Basin project, which would construct a 9-acre-foot (AF) capacity stormwater detention basin beneath the parking lot in Twin Pines Park, next to City Hall, in and adjacent to the Proposed Project area. The Twin Pines Park Storm Water Detention Basin project is a stand-alone project with its own independent utility, funding source, and a separate CEQA compliance pathway.

Groundwater Levels, Flows, and Quality

The Proposed Project site lies within the Santa Clara Groundwater Basin, San Mateo Plain Subbasin (DWR No. 2-009.03), which is designated as very low priority by DWR (DWR, 2023). The San Mateo Plain Subbasin is not a highly used basin, and only approximately 2,300 AF of groundwater is pumped from the subbasin annually (San Francisco Bay RWQCB 2021). The two main sources of recharge are stream channel percolation and stormwater infiltration.

An assessment report for the San Mateo Plain Subbasin, completed in 2018, found that deeper water quality is better than shallow water quality, and iron and manganese appear to be naturally occurring and have exceeded secondary drinking water standards at some municipal supply wells (San Francisco Bay RWQCB, 2021).

Floodplains and Tsunamis

The Project site is located within the bed and banks of Belmont Creek; thus, it is within the floodplain of this waterbody. The Federal Emergency Management Agency (FEMA) maps the majority of the Proposed Project site as Zone A (FEMA 2023), which is a Special Flood Hazard Area designation, indicating that the area will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in a given year (FEMA 2020).

The Project site is approximately 3.25 miles inland from San Francisco Bay, and mapping by the California Geological Survey indicates that the entire Project site is outside of the tsunami hazard zone (California Department of Conservation, 2023).

3.10.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on hydrology and water quality that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade water quality

Construction of the Proposed Project would have the potential to adversely affect beneficial uses and violate WQOs via ground-disturbing activities within and adjacent to the channel and through potential releases of hazardous materials during construction. Operation of heavy construction equipment within the channel and on the banks, such as for clearing and grubbing and installation of bio-engineered channel features, would loosen soils and remove vegetation, thus increasing the potential for erosion and mobilization/discharge of sediments to Belmont Creek and receiving waters downstream (in particular, following a precipitation event). Additionally, hazardous materials (e.g., fuel, oil, grease, etc.) from construction equipment or stored at staging areas could leak or otherwise be accidentally released, thus resulting in adverse water quality impacts and violations of WQOs. Given that work would be conducted within the creek channel, the risk of adverse effects would be heightened since there would be a direct pathway to surface waters.

As described in Chapter 2, *Project Description,* the Proposed Project would incorporate measures that would limit the potential for water quality impacts during construction. Additionally, the Proposed Project would comply with existing laws and regulations that reduce potential for adverse effects. Construction BMPs that would be implemented and which would reduce impacts on water quality are summarized as follows (refer to Chapter 2 for the full text of the BMPs):

- **BMP-1, Construction Work Windows**. Would require that ground-disturbing activities in the channel occur during the dry season (June 15 through October 15 or as allowed by permits) and that work not occur during or within 24-hours of a rain event, thus reducing potential for loose soils to be eroded and transported off-site or downstream.
- **BMP-2, Area of Disturbance**. Would require that ground disturbance within the channel be kept to the minimum footprint necessary, and limit work activities to approved areas, thus reducing the potential for erosion and sedimentation.
- **BMP-3, Erosion and Sediment Control.** Would require implementation/installation of a suite of erosion and sediment control measures and that such measures be monitored for effectiveness. States that silt-laden runoff shall not be allowed to leave the Project site within the waterway and specifies that all areas disturbed during construction must be seeded prior to October 15th or the end of the dry season construction window. These measures would reduce potential for erosion and sedimentation from construction causing adverse water quality impacts.
- **BMP-4, Fills, Spoils, and Stockpiled Materials**. Would require that fill materials, excavated spoils, and other temporarily stored materials not be moved within 14 days and be isolated with a silt fence or similar device to control off-site movement of sediment.
- **BMP-5, On-site Hazardous Materials Management**. Would require that the contractor maintain an inventory of hazardous materials used or expected to be used at the site and implement proper labeling and storage protocols (including secondary containment, as appropriate; keeping petroleum products and toxic materials away from storm drains

or direct connections to surface waters). Additionally, requires that hazardous materials encountered at the site be properly removed and disposed of, per BMP-6. This would reduce the likelihood of spills or accidental hazardous materials releases, and minimize impacts to waters if such events were to occur.

- **BMP-6, Spill Prevention and Response Plan**. Would require development and implementation of a Spill Prevention and Response Plan, including detailed guidance (e.g., pertaining to training, keeping cleanup materials and equipment on-site, proper handling of materials by field personnel, and routine inspections of the work site) for cleanup and disposal of spilled and leaked materials.
- **BMP-7, Vehicle and Equipment Maintenance.** Would require that vehicles are serviced in designated areas outside of Belmont Creek and that fueling of vehicles and equipment be conducted at least 50 feet from the top of the creek bank. Additionally, would require that vehicles and equipment be kept clean and be checked for leaking oil and fluids.
- **BMP-9, Work Site Housekeeping.** Would require that the construction contractor maintain a neat and orderly job site and properly dispose of trash and other debris.

In addition to these BMPs, given that the Proposed Project would disturb more than 1 acre of land, it would require coverage under the Construction General Permit, including preparation and implementation of a SWPPP. As described in Section 3.10.1, the SWPPP would include erosion and sediment control measures, as well as good site housekeeping measures, to limit the potential discharge of sediment and other construction-related pollutants. This could include temporary soil stabilization measures (e.g., mulch, temporary seeding, fiber rolls or blankets, etc.) as well as perimeter control measures (e.g., silt fences or straw waddles).

Implementation of the Project construction BMPs and the SWPPP would substantially reduce the potential for discharge of pollutants during, or as a result of, Project construction activities. Given that construction would take place during the dry season, the area of disturbance would be minimized, and erosion and sediment control measures would be installed, as appropriate. This would prevent loose soils generated by Project construction from washing off-site and discharging to Belmont Creek and Belmont Slough, as well as Lower San Francisco Bay. Likewise, the requirements related to on-site hazardous materials management, vehicle and equipment fueling, and spill prevention and response would limit the potential for any hazardous materials to be released during Project construction activities and reduce the damage to resources should such an event occur.

Following construction, over the long term, the Proposed Project would improve water quality relative to baseline conditions. The stabilization of the currently eroding creek banks and installation of bio-engineered features would reduce sediment loads to downstream surface waters, reduce stream velocities, and improve flood attenuation, and improve aquatic habitat within the section of creek where the improvements would be made.

Given implementation of construction BMPs and measures contained within the SWPPP, Proposed Project construction would not violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality. Thus, impacts would be **less than significant.**

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

As noted above, the Proposed Project lies within the San Mateo Plain Subbasin (DWR No. 2-009.03), which is designated very low priority by DWR. No elements of the Proposed Project would substantially impact groundwater supplies or recharge. While Project construction would utilize water for dust control, this would likely come from surface water sources and would not be of an amount to substantially affect groundwater supplies. None of the new Proposed Project features would be impervious and thus would allow for groundwater recharge; over the long term, the Proposed Project could improve groundwater recharge occurring at the site through the creek bottom by slowing stream velocities thus allowing greater percolation to occur. Therefore, the impact would be **less than significant.**

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

i. result in substantial erosion or siltation on- or off-site

As described in "a" above, Project construction activities would have potential to result in erosion and/or siltation on-site, which could then lead to silt/sediment being discharged downstream. The ground-disturbing activities (e.g., site preparation, installation of channel features) would loosen soils, which could then be mobilized and carried downstream by precipitation events. However, implementation of construction BMPs (e.g., BMPs 1 through 4) along with the SWPPP would substantially reduce the potential for substantial erosion or siltation to occur. Therefore, impacts 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

The Proposed Project would be largely limited to in-channel features that would be designed to correct existing undesirable conditions (e.g., channel incision). The Project would repave existing asphalt paths but would not increase the surface area of these existing features. Project construction would occur during the dry season; thus, any effects associated with construction activities would be minor.

As noted above, the Proposed Project, through channel improvements, would reduce streamflow velocities along this segment of Belmont Creek and attenuate high flows, thereby reducing the risk of flooding downstream. Therefore, the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite. 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

Belmont Creek itself is the primary storm drainage conveyance facility in the City of Belmont. The Creek receives runoff from surrounding areas via a variety of storm drains and stormwater facilities. As described under "b, ii,", the Proposed Project would not increase the impervious surface on the Project site. The proposed channel features (i.e., constructed riffles, rootwads, woody debris, etc.) would all be composed of natural materials that would not create impervious conditions. Some rock would be placed along the lower bank at key locations for added resistance from fluvial erosional forces. However, the volume and area of added rock are minimal and would not significantly affect drainage patterns or infiltration rates. While the Project would include repaving of existing asphalt paths connecting the pedestrian bridge to recreational facilities within Twin Pines Park and Ralston Avenue, it would not expand the surface area of these existing impervious facilities. Thus, the Proposed Project would not increase surface runoff generation relative to baseline conditions.

The construction process would utilize heavy equipment that would contain hazardous materials (e.g., fuel, oil, grease, etc.), and such materials may also be stored in staging areas. As discussed under "a", without proper protocols and preventative measures, these hazardous materials could leak from equipment or otherwise be released, potentially creating polluted runoff if a precipitation event were to follow. However, the Proposed Project would implement BMP-5 (On-site Hazardous Materials Management), BMP-6 (Spill Prevention and Response Plan), and BMP-7 (Vehicle and Equipment Maintenance), along with measures that are part of the SWPPP, which would substantially reduce the potential for hazardous materials to be released and polluted runoff to be generated.

As a result, the Proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This impact would be **less than significant**.

iv. impede or redirect flood flows

As discussed above, the Proposed Project would alter the hydraulic properties along this stretch of Belmont Creek due to the proposed re-grading and widening of the channel cross-sectional area, along with the roughening of the channel bottom in certain areas and installation of bio-engineered materials (e.g., rootwads, boulders, woody debris, etc.). Ultimately, this would reduce flooding concerns for areas downstream and stabilize the creek banks during large storms. As such, it would not substantially impede or redirect flood flows in an adverse way. 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 outside of any mapped tsunami hazard zones and there are no enclosed bodies of water close by within which a seiche wave could be generated.

Much of the Proposed Project site is designated as Zone A by FEMA, which indicates that the area would be inundated by the flood event having a 1-percent change of being equaled or exceeded in a given year (FEMA, 2023; 2020). During construction, there would be some risk of hazardous materials contained within construction equipment and stored at staging areas (e.g., fuel, oil, grease, etc.) being released if a large storm/flooding event were to occur at the time of construction activities. Implementation of BMP-1 (Construction Work Windows), however, would reduce any such risk substantially by requiring that ground-disturbing activities within the channel occur during the dry season. Additionally, BMP-5 (On-site Hazardous Materials Management) would require that hazardous materials are properly stored and contained on-site, thereby reducing the potential for any release of pollutants during an inundation event. As such, the Proposed Project would not substantially risk release of pollutants due to project inundation. This impact would be **less than significant**.

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

As discussed under "a" above, given implementation of applicable BMPs (i.e., BMPs 1 through 7 and 9) and the SWPPP, construction of the Proposed Project would not violate any water quality standards (i.e., beneficial uses and WQOs) of the San Francisco Bay Basin Plan or otherwise substantially degrade water quality. Over the long term, the Proposed Project would largely be consistent with and help to implement the Basin Plan, as it would reduce channel erosion and excess sediment transport to downstream areas and would also improve aquatic habitat complexity. Thus, the Proposed Project would not conflict with or obstruct implementation of the San Francisco Bay Basin Plan.

As noted in Section 3.10.2, the Project site lies within the San Mateo Plain Subbasin (DWR No. 2-009.03), which is designated as very low priority and for which a GSP has not been developed. Additionally, the Proposed Project would not use substantial groundwater supplies nor include features that could substantially inhibit groundwater recharge (rather, it is likely to improve recharge). Thus, the Project would not conflict with or obstruct a sustainable groundwater management plan. Therefore, this impact would be **less than significant**.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

No federal regulations are applicable to Land Use and Planning in relation to the Proposed Project.

State Laws, Regulations, and Policies

California Government Code §65300 – 65303.4

This code, as set, requires all counties and cities in California to adopt a long-term, comprehensive general plan for future development within their respective jurisdictions. It requires that all plans contain elements considering land use, circulation, housing, noise, conservation, open space, and safety.

3.11.2 Environmental Setting

The following section describes the environmental setting that pertains to impacts on land use.

The bulk of the Project site is within Twin Pines Park (Park) and is surrounded by trees, open recreation space, footpaths, recreational accessory buildings, and related uses such as a playground. However, the easternmost part of the Phase 2 Project site extends beyond the boundaries of the Park. This section is lined by trees but is closely bordered by non-recreational uses, primarily commercial and residential.

The Zoning within the Proposed Project for both Phase 1 and Phase 2 includes PS – Public Space, PP – Park/Plaza, PF - Public Facility, R1B – Single Family Residential 6000 square feet, and VC – Village Core (City of Belmont 2020, 2023a).

3.11.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on land use that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. Divide an established community

The Proposed Project involves biotechnical treatments to stabilize eroding banks and enhance ecological conditions within the existing Twin Pines Park. Thus, 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

Land use plans in the vicinity include the City of Belmont General Plan (City of Belmont, 2017a), the Belmont Village Specific Plan (2017b), Twin Pines Park Master Plan (City of Belmont, 2019), the Belmont Municipal Code, and the Draft Belmont Parks Recreation and Open Space Plan (PROS) (City of Belmont, 2023d).

Policy 4.5-2 within the City of Belmont General Plan requires that the City consider future creek restoration projects to protect Belmont Creek, including through Twin Pines Park. The Belmont Village Specific Plan (City of Belmont, 2017b) includes several policies focusing on the restoration of Belmont Creek and preserving the wildlife habitat around the creek. One of the goals of the Twin Pines Park Master Plan (City of Belmont, 2019) is the improvement of pedestrian access to the creek, with the informal existing trails down to the water being considered an asset to Twin Pines Park. Further, Belmont Municipal Code Section 9-40 (City of Belmont, 2023b) provides for grading of Belmont Creek when necessary for maintenance and preservation of stream flow. While the PROS plan is not yet finalized and is currently undergoing a CEQA initial Study (City of Belmont, 2023c), this plan seeks to improve public access to Belmont Creek and preserve and enhance the natural riparian environment along waterway corridors (City of Belmont, 2023d). Further, Twin Pines Park Belmont Creek Restoration, the Proposed Project, is mentioned in the PROs plan as one of the current ongoing projects that supports the goals of the PROS plan (City of Belmont, 2023d). The Proposed Project would not conflict with any land use plan, policy, or regulation but would be directly in compliance. Therefore, impacts with regards to conflicts with land use plans and policies would be **less than significant.**

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

There are no federal laws, regulations, or policies regarding mineral resources that are applicable to the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Mining and Geology Board to adopt state policies for the reclamation of mined lands and the conservation of mineral resources (DOC 2023). As required by SMARA, the state has established the California Mineral Land Classification System to help identify and protect mineral resources in areas that are subject to urbanization or other irreversible land uses that would prevent mineral extraction. Protected mineral resources include construction materials, industrial and chemical mineral materials, metallic and rare minerals, and nonfluid mineral fuels.

Environmental Setting

The following sections describe the environmental setting that pertains to impacts on mineral resources.

The California Department of Conservation, Division of Mines and Geology (CDMG), has mapped mineral deposits as Mineral Resources Zones (MRZs) that include the following (CDMG, 2000):

- MRZ-1: Areas where sufficient information suggests that no significant aggregate deposits are present or where it is determined that little likelihood exists for their presence;
- MRZ-2: Areas where sufficient information suggests that significant aggregate deposits are present or where it is determined that a high likelihood of their presence exists;
- MRZ-3: Areas containing aggregate deposits, the significance of which cannot be determined;
- MRZ-4: Areas where available information is insufficient for assignment to any other zone.

The south-western extent of the Project area is mapped as MRZ-2, which corresponds with areas where there is enough information to suggest that significant levels of aggregate deposits are present (DOC 1982). The eastern extent of the Project area is classified as MRZ-1, which means there is sufficient information to suggest that there are no significant aggregate deposits or that it is determined that they likely don't exist (CMDG, 1996). Within the vicinity of the Project, the majority of aggregate deposits are located on the northern side of Belmont Creek, just south of Ralston Avenue.

3.12.2 Discussion of Checklist Responses

The following sections provide an analysis of impacts on mineral resources that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

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

As mentioned above, a portion of the Project area is mapped as MRZ-2, which is associated with a high likelihood of the presence of minerals. However, as outlined in Chapter 2*, Project Description*, Project activities would not change the land use, function, or impervious surface cover of the Project area and would therefore not change the accessibility of potentially occurring minerals that are of value to the region or residents of the state. As a result, the Project will have **no impact** on the availability of a known mineral resource of value.

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

There are no mineral resource recovery sites within or in proximity to the Project area that are delineated within an applicable general, specific, or land use plan. Therefore, the project would have **no impact** on the availability of a locally important mineral resource recovery site.

3.13 NOISE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project result in?				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
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 area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?	☐	☐	☐	☒

3.13.1 Overview of Noise and Vibration Concepts and Terminology

In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale. Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

Decibel (dB) is a measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.

A-weighted decibel (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Maximum sound level (Lmax) is the maximum sound level measured during a given measurement period.

Minimum sound level (Lmin) is the minimum sound level measured during a given measurement period.

Equivalent sound level (Leq) is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound level during that same period.

Percentile-exceeded sound level (Lxx) is the sound level exceeded during *x* percent of a given measurement period. For example, L_{10} is the sound level exceeded 10 percent of the measurement period.

Day-night sound level (Ldn) is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.

Community noise equivalent level (CNEL) is the energy average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels between 10:00 p.m. and 7:00 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. **Table 3.13-1** presents approximate noise levels for common noise sources, measured adjacent to the source.

Table 3.13-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30

Source: Caltrans 2009

Vibration

Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies. The normal frequency range of most ground-borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high frequency of about 200 Hz. Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually results, but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces can also be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance is also related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

3.13.2 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Program. However, the Federal Transit Administration (FTA) *Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment* state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA L_{eq} should be used for residential areas (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings extremely susceptible to vibration damage (FTA 2006). The groundborne vibration annoyance level is 65 VdB for buildings where vibration would interfere with interior operations, 72 VdB for residences, and 75 VdB for institutional land uses, primarily daytime uses.

State Laws, Regulations, and Policies

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table 3.13-2**.

For the protection of fragile, historic, and residential structures, Caltrans recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2013).

Table 3.13-2. State Land Use Compatibility Standards for Community Noise Environment

Land Use Category	Community Noise Exposure - L_{dn} or CNEL (dB)						
	55	60	65	70	75	80	
Residential – Low Density Single Family, Duplex, Mobile Homes							
Residential – Multi-Family							
Transient Lodging – Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

	Normally Acceptable:	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable:	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
	Normally Unacceptable:	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable:	New construction or development generally should not be undertaken.

Source: California Governor's Office of Planning and Research 2017

3.13.3 Environmental Setting

The Proposed Project is located in the existing Twin Pines Park within the City of Belmont, in the County of San Mateo. The site is in an urbanized area, and the closest sensitive receptors are located approximately 250 feet to the north and approximately 450 feet to the south. The park is bounded by Ralston Avenue to the north and is accessed via Twin Pines Lane to the east. San Carlos Airport is located approximately 1.25 miles east of the Project site.

3.13.4 Discussion of Checklist Reponses

The following sections provide an analysis of impacts related to noise that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

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

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive receptors. Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (early morning, evening, and nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction occurs over an extended period (e.g., longer than one year).

Significant noise impacts do not normally occur when standard construction noise control measures are enforced or when the duration of the noise-generating construction activities is limited to one construction season or less. Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction material, are necessary to protect the health and safety of the public, promote the general welfare of the community, and maintain the quality of life.

The Project site is within the urbanized City of Belmont. There are multiple sensitive receptors (residences) to the north within approximately 250 feet and approximately 450 feet to the south of the site. Hauling trucks using Ralston Avenue to access the Project site would pass within 30 to 50 feet of residences. Recreational users choosing to visit Twin Pines Park during construction could be exposed to Project-generated noise.

Project construction activities would be typical for roadway improvements and would generate noise from activities such as site grading and material hauling. The City of Belmont Ordinance Code allows construction between 8:00 a.m. and 5:00 p.m. Monday through Friday. During construction of the Proposed Project, noise from construction activities would temporarily add to the noise environment in the Project vicinity. As shown in **Table 3.13-3**, activities involved in construction would generate maximum noise levels ranging from 76 to 85 dB at a distance of 50 feet.

Table 3.13-3 Typical Construction Equipment Noise

Type of Equipment	Maximum Level, dBA at 50 feet
Backhoe	78
Compactor	83
Compressor (air)	78
Crane	85
Dozer	85
Drum Mixer	80
Dump Truck	76
Excavator	81
Flat Bed Truck	84
Generator	81
Pneumatic Tools	85
Welding Truck	73

Source: FHWA, 2018.

Multiple types of equipment (bulldozers, pneumatic tools, etc.) that would be used for construction of the proposed Project may generate sound levels of 85 dBA at a distance of 50 feet (FHWA, 2018). These would be operating at more than 50 feet from the nearest residences and would therefore not exceed 85 dBA at those properties. Ambient noise at this location includes traffic and noise from Ralston Avenue, so hauling trucks would not generate a significant increase in ambient noise levels.

Upon completion of construction, the Project would operate nearly identically to existing conditions, with the same amount or less maintenance required. Thus, impacts from noise generated by the construction and operation would be **less than significant**.

b. Generation of excessive groundborne vibration or groundborne noise levels

Common construction activities and equipment may expose people to excessive groundborne vibration or groundborne noise. Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibrations rise significantly above the threshold of perception. Hauling trucks heading to the Project site would pass within the 40-foot annoyance threshold distance for residences along Ralston Avenue; however, these occurrences would be brief and temporary and would be in a location acclimated to frequent truck trips. Thus, potential impacts associated with the proposed Project would be localized and temporary during the construction period and would not substantially impact passive recreational users or nearby residences. Construction of the proposed Project would require the use of heavier construction equipment, specifically excavators, dozers, and trucks. The Proposed Project would not require pile driving, blasting, or other special

construction techniques associated with greater groundborne vibration. Therefore, the expected generation of groundborne vibration associated with the Proposed Project would remain below the 0.1 inch/second annoyance threshold. Accordingly, the Proposed Project would be **less than significant**.

c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels

The Project site is approximately 1.25 miles west of the San Carlos Airport and over 7 miles from the San Francisco International Airport. Implementation of the Project would not increase exposure of Project users to excessive noise levels associated with the airport. Thus, the Project would have **no impact**.

3.14 POPULATION AND HOUSING

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

3.14.1 Regulatory Setting

The regional and local regulatory environment is described in Appendix A. There are no federal or state regulations or policies regarding population and housing that are applicable to the Proposed Project.

3.14.2 Discussion of Checklist Responses

The following sections provide an analysis of impacts on population and housing that would result from project implementation.

a. Induce unplanned population growth

The Proposed Project would stabilize eroded sections of Belmont Creek and would not involve the construction of new homes or businesses within the area or extend new roads or other types of infrastructure. Construction for the Proposed Project would last seven months for Phase 1 and ten months for Phase 2. It is expected that regional labor supply would likely be able to fulfill crew demands, and no crew relocation would be necessary. As a result, the Project would have **no impact** to the local population and would not cause unplanned population growth.

b. Displace a substantial number of existing people or housing

As previously stated, the Project would involve the stabilization of eroded segments of Belmont Creek and would not displace any people or housing. Therefore, the Project would have **no impact**.

3.15 PUBLIC SERVICES

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

3.15.1 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

No federal or state regulations are applicable to public services in relation to the Proposed Project.

3.15.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on public services.

Fire Protection

The Belmont Fire Protection District provides fire protection and suppression services to the City of Belmont, including the Project area. The closest fire station is located at 911 Granada Street and is about 0.4 miles from the Project site.

Police Protection

The Belmont Police Department provides law enforcement for the City of Belmont, including the Project area. The closest police station is located at 1 Twin Pines Lane, Suite #160, which is located adjacent to the Project area, about 50 feet from Twin Pines Park.

Schools

The primary school district that services the City of Belmont, including the Project area, is the Belmont-Redwood Shores School District. The district includes seven schools total, including six elementary schools and one middle school. The closest of these to the Project site is Central Elementary, which is located 0.6 miles away at 525 Middle Road.

Parks

In total, the City of Belmont's Parks and Recreation Department oversees approximately 337 acres of open space at 14 different parks across the City (City of Belmont 2023). The Project area is located within Twin Pines Park, which is approximately 19 acres (City of Belmont 2023a).

Other Public Facilities

Twin Pines Park houses, Belmont City Hall, and Parks and Recreation Department. Both are located on Twin Pines Lane, within the vicinity of the Project area.

3.15.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on public services that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. (i-v) Result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities

As stated in Section 3.13, "Population and Housing," the Proposed Project would focus on the stabilization of eroding banks in Belmont Creek and would not involve the construction of new buildings or housing that would increase population or employment. Thus, there would be no increased demand for fire or police protection. The Proposed Project would not result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities (schools, parks, other facilities). The Project would have **no impact**.

3.16 RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. 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. 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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

No federal or state regulations are applicable to recreation in relation to the Proposed Project.

3.16.2 Environmental Setting

As the Project Site is located within Twin Pines Park, there are many recreational opportunities in and near the Project area. Within the park are open spaces, three designated picnic areas, playground areas, and formal and informal walking paths, including user-created informal trails down the creek banks to access the water (City of Belmont, 2019). Creek access is considered an attractive asset to visitors.

3.16.3 Discussion of Checklist Responses

a. Increase use of existing parks or recreational facilities

The Project would not increase the local population nor result in population growth in the area. Therefore, it would not increase the total number of possible visitors that may frequent the area on a regular basis.

For safety reasons, public access to portions of Twin Pines Park and the creek would be restricted during Project construction. However, Project construction would not restrict the use of the entire park and construction impacts would be temporary. Therefore, the number of visitors seeking out recreational opportunities elsewhere would not be considered significant.

Upon completion, the Project would improve the appearance of the creek area, improve creek access, and repave existing adjacent asphalt paths. Therefore, the improved amenities in and around the creek may make the area more appealing and attract a greater number of visitors to the area. However, given the small scale of the Project and that the Project is not expected to increase the local population, it is not anticipated that the Project would result in a substantial increase in visitors. Therefore, the impact of the Project on the use of existing parks and recreational facilities would be **less than significant**.

b. Creation of new or altered recreational facilities

The Proposed Project would replace in-kind and/or improve existing recreational facilities in the Project area in Twin Pines Park. These actions would be considered beneficial overall. Therefore, the Project impacts would be considered **less than significant**.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
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 Regulatory Setting

The following sections describe federal and state, regulations, and policies that are relevant to impacts that could result from Project implementation.

No federal or state regulations are applicable to transportation in relation to the Proposed Project.

3.17.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on transportation.

Existing Vehicle Access

Access to the Project area is on Twin Pines Lane and Ralston Avenue. Ralston Avenue is a Boulevard, and Twin Pines Lane is a local street that provides access to Twin Pines Park.

Existing Bicycle and Pedestrian Facilities

Pedestrian facilities throughout the City include sidewalks, crosswalks, curb ramps, and streetscape amenities. The site is accessible by pedestrians via Ralston Avenue, Twin Pines Lane, Onell Avenue, and Paloma Avenue. The City maintains bike facilities throughout the City by maintaining on-street bicycle lanes and routes. The Project site accessed via the Class II bicycle lane and Class III bicycle route along Ralston Avenue.

Existing Transit Service

There is public service provided via SamTrans and Caltrain within the City to connect both locally and regionally to other transportation services.

3.17.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on transportation that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines. Where applicable, the text prescribes mitigation that would reduce an impact to less than significant with mitigation.

a. Conflict with applicable circulation plans, ordinances, or policies and applicable congestion management programs

As described in Chapter 2, construction activities would take place Monday through Friday between 8:00 a.m. and 5:00 p.m. No nighttime work is anticipated. Construction of Phase 1 would require an estimated 7 months, and Phase 2 would require approximately 10 months. Phase 1 would remove approximately 1.05 tons of concrete and trash and import approximately 111 cubic yards of streambed material for riffles, seven logs, and twenty boulders for stabilization activities. Phase 2 would involve the off-hauling of materials during demolition. Design of Phase 2 has not been completed to a quantitative level of detail, but it is known that soil, concrete debris, trash, vegetation, and a chain link fence would be off-hauled. Vegetation would be removed during grading and fill placement. Existing concrete, gravel, trash, and other debris would be removed from the Project site during construction.

The Project would not entail a change in land use from existing conditions or introduce factors that would generate new or unanticipated long-term changes in vehicle miles traveled (VMT), such as residences and facilities. Therefore, no direct or cumulative population growth would occur that is not already incorporated in regional growth projections. Therefore, it would have a **less than significant** impact on programs, plans, ordinances, and policies addressing the circulation system.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)

The Project would not entail a change in land use from existing conditions or introduce factors that would generate new or unanticipated long-term changes in VMT, such as residences and facilities. Roadway capacity would be unaffected. Therefore, the Proposed Project would not conflict with or be inconsistent with CEQA Guidelines § 15064.3(b)(2). **No impact** would result.

c. Increased hazards resulting from geometric design features

Construction vehicles would access the site from Ralston Avenue and Twin Pines Lane. All staging areas would be located within the City right-of-way or City property within Twin Pines Park. Trucks entering and leaving the Project area could present a hazard to vehicles traveling on Ralston Avenue. Implementation of **Mitigation Measure TR-1** would reduce this impact to a

less-than-significant level with mitigation by ensuring that the presence of construction traffic would not result in a lane hazard.

Mitigation Measure TR-1. Prepare and Implement a Construction Traffic Management Plan

The City shall require that the construction contractor(s) prepare and implement a construction traffic management plan to manage traffic flow during construction, reduce potential interference with local emergency response plans, reduce potential traffic safety hazards, and ensure adequate access for emergency responders. The City and/or the construction contractor(s) will ensure that the plan is implemented during construction. The plan will include, but not be limited to, the following measures:

- Identify construction truck haul routes and timing to limit conflicts between truck and automobile traffic on nearby roads. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety.

- Evaluate the need to provide signage, flaggers, or temporary traffic control on Ralston Avenue to assist trucks in accessing the roadway with minimal disruption of traffic.

- Document road pavement conditions at Ralston Avenue where it enters Twin Pines Park before and after Project construction so that any damage or debris attributable to haul trucks can be identified and corrected. Roads damaged by construction vehicles shall be repaired to their preconstruction condition.

d. Inadequate emergency access

Traffic on Twin Pines Lane and Ralston Avenue could be temporarily delayed when construction material or vehicles are being moved on and off the Project site. However, this impact would be sporadic over the course of Project construction and temporary. Further, implementation of Mitigation Measure TR-1 would evaluate the need and provide traffic control at the Project access road that could allow emergency vehicles access through the area and to the site. Therefore, this impact would be **less than significant**.

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Regulatory Setting

The following sections describe federal and state, regulations, and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

Federal law does not address tribal cultural resources (TCR), as these resources are defined in the California Public Resources Code. However, similar resources, called TCPs, fall under the purview of Section 106 of the NHPA, which was referenced in Section 3.5. TCPs are locations of cultural value that are historic properties. A place of cultural value is eligible as a TCP "because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history and (b) are important in maintaining the continuing cultural identity of

the community" (Parker & King 1990, rev. 1998). A TCP must be a tangible property, meaning that it must be a place with a referenced location, and it must have been continually a part of the community's cultural practices and beliefs for the past 50 years or more. Unlike TCRs, TCPs can be associated with communities other than Native American tribes, although the resources are usually associated with tribes. By definition, TCPs are historic properties; that is, they meet the eligibility criteria as a historic property for listing in the NRHP. Therefore, as historic properties, TCPs must be treated according to the implementing regulations found under Title 36 CFR §800, as amended in 2001.

State Laws, Regulations, and Policies

Assembly Bill 52

AB 52, which was approved in September 2014 and went into effect on January 1, 2015, requires that State lead agencies consult with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in Public Resources Code § 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Public Resources Code § 21074(a), TCRs are:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    a. Included or determined to be eligible for inclusion in the CRHR; or

    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. 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 I of Section 5024.1. In applying the criteria set forth in subdivision I of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Public Resources Code § 21074 as follows:

A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

a. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered § 21080.3.2 or according to § 21084.3. Section 21084.3 identifies mitigation measures that include the avoidance and preservation of

TCRs, treating TCRs with culturally appropriate dignity, and considering the tribal cultural values and meaning of the resource.

3.18.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on tribal cultural resources.

Tribal cultural resources (TRC) are defined in PRC Section 21074 as sites, features, places, cultural landscapes, sacred places, and objects that hold cultural value to a California Native American Tribe.

ESA conducted the initial outreach for the Storm Water Project by submitting a sacred land file request to the Native American Heritage Commission (NAHC) on August 17, 2022. A response was received from the NAHC on September 29, 2022, which indicated the results of the sacred lands search were negative for this location. The NAHC also provided a list of eight tribes and tribal contacts with a traditional and cultural affiliation with the Project area for notification pursuant to Public Resources Code § 21080.3.1 (Assembly Bill 52). Letters were sent to each contact on February 13, 2023, by the City of Belmont (City) to elicit any concerns or information regarding any known tribal cultural resources within the Restoration Project area. In June 2023, two responses were received: from Andrew Galvan, Chairperson with the Ohlone Indian Tribe and Monica Arellano, Vice Chairperson with the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area. During the subsequent testing of the known archaeological resource for the Storm Water Project, the NAHC declared that the Muwekma Tribe is the Most Likely Descendent (MLD) for the Project. The City sent a follow-up letter to Chairperson Galvan and Vice Chairperson Arellano on October 3, 2023, to further inform those Tribes who requested to consult on the Storm Water Project of the Restoration Project and to request any further information or concerns regarding the Restoration Project. The City, as the CEQA lead agency, will continue to provide information to the Tribe as planning proceeds.

A correspondence log is provided in Appendix D that outlines all the Tribal correspondence conducted to date.

3.18.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on tribal cultural resources that would result from project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines. Where applicable, the text prescribes mitigation that would reduce an impact to less than significant with mitigation.

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, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

No TCRs within the Project area or mitigation area have been identified that are either listed or eligible for listing on the CRHR or on any other local register of historical resources as defined by PRC Section 21074. Therefore, **no impact** to known TCRs would occur as a result of the Proposed Project.

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

Although it is not anticipated, is it possible that Native American archaeological or human remains could be discovered during Project activities. Implementation of **Mitigation Measures CUL-1** (Conduct Archaeological and Tribal Monitoring), **CUL-2** (archaeological discoveries), and **CUL-3** (discovery of human remains) would help limit any potential effects on tribal culture resources to **less-than-significant with mitigation**.

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Require or result in the relocation or construction of new or expanded water, or 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 which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
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 Regulatory Setting

No federal or state regulations are applicable to utilities and service systems in relation to the Proposed Project.

3.19.2 Environmental Setting

Water

The Mid-Peninsula Water District provides water service to the City of Belmont (City of Belmont, 2023a). Twin Pines Park has drinking fountains, restrooms, and irrigated landscapes.

Sewer

The Belmont Sewer Utility Division maintains over 90 miles of sewer mains within the City (City of Belmont, 2023b). Restrooms are available within the Park.

Stormwater

The City's Public Works Engineering Services is responsible for planning, design, construction, and operation and maintenance of the storm drain system, which includes all of the storm drains, pipes, catch basins, and manholes within the City right-of-way (City of Belmont, 2023c). The Project site is characterized by the creek system that serves as stormwater management onsite.

Solid Waste

The City has contracted with Recology of San Mateo County for collection and disposal of regular solid waste, targeted recyclable material, and organic material (City of Belmont, 2023d). Trash cans are provided throughout Twin Pines Park, from which trash is collected weekly.

Electricity and Natural Gas

PG&E is responsible for providing power supplies to the City (City of Belmont, 2023e). Electricity and natural gas services are available at the Project site.

Communications

Wireless communication facilities are available at the Project site and throughout the City from a variety of service providers.

3.19.3 Discussion of Checklist Responses

a. Require the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects

No new or expanded water, wastewater treatment, or stormwater drainage facilities, electric power, natural gas, or telecommunications facilities, or expansion of existing facilities, would be constructed or relocated as part of the Project. There would be **no impact**.

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

Project water use may include supplies for dust suppression and soil compaction during construction activities and post-construction irrigation of newly planted areas. However, these potential water uses would be minimal and water use would not meaningfully affect existing

water supplies or inhibit the sustainable management of water supplies. Therefore, there would be a **less than significant** impact on water supply.

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

The Project does not include the construction of new facilities that would require connection to wastewater facilities. 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.

As described in Chapter 2, Project Description, approximately 1.05 tons of concrete and 6 loads of trash would be removed from the Project site, as well as vegetation removed during site preparation. It is anticipated that some solid waste would be generated by construction of the Project; however, the proposed Project does not involve the demolition of any structures. Solid waste generated during construction would be transported to the Ox Mountain Sanitary Landfill. Ox Mountain Sanitary Landfill has sufficient capacity until 2039, and the additional solid waste generated during Project construction could be accommodated within the landfill's capacity. The City would require contractors to comply with regulations on solid waste and solid waste recycling. Therefore, the Proposed Project would not generate excessive volumes of solid waste or otherwise impair the attainment of solid waste reduction goals. Therefore, the impact would be **less than significant**.

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

The Proposed Project would comply with management and reduction regulations related to solid waste. The Project would not increase demand for solid waste services. There would be **no impact**.

3.20 WILDFIRE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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 Regulatory Setting

The following sections describe federal and state regulations and policies that are relevant to impacts that could result from Project implementation. The regional and local regulatory environment is described in Appendix A.

Federal Laws, Regulations, and Policies

No federal regulations are applicable to wildfire in relation to the Proposed Project.

State Laws, Regulations, and Policies

CAL FIRE Wildland Fire Management

The Office of the State Fire Marshal and the CAL FIRE Department administers state policies regarding wildland fire safety. Construction contractors must comply with the following

requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Pub. Res. Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Pub. Res. Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Pub. Res. Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Pub. Res. Code Section 4431).

3.20.2 Environmental Setting

The Proposed Project is within Twin Pines Park and is therefore surrounded by trees, dense vegetation, open recreation space, footpaths, and recreational accessory buildings.

Fire Hazard Severity Zones (FHSZ) are mapped by the Office of the State Fire Marshal and are determined based on factors such as slope, winds, and fuel loading. (CAL FIRE, 2023a). These severity zones are classified as moderate, high, and very high (CAL FIRE, 2023a). CAL FIRE has mapped the fire hazards for all State Responsibility Areas (SRA) and has worked with local agencies to provide recommendations for “Very High” fire hazard zones (VHFSZ) within Local Responsibility Areas (LRA). LRAs include incorporated cities and other urban areas where local government is responsible for wildfire protection (CAL FIRE 2023a).

The Project site is located within the City of Belmont and is surrounded by urban development. Neither the County of San Mateo (2023) nor CAL FIRE (2023b) classify the Project site as a fire hazard zone. As discussed above, only “Very High” zones within LRAs are mapped. The closest FHSZ (Very High) is located approximately 0.75 miles to the southwest (County of San Mateo, 2023). However, when CAL FIRE made the recommendations to LRA, their draft documents did include moderate and high severity zones. In the draft map intended for LRA review, the area in and around Twin Pines Park was classified as a Moderate FHSZ (CAL FIRE, 2007). Updates to the LRA maps are scheduled to occur in 2023/2024, after the completion of the SRA update (CAL FIRE, 2023a). In the County Community Wildfire Plan, the area around the Project site is not identified as being in a Wildland Urban Interface (CAL FIRE San Mateo, 2018).

3.20.3 Discussion of Checklist Responses

The following sections provide an analysis of impacts on wildfires that would result from Project implementation, based on the CEQA checklist in Appendix G of the CEQA Guidelines.

a. Substantially impair an adopted emergency response plan or emergency evacuation plan.

The Proposed Project is located adjacent to Ralston Avenue, which is a well-used local road. No full-road closures are expected along Ralston Avenue.

Project construction would require use of Ralston Avenue and Twin Pines Lane by construction equipment and hauling trucks accessing the site. Project construction would not involve large numbers of construction personnel, and Project operation would not introduce new users to the Project area. Construction-related vehicle trips may result in temporarily traffic slowdowns on Ralston Avenue during the construction period of the Proposed Project. However, these potential slowdowns would be insignificant and not impair an evacuation process should the Project's activities coincide with an emergency. The Project impact on adopted emergency response plans or emergency evacuation plans would be **less than significant**.

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

Project construction activities and associated maintenance activities would not involve placement of people or habitable structures in areas without adequate fire protection. Additionally, proposed treatment types and associated maintenance activities would not result in the creation of new wildland areas, which could increase fire dangers.

Because certain Proposed Project activities (e.g., earthwork activities) would be conducted during the dry summer months when fire danger is the highest, there is a potential for an accidental ignition of a wildland fire during construction activities. Use of vehicles and equipment for construction activities could ignite a fire through generation of sparks or heat. BMP-11 (Fire Prevention) would be implemented, which requires on-site fire suppression equipment, spark arrestors on all equipment with internal combustion engines, and restricts activities on high fire danger days. With adherence to requirements of this BMP, the Proposed Project would minimize risk of igniting wildfires during Project construction activities and would therefore not substantially exacerbate fire risk to nearby structures or occupants. This impact would be **less than significant**.

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 on the environment.

No installation or maintenance of infrastructure would be required for the Proposed Project that would exacerbate fire risk or result in temporary or ongoing impacts on the environment. The Project would have **no impact**.

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

Proposed Project activities would not involve placement of people or habitable structures in areas with risks related to post-wildfire flooding or landslides.

As described in Section 3.7, Geology, Soils, and Seismicity, Project construction activities, including vegetation removal, bank grading, and repair, would have the potential to contribute to erosion during the construction period and in the near-term following construction. Implementation of BMP-2 (Area of Disturbance), BMP-3 (Erosion and Sediment Control), and BMP-4 (Fills, Spoils, and Stockpiled Materials) and a Stormwater Pollution Prevention Plan (SWPPP) result in a low risk of erosion during construction. The Proposed Project would reduce streamflow velocities along this segment of Belmont Creek and attenuate high flows, thereby reducing the risk of flooding downstream. This would have a beneficial impact compared to existing conditions. Therefore, impacts would be **less than significant**.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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 plan 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 which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

3.21.1 Discussion of Checklist Responses

a. Substantially degrade environmental quality, fish or wildlife, and historic resources

One of the primary objectives of the Proposed Project is to restore and enhance ecological conditions for terrestrial and aquatic biological resources that may utilize Belmont Creek in Twin Pines Park, as well as the water quality of the creek downstream of the Project area. As discussed through this Initial Study checklist, significant but mitigable impacts were identified for biological resources, cultural resources, and tribal cultural resources. With the implementation of BMPs and mitigation measures identified in this IS/MND (refer to Mitigation Measures BIO-1 through BIO-4, CUL-1, CUL-2, and CUL-3), the Proposed Project would further reduce the potential to substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal; eliminate important examples of the major periods of California history or prehistory; or

damage or render inaccessible culturally important tribal resources. This impact would be **less than significant**.

b. Cumulative Impacts

A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines § 15355). Cumulative impacts reflect "the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines § 15355[b]).

Lead agencies may use a "list" approach to identify related projects or may base the identification of cumulative impacts on a summary of projections in an adopted general plan or related planning document (CEQA Guidelines § 15130[b]), also known as the "projection" approach. This document utilizes a combination of the list and projection approaches. Project contributions to localized cumulative impacts (air quality, biological resources, noise and vibrations) are evaluated using the list approach, while Project contributions to regional cumulative impacts (greenhouse gas [GHG] emissions and traffic) are evaluated using the projection approach.

Projects with the potential to contribute to the same cumulative impacts as the Proposed Project are, to a large extent, within close geographic proximity to the Project area, except for certain resources (e.g., air quality, greenhouse gas emissions).

The list approach is applied by developing a list of past, present, and reasonably foreseeable projects. The list of projects used for this analysis was developed by identifying projects from the City of Belmont's list of City projects, projects described on the City of Belmont's City Projects website (City of Belmont n.d.), projects from the City of Belmont General Plan (City of Belmont 2019), projects from the Belmont Village Specific Plan (City of Belmont 2017), projects from the Twin Pines Park Master Plan (City of Belmont 2019), and projects listed in the CEQANet database (CEQANet 2023). Several of these projects may have construction activities occurring at the same time as the Proposed Project. While not every possible cumulative project is likely to be listed, the list of cumulative projects is believed to be representative of the types of impacts that would be generated by other projects related to the Proposed Project. The cumulative impact evaluation assumes that the impacts of past and present projects are represented by baseline conditions, and cumulative impacts are considered in the context of baseline conditions alongside reasonably foreseeable future projects.

Table 3.21-1. List of Reasonably Foreseeable Future Projects that May Cumulatively Affect Resources of Concern for the Proposed Project

Project Title	Brief Project Description	Distance from Project
2023 Pavement Project	Pavement Engineering Inc. began preliminary surveys and design in June 2022. • Arbor Avenue • Hillman Avenue • Lyon Avenue • Middle Road • Miller Avenue • Oak Knoll Drive • South Road • Upper Lock Avenue • Virginia Avenue	Various Locations (Distance ranges from 0.6 to 2.6 miles)
500-580 Masonic Way – Belmont Town	The submitted application described a 139-unit, five-story apartment building with a proposed height of 60 feet and an 8-foot-tall sloping roof/mechanical equipment screen. Twenty-one affordable units were identified in the application, and 137 parking spaces were proposed within both an underground and at-grade parking structure. The application also identified approximately 3,000 square feet of ground-level co-work/café space, bike parking area, and leasing/amenity spaces for the complex.	0.5 miles
601 Harbor (Office/R&D/Life Sciences)	The proposed project will consist of approximately 380,000 square feet of life-sciences development in a four-story, 65-foot-tall building. Approximately 996 parking spaces would be provided in three levels of subsurface parking. It would also include a public plaza and cafe on Harbor Boulevard, as well as a walking path along Belmont Creek.	0.5 miles
604-608-610 Harbor Boulevard – Windy Hill Project	The proposed project consists of a lot merger to consolidate four parcels and develop the resulting 0.71-acre lot. The site is bounded by Old County Road to the southwest, Harbor Boulevard to the southeast, Elmer Street to the northeast, and an alley to the northwest. Currently, the project sites consist of a self-service car wash at 604 Harbor Boulevard, a vacant lot at 608 Harbor Boulevard, and a gas station at 610 Harbor Boulevard. They are surrounded by existing commercial, light manufacturing, general industrial, and warehousing land uses. The proposed project includes the demolition and removal of hardscape and structures associated with the onsite car wash and gas station, including the removal of two underground petroleum storage tanks (UST), fuel dispensers, and associated piping that serve the gas station.	0.5 miles

Project Title	Brief Project Description	Distance from Project
608 Harbor Boulevard (Apartment Units)	This project would include 103 new apartment units, 15 percent of which would be reserved as affordable housing. The project would also include the annexation of the subject parcels into Belmont.	0.5 miles
800 Laurel Avenue (Townhomes)	The 77,286-square-foot (1.77-acre) project site is located north of Hill Street and east of South Road. Currently, the project site is largely undeveloped, with the exception of an existing single-family dwelling located in the northern portion of the site at the corner of Laurel Avenue and Antique Forest Lane. The proposed project entails the demolition of the existing single-family home on site and construction of four multi-story townhome buildings containing 16 dwelling units. The project would include the construction of a private access road extending from the end of Hill Street to Laurel Avenue. The development would include common areas (walkways and a pocket park) and eight guest parking spaces along the new roadway.	0.3 miles
800-803 Belmont Avenue (Apartment Unites)	The project site is located on the south side of Belmont Avenue at the El Camino Real intersection. The 1.5-acre property consists of a combination of vacant land and the Bel-Mateo Motel. The proposed development consists of 125 Affordable Residential Apartments, subterranean parking, ancillary space (community room, gym, office), and open space. The residential unit mix includes 52 one-bedroom, 40 two-bedroom, and 33 three-bedroom units.	0.9 miles
Twin Pines Park Storm Water Detention Basin	A two-part project (the Creek Restoration Project and Stormwater Detention Basin) will address the severe erosion and bank failure along the reach in Twin Pines Park and the construction of a low-flow sediment capture basin, which further reduces sediment transport downstream.	Located adjacent to Project Site within Twin Pines Park
Eucalyptus Removals in Twin Pines Park	The eucalyptus trees in Twin Pines Park have been mapped and assessed based on vulnerability and health and grouped into clusters based on risk to park users and infrastructure. Six high risk trees in the Playground Lawn area have been included in Phase 1 of the Twin Pines Park Master Plan Implementation.	Located adjacent to Project Site within Twin Pines Park

Source: CEQANet, 2023; City of Belmont,2023; City of Belmont, 2019.

A detailed analysis of a project's contribution to cumulative impacts is required when (1) a cumulative impact to which a project may contribute is expected to be significant and (2) the project's contribution to the cumulative impact is expected to be cumulatively considerable or significant in the context of the overall (cumulative) level of effect. **Table 3.21-2** summarizes the

cumulatively significant impacts and identifies the Proposed Project's contribution. Additional analysis follows for those impacts to which the Proposed Project would contribute.

Table 3.21-2. Summary of Cumulative Significant Impacts and Proposed Project's Contribution

Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Aesthetics	None identified	No analysis required
Agricultural Resources	None identified	No analysis required
Air Quality	The San Francisco Bay Area Air Basin (SFBAAB) has been designated as being in nonattainment under both federal and State standards for ozone and fine particulate matter (PM2.5); particulate matter (PM10) is also designated as being in nonattainment under State standards. These impacts would be considered cumulatively significant.	Use of vehicles, hauling trucks, and other equipment would result in emissions of criteria air pollutants. However, because such emissions would be below Bay Area Air Quality Management District (BAAQMD) thresholds, in accordance with BAAQMD guidance, the Proposed Project would not make a considerable contribution to cumulative impacts related to air quality.
Biological Resources	Past and present projects could have temporary adverse effects on special-status species and habitat during the construction phase. This cumulative impact is significant.	Proposed Project BMPs and Mitigation Measures BIO-1 through BIO-4 effectively avoid and minimize potential Project-level impacts on sensitive biological resources. Overall, the Proposed Project is beneficial to local biological resources. Accordingly, the Project's contribution to the cumulative impact would be less than cumulatively considerable.
Cultural Resources	Throughout California, culturally important sites and traditional cultural practices have been substantially affected by land management practices and urbanization over the past 150 years. While the City General Plans contain policies regarding preservation of important cultural resources, ongoing development could lead to the cumulative loss of significant historic and archeological resources. This cumulative impact is significant.	The Proposed Project would involve ground-disturbing activities (e.g., sediment removal) during construction, which could potentially expose buried, unknown cultural resources. Adverse impacts on such resources would add to the ongoing losses of and effects on cultural resources in California due to development activities. As discussed in this document, the implementation of Mitigation Measures CR-1, CR-2, and CR-3 would reduce project impacts to cultural resources to a less than significant level. Accordingly, the Project's contribution to the cumulative impact would be less than cumulatively considerable.
Energy	None identified.	No analysis required.
Geology, Soils, and Seismicity	None identified.	No analysis required.

Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Greenhouse Gas Emissions	Anthropogenic emissions of greenhouse gases (GHG) are widely accepted in the scientific community as contributing to global warming. This cumulative impact is significant.	Vehicle and equipment use would result in emissions of GHGs. However, because such emissions would be below applicable thresholds, in accordance with BAAQMD guidance, the Proposed Project would not make a considerable contribution to cumulative impacts related to GHG emissions.
Hazards and Hazardous Materials	None identified.	No analysis required.
Hydrology and Water Quality	The hydrology and water quality of surface and ground waters in the San Francisco Bay Area have been adversely impacted by decades of urban development and other human activities. The San Francisco Bay and surface streams flowing to the Bay continue to be listed as impaired under the Clean Water Act for various pollutants. The cumulative impact is significant.	Construction of the Proposed Project would involve ground-disturbing activities that could result in erosion and discharge of sediment, as well as accidental releases of hazardous materials. However, implementation of BMPs 1 through 7 would reduce these impacts to a level that is less than significant at the project level. The Project's contribution to the cumulative impact would be less than cumulatively considerable.
Land Use and Planning	None identified.	No analysis required.
Mineral Resources	None identified.	No analysis required.
Noise	Traffic-related noise associated with reasonably foreseeable future increased growth in traffic volumes in San Mateo County is considered to have a significant cumulative impact.	The Proposed Project would not increase noise associated with increased vehicle use in the long term because it would not foster population growth. Project construction would result in a temporary increase in localized noise but would be limited to only one to several pieces of equipment operating during a short period. The Proposed Project would not make a considerable contribution to cumulative impacts related to traffic-related noise.
Population and Housing	None identified.	No analysis required.
Public Services	None identified.	No analysis required.
Recreation	None identified.	No analysis required.

Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Transportation	A reasonably foreseeable future increase in VMT in San Mateo County due to population growth is considered a significant cumulative impact.	The Proposed Project does not involve any road closures. It would not increase population and thereby add to increased VMT over the long term. Short-term construction traffic would be temporary and limited in number of construction vehicles during this short period. Accordingly, the Project's contribution to the cumulative impact would be less than cumulatively considerable.
Tribal Cultural Resources	Throughout California, the Native American cultural legacy, which includes tribal cultural resources such as sites, features, places, cultural landscapes, sacred places, and objects that hold cultural value to a California Native American Tribe, has been substantially affected by land management practices and urbanization over the past 150 years. While the City General Plans contain policies regarding preservation of important tribal cultural resources, ongoing development could lead to the cumulative loss of significant tribal cultural resources. This cumulative impact is significant.	The Proposed Project would involve ground-disturbing activities (e.g., sediment removal) during construction, which could potentially encounter tribal cultural resources. Adverse impacts on such resources would add to the ongoing losses of and effects on places, features, landscapes, or objects of important value to a California Native American Tribe due to development activities. Mitigation Measures CR-1, CR-2, and CR-3 would consider tribal cultural values and treat tribal cultural resources with appropriate dignity, reducing impacts to a less than significant level. Accordingly, the Project's contribution to the cumulative impact would be less than cumulatively considerable.
Utilities and Service Systems	None identified.	No analysis required.
Wildfire	Throughout California, the risk of wildfire has increased as the global climate has changed due to anthropogenic influences. While wildfire in urban areas was previously rare, in recent years there have been multiple incidents of wildfire penetrating urban areas, such as the Tubbs Fire of 2017 that inflicted great losses in Santa Rosa Fire. This cumulative impact is significant.	The Proposed project involves removal of numerous eucalyptus trees in Twin Pines Park. Eucalyptus trees are known to increase wildfire hazards because of the shedding bark, which catches fire readily and carries fire up into the canopy. Removal of these trees and replanting with native species would reduce wildfire risk. Accordingly, the Project's contribution to the cumulative impact would be less than cumulatively considerable.

Construction of the Project would overlap with the projects listed in Table 3.21-1. Therefore, the Project could result in cumulative impacts related to air quality, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, noise, transportation, and

tribal cultural resources as a result of Project construction. However, because the construction duration would be relatively short and because Project construction would comply with BMPs identified in Chapter 2, the Project's contribution to existing cumulative impacts would be less than considerable. Therefore, the Project would result in a **less-than-significant cumulative impact**.

c. Effects on Human Beings

Based on the analysis provided in the above resource sections, all of the potentially adverse effects on human beings identified in this initial study would be avoided or reduced by BMPs incorporated into the Proposed Project or would be mitigated to a less-than-significant level by implementation of measures identified in this document.

Collectively, with implementation of BMPs and mitigation measures, no substantial adverse effects on human beings would result, and the impact would be **less than significant**.

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Chapter 4
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Chapter 5
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None.

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APPENDICES

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Appendix A

Regional and Local Laws, Regulations, and Policies

Appendix A
REGIONAL AND LOCAL LAWS, REGULATIONS, AND POLICIES

Law, Regulation, or Policy	Overview
AESTHETICS	
City of Belmont General Plan 2035	The City of Belmont General Plan 2035 provides policies relevant to visual quality and the built environment in the Land Use, Parks, Recreation, and Open Space, and Conservation chapters. These goals and policies include: **LU Goal 2.13** Enhance Belmont's character and image as a desirable community with distinct visual qualities, small-town character, and connections to nature and open space. **OS Goal 4.4** Continue to develop and support a balanced and integrated open space system reflecting a variety of considerations, including natural resource conservation, outdoor recreation, and public health and safety, to ensure synergies between various open space components and compatibility with land use planning. **OS Policy 4.4-1** Continue to designate and protect open space lands for the preservation of scenic areas, natural drainage ways, and plant and wildlife habitats; for outdoor recreation; and for public health and safety. **0S Policy 4.4-5** Use the Parks, Recreation, and Open Space Master Plan to establish priorities for the protection, enhancement, and improvement of open space lands and trails for recreation purposes. **0S Action 4.4-5a:** Ensure that the updated Parks, Recreation, and Open Space Master Plan includes: • Measures to improve the visual quality and safety of trails and bikeways. **CO Goal 5.4** Preserve and restore Belmont's waterways and adjacent corridors as valuable community resources that serve as plant and wildlife habitats, groundwater recharge facilities, flood control and irrigation components, and connections between open space areas. **CO Policy 5.4-4** Preserve and enhance the natural riparian environment along waterway corridors, including Belmont Creek, by minimizing environmental and visual impacts.

Law, Regulation, or Policy	Overview
	CO Action 5.4-4a Establish design and development standards for new development near waterway corridors to preserve and enhance the natural riparian environment along these corridors and ensure that building and vehicle service areas, loading docks, trash enclosures, and storage areas are set back from waterways and/or screened from view from the Belmont Creek corridor to minimize environmental and visual impacts. **CO Goal 5.3** Protect and restore biological and ecological resources in Belmont, including sensitive wildlife species and their habitats. **CO Policy 5.3-7** Encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation, and ensure the maximum number and variety of well-adapted plants are maintained. **CO Goal 5.4** Preserve and restore Belmont's waterways and adjacent corridors as valuable community resources that serve as plant and wildlife habitats, groundwater recharge facilities, flood control and irrigation components, and connections between open space areas. **Policy 5.4-4:** Preserve and enhance the natural riparian environment along waterway corridors, including Belmont Creek, by minimizing environmental and visual impacts.
Belmont Parks Recreation Open Space (PROS) Master Plan Draft	The Belmont Parks Recreation Open Space (PROS) Master Plan is still in draft form as it is currently undergoing a CEQA initial study (City of Belmont, 2023a). The draft document outlines policies relevant to visual quality and the built environment. These goals and policies include: **PROS GOAL 5** Revitalize the PROS System to be adaptable, flexible, and supportive of many uses and users now and into the future. **Strategy 5.B** Incorporate looped walking paths within, as connections to, and through parks as safe, accessible, and pleasant experiences to walk, run, or roll.
Twin Pines Park Master Plan	The purpose of this plan is to highlight the existing assets of the park and the significance they have within the community. The plan also seeks to guide future development through community feedback and prioritizing development opportunities to pursue as funding becomes available.
AGRICULTURAL AND FORESTRY RESOURCES	
No applicable local regulations.	

Law, Regulation, or Policy	Overview
AIR QUALITY	
Bay Area Air Quality Management District Regulations	The Bay Area Air Quality Management District (BAAQMD) manages air quality in the basin for attainment and permitting purposes and has implemented several regulations to control air emissions. These regulations would apply to the Proposed Project during construction. Alameda County, which contains the project site, is designated as a federal and state non-attainment area for ozone and PM2.5 and a state non-attainment area for PM10 (BAAQMD 2017a, BAAQMD 2023a). The BAAQMD has also established the following rules and regulations that may pertain to the Proposed Project (BAAQMD, 2023b): **Regulation 6, Rule 1: General Requirements.** Places limits on the quantity of particulate matter in the atmosphere by controlling emission rates, concentration, visible emissions, and opacity. **Regulation 6, Rule 6: Prohibition of Trackout.** Places limits on the quantity of particulate matter in the atmosphere through control of trackout of solid materials onto paved public roads outside the boundaries of Large Bulk Material Sites, Large Construction Sites, and Large Disturbed Surface sites. **Regulation 7: Odorous Substances.** Established limits on odorous substances. **Regulation 14: Mobile Source Emissions Reduction Measures.** Includes measures to reduce emissions of air pollutants from mobile sources by reducing motor vehicle use and/or promoting the use of clean fuels and low-emission vehicles.
BAAQMD Clean Air Plan 2017	BAAQMD adopted the *Bay Area 2010 Clean Air Plan* (CAP) (BAAQMD, 2010) to improve Bay Area air quality and meet public health goals. More specifically, the control strategy described in the 2010 CAP is designed to reduce emissions and decrease ambient concentrations of harmful pollutants, safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, and reduce GHG emissions to protect the climate. The 2010 plan addresses four categories of pollutants: (1) ground-level ozone and its key precursors, reactive organic gases (ROG) and NOx; (2) particulate matter, primarily PM2.5, as well as precursors to secondary PM2.5[1]; (3) airborne toxic contaminants; and (4) GHGs. The control strategy in the 2010 CAP describes measures that address or control stationary sources, transportation, mobile sources, land use and local impacts, energy and climate, and further study measures to reduce air pollutants (BAAQMD, 2010).

[1] PM includes all particles that are suspended in the air. PM is both directly emitted (referred to as direct PM or primary PM) and also formed in the atmosphere through reactions among different pollutants (referred to as indirect PM or secondary PM).

<table>
<tr><th>Law, Regulation, or Policy</th><th>Overview</th></tr>
<tr><td>BAAQMD 2017 Clean Air</td><td>The Final 2017 Clean Air Plan (BAAQMD, 2017a) presents the District's plan for attaining federal air quality standards, particularly for ozone and particulate matter. A project must be consistent with the plan in order to be considered to have no significant adverse impact on air quality.</td></tr>
<tr><td>Particulate Matter Plan</td><td>To fulfill federal air quality planning requirements, the BAAQMD adopted a PM2.5 emissions inventory in 2010. This was transmitted to CARB for inclusion in the California State Implementation Plan (SIP). The BAAQMD also produced an informational report entitled Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area to help guide ongoing efforts to analyze and reduce PM in the Bay Area. The 2010 and 2017 CAPs contain multi-pollutant approaches that include several measures for reducing PM emissions in the Bay Area.

In January 2013, the USEPA issued a final rule determining that the San Francisco Bay Area has attained the 24-hour PM2.5 NAAQS; this action suspended federal SIP planning requirements for the Bay Area (BAAQMD, 2020). However, until submittal of a re-designation request and a maintenance plan to the USEPA, the area remains designated as non-attainment.</td></tr>
<tr><td>BAAQMD CEQA Guidelines</td><td>The BAAQMD has established guidelines for determining significance for air quality analyses (BAAQMD 2022) which are shown in Table A-1. Projects below these mass emission thresholds do not have a significant impact on air quality.

Table A-1. Air Quality Significance Thresholds for Project Operations
<table>
<tr><th>Pollutant</th><th>Construction-Related</th><th colspan="2">Operational-Related</th></tr>
<tr><th>Criteria Air Pollutants and Precursors</th><th>Average Daily Emissions (pounds per day)</th><th>Average Daily Emissions (pounds per day)</th><th>Maximum Annual Emissions (tons per year)</th></tr>
<tr><td>ROG</td><td>54</td><td>54</td><td>10</td></tr>
<tr><td>NOx</td><td>54</td><td>54</td><td>10</td></tr>
<tr><td>PM_{10}</td><td>82 (Exhaust)</td><td>82</td><td>15</td></tr>
<tr><td>$PM_{2.5}$</td><td>54 (Exhaust)</td><td>54</td><td>10</td></tr>
<tr><td>$PM_{10}/PM_{2.5}$ (Fugitive Dust)</td><td>Best Management Practices (BMPs)</td><td colspan="2">None</td></tr>
</table>
Source: BAAQMD 2022</td></tr>
</table>

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City of Belmont 2035 General Plan	The City of Belmont General Plan Conservation Element contains the following policies related to the protection of air quality and which are considered applicable to the Proposed Project: **Goal 5.10:** Reduce emissions of ozone-producing pollutants and particulate matter to improve regional air quality and protect the health of Belmont and Bay Area residents. **Policy 5.10-1**: Coordinate air quality planning efforts with other local, regional, and State agencies. **Policy 5.10-2**: Require that new development with sensitive uses that is located adjacent to sources of toxic air contaminants (TAC) be designed to minimize any potential health risks. **Policy 5.10-3**: Ensure that construction and grading activities minimize short-term impacts to air quality by employing appropriate mitigation measures and best practices. **Policy 5.10-6**: Ensure compliance with the most current Bay Area Clean Air Plan by implementing the Plan's recommended Transportation Control Measures (TCMs).

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Belmont Village Specific Plan	The Belmont Village Specific Plan Environmental Sustainability Element contains the following policies related to the protection of air quality and which are considered applicable to the Proposed Project: **Goal 6.4:** Ensure that infill development projects minimize exposure to hazardous materials and toxic air contaminants. **Policy 6.4-2**: Require new residential projects and other new sensitive receptors such as schools, daycares, nursing, and retirement homes located within 1,000 feet of Highway 101, El Camino Real, or the Caltrain tracks to install indoor air quality equipment, such as enhanced air filters (air filters rated at a minimum efficiency reporting value (MERV) 13 or higher) or equivalent mechanisms, to minimize health risks for future residents. **Policy 6.4-3**: Require proponents of projects within 100 feet of existing hazardous materials case sites or TAC stationary sources, or 300 feet of gas stations or perc dry cleaners, to investigate 1) the site's health risk, 2) applicable Air District risk standards, 3) use compatibility at the location in question (some kinds of uses might be at lower risk than others), and 4) potential feasible design-related risk mitigation measures. If the investigation results show that the health risk exceeds the Air District standards for toxic air contaminants, require project proponents to include design-related risk mitigation measures, such as upgraded ventilation systems with high efficiency filters (air filters rated at a minimum efficiency reporting value (MERV) 13 or higher) or equivalent mechanisms, to minimize health risks for future residents. **Policy 6.4-5:** Require development projects with sensitive receptors, such as residences, senior and nursing homes, schools, daycare facilities, and hospitals, that are located within 300 feet of TAC stationary sites containing older generators to install air filters rated at a minimum efficiency reporting value (MERV) 13 or higher. **Policy 6.4-7:** Implement the recommendations in the City's transportation studies, such as those in the Ralston Avenue Corridor Study, to ease congestion, improve multi-modal mobility, and reduce traffic-generated exhaust. (General Plan Policies under Goal 3.10 in the Circulation Element).
BIOLOGICAL RESOURCES	
City of Belmont 2035 General Plan	The Parks, Recreation Open Space, and Conservation Element of the City of Belmont 2035 General Plan (2017) contains the following goals and policies

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	related to the protection of biological resources, which are considered applicable to the Proposed Project: **Open Space** **Goal 4.4:** Continue to develop and support a balanced and integrated open space system reflecting a variety of considerations, including natural resource conservation, outdoor recreation, and public health and safety, to ensure synergies between various open space components and compatibility with land use planning. **Policy 4.4-1**: Continue to designate and protect open space lands for the preservation of scenic areas, natural drainage ways, and plant and wildlife habitats; for outdoor recreation; and for public health and safety. See also policies in the Conservation and Safety elements. **Policy 4.4-6:** Develop programs to control invasive plant species that threaten natural resources. **Policy 4.5-2:** Protect Belmont Creek from future encroachment through regulation, development review, conservation easements, or other appropriate actions. **Action 4.5-2a:** Evaluate the necessity of a stream buffer overlay zone around Belmont Creek and tributaries to facilitate management and protection of the waterway. Such a zone would apply to areas where the creek flows above ground through developed areas, and would ensure that any new development adjacent to the creek is designed and built in such a way that the stream environment is not degraded. **Action 4.5-2b**: Consider creek restoration projects that alter the creek corridor to enhance the function of the waterway, including restoration through Twin Pines Park. **Conservation** **Goal 5.1-1:** Protect and maintain open space for the preservation of natural resources. **Policy 5.1-1**: Ensure that any improvements recommended for open space areas are appropriate for the type of open space and the use proposed. **Policy 5.1-2**: In portions of Belmont that include significant open space resources, use area plans to address the balance and interface between natural and developed areas.

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	Action 5.1-2b: Promote site design techniques such as cluster-type housing to preserve sensitive environmental resources. **Policy 5.1-3:** Reduce risk of wildland fire, ecological succession, and pathogen threats (such as Sudden Oak Death) through active maintenance of public spaces, education, and enforcement of development standards on private property. **Action 5.1-3a**: Develop consistent design standards for the interface between open space and the adjoining neighborhoods, and neighborhoods and the Urban/Wildland Interface Zone. Identify standards for the margin of space needed to allow wildlife, recreation, and aesthetic values to flourish while also reducing the threats of fire and invasive plants. **Action 5.1-3b**: Establish standards for development projects, where appropriate and warranted, to incorporate natural features (such as hedgerows and wooded strips) to serve as buffers for adjacent natural areas with high ecological value. Include standards for fencing, brush clearing for fire prevention, and trails. **Action 5.1-3c**: Establish clear boundaries between public open space and private property through the use of boundary markers or other appropriate methods. **Goal 5.2**: Protect and preserve open space for public health, safety, and recreation in areas that require special management for regulation. **Policy 5.2-1**: Encourage the retention of areas that are hazardous to public safety and welfare as undeveloped open space, including steep hillsides unsuitable for development as identified in area plans and other detailed geotechnical studies; hydrological areas of concern; areas of geological instability; and appropriate setback areas on either side of known active fault traces. See also discussion and policies in the Safety Element. **Policy 5.2-2**: Involve the public in stewardship of Belmont's open space resources. **Action 5.2-2a**: Develop an active public engagement program for education and involvement in Belmont's open space. Encourage volunteers to maintain the trails, replant damaged areas, and remove invasive species.

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	Action 5.2-2b: Develop interpretive programs to enhance the community's understanding and engagement in the open space areas. **Goal 5.3**: Protect and restore biological and ecological resources in Belmont, including sensitive wildlife species and their habitats. **Policy 5.3-1**: Support the protection, preservation, restoration, and enhancement of habitats of State or federally listed rare, threatened, endangered, and/or other sensitive and special status species, and favor enhancement of contiguous areas over small, segmented remainder parcels. **Policy 5.3-2:** Continue to maintain, protect, restore, and enhance Belmont's ecologically important areas and seek to reduce impacts on them, including the creek corridors, the open space, and the wetlands around O'Neill Slough. **Policy 5.3-3**: To the greatest extent feasible, ensure that development does not disturb sensitive habitat and special status species by requiring appropriate and feasible mitigation measures. **Action 5.3-3a**: Establish guidelines for habitat conservation and mitigation programs when sensitive habitat or special status species would be disturbed by development. These could include, but are not limited to: • Protocols for the evaluation of a site's environmental setting and proposed design and operating parameters of proposed mitigation measures. • Methodology for the analysis of land to be acquired or set aside for mitigation activities. • Parameters for specification of the types and sources of plant material used for any revegetation, irrigation requirements, post-planting maintenance, and other operational measures to ensure successful mitigation by the project proponent. • Monitoring at an appropriate frequency by qualified personnel and reporting of data collected to permitting agencies, if necessary. **Action 5.3-3b**: If Endangered or Threatened Species are discovered prior to or during construction of a development project, require project proponents to consult a qualified biologist for recommended proper action, and incorporate appropriate mitigation measures.

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	Policy 5.3-4: Maintain functional wildlife corridors and habitat linkage in order to contribute to regional biodiversity and the viability of rare, unique or sensitive biological resources throughout the city and region. **Policy 5.3-5:** In design and construction, require use of best practices that preserve natural resources, such as soil, trees, native plants, and permeable surfaces. **Policy 5.3-7**: Encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation, and ensure the maximum number and variety of well-adapted plants are maintained. **Policy 5.3-8**: Use native or drought-resistant vegetation in landscaping on City-owned property, and encourage private property owners to use native or drought-resistant vegetation in landscaping on private property. **Policy 5.3-9:** Promote the healthy growth of trees and control the removal of trees within the city. **Action 5.3-9a**: Maintain and enforce the City's Tree Ordinance to provide adequate and reasonable tree protection and removal standards and best management practices. **Goal 5.4** Preserve and restore Belmont's waterways and adjacent corridors as valuable community resources that serve as plant and wildlife habitats, groundwater recharge facilities, flood control and irrigation components, and connections between open space areas. **Policy 5.4-1** Restore Belmont Creek to enhance ecological functions, biological resources, hydrology function, and flood control. **Action 5.4-1a**: Continue to work in collaboration with the Department of Fish and Wildlife, US Army Corp of Engineers, the San Francisco Bay Regional Water Quality Control Board, the cities of San Carlos and Redwood City, San Mateo County, Caltrans, and other entities as needed, to identify and implement a long-term approach to address ongoing maintenance and creek improvements. **Action 5.4-1b**: Consider implementing potential improvements to Belmont Creek as is feasible and appropriate, including but not limited to projects such as enlarging the bypass culvert on Harbor Boulevard; restoring the floodplain at Twin Pines Park without reducing existing park uses; constructing an off-line basin; building flood walls through lower Belmont Creek; daylighting sections of

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	the eastern portion of the creek; improving the operations and design of Water Dog Lake; or installing tide gates at Marine Parkway. **Policy 5.4-2**: Preserve, where possible, natural watercourses or provide naturalized drainage channels within the city. Where necessary and feasible, implement restoration and rehabilitation measures. **Policy 5.4-3**: Protect, restore, and enhance a continuous corridor of native riparian vegetation and wildlife habitat along Belmont's waterways, water bodies, and wetlands. **Policy 5.4-4:** Preserve and enhance the natural riparian environment along waterway corridors, including Belmont Creek, by minimizing environmental and visual impacts. See also Policy 4.5-2 in the Parks, Recreation, and Open Space Element. **Action 5.4-4a**: Establish design and development standards for new development near waterway corridors to preserve and enhance the natural riparian environment along these corridors and ensure that building and vehicle service areas, loading docks, trash enclosures, and storage areas are set back from waterways and/or screened from view from the Belmont Creek corridor to minimize environmental and visual impacts. **Goal 5.5:** Preserve water quality by promoting the protection of Belmont's creeks and other natural water bodies from pollution. **Policy 5.5-1:** Continue to participate in the San Mateo Countywide Water Pollution Prevention Program. **Policy 5.5-3:** Require development projects to incorporate structural and non-structural best management practices (BMPs) to mitigate or reduce the projected increases in pollutant loads, in accordance with the NPDES permit guidelines. **Policy 5.5-4:** Ensure that the design and construction of new infrastructure elements does not contribute to stream bank or hillside erosion or creek or wetland siltation, and incorporates site design and source control BMPs, construction phase BMPs, and treatment control BMPs to minimize impacts to water quality. **Policy 5.5-5:** Implement water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment. **Goal 5.9:** Maintain and improve the reliability of the City's storm drainage system, and promote best management practices to protect this system from flooding, enhance water quality, and prevent infrastructure deterioration.

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	Policy 5.9-1: Continue to make improvements and upgrades to the drainage system. Priorities should be to provide curbs and gutters to underserved areas (as feasible), improve facilities in areas that are subject to seasonal flooding, increase capacity of the system, and replace damaged lines in the storm drain system. **Action 5.9-1b**: Pursue additional funding sources, including a potential impact fee, to complete projects to maintain and improve the reliability of the City's storm drainage system. **Action 5.9-1c**: Study and consider adopting a program to mandate that the City annually complete maintenance and improvements on a portion of the storm drainage system, to ensure that the City prioritizes and completes maintenance projects. **Policy 5.9-2**: Encourage development projects of all sizes to incorporate site design measures that facilitate groundwater recharge and natural hydrological processes, allowing stormwater to infiltrate the ground on-site and/or be collected for reuse in landscaping and designated to on-site stormwater detention facilities. Such measures may include: • Canopy trees or shrubs to absorb rainwater; • Grading that lengthens flow paths over permeable surfaces and increases runoff travel time to reduce the peak hour flow rate; • Partially removing curbs and gutters from parking areas where appropriate to allow stormwater sheet flow into vegetated areas; • Installation of green roofs on buildings; • Use of permeable paving in parking lots and other areas characterized by significant impervious surfaces; • On-site stormwater detention, use of bioswales and bioretention basins to facilitate infiltration; and • Integrated or subsurface water retention facilities to capture rainwater for use in landscape irrigation and other non-potable uses.
Belmont Village Specific Plan	The Belmont Village Specific Plan Environmental Sustainability Element contains the following policies related to the protection of habitat and wildlife which are considered applicable to the Proposed Project: **Goal 6.3:** Protect and improve the quality of biological resources and habitat areas in the Planning Area. **Policy 6.3-1**: Ensure that development does not disturb sensitive habitat and special status species by requiring appropriate and feasible mitigation measures. If Endangered or Threatened Species are discovered prior to or during construction of a development project,

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	require project proponents to consult a qualified biologist for proper action and to develop adequate measures to avoid or mitigate impacts. **Policy 6.3-2**: Maintain the Belmont Creek corridor west of Sixth Avenue as a functional wildlife corridor and habitat linkage. Provide an appropriate buffer, using landscaping, to preserve and protect the creek water quality. Where feasible, allow public access in the form of open space or a multi-use trail along the creek corridor. Incorporate interpretive signage for educational purposes in public access areas along the creek and in Twin Pines Park. **Policy 6.3-3:** Promote the development of new parks or public spaces in the Planning Area that provide both human and habitat services.
CULTURAL RESOURCES	
City of Belmont 2035 General Plan	**GOAL 2.23** Conserve designated historic and cultural sites and structures that help define Belmont's identity and character. **Policy 2.23-1** Update the City's inventory of historic resources to ensure that historic resources are preserved and protected in Belmont. **Policy 2.23-2** Ensure that City ordinances adequately recognize and protect historic resources. **Action 2.23-2a**: Incorporate historic preservation in the Zoning Ordinance, rather than elsewhere in the Municipal Code. **Action 2.23-2b**: Update the City's historic preservation regulations to make them more easily understood and to make procedures less cumbersome, such as streamlining the process for issuing building permits for minor repairs and alterations. Include, as appropriate, preservation incentives, such as use of the California Historic Building Code, where appropriate, and other available incentives. **Action 2.23-2c**: Develop a preservation strategy for historic resources, or structures with historic character or qualities, that may not be located within a designated historic district. **Policy 2.23-3:** Consider creating a Historic Preservation Commission to administer and advise on historic preservation matters, such as updating the inventory of historic resources and updating the historic preservation ordinance. **Policy 2.23-4:** Encourage adaptive reuse of historic structures – preserving their original design and character – as an option for pre- serving sites that are threatened with demolition or degradation.

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	Policy 2.23-5: Support Notre Dame de Namur University's efforts to restore Ralston Hall as an important community asset. **Policy 2.23-6:** Support efforts to increase public awareness and appreciation of local historic resources and promote community history. **GOAL 5.12:** Preserve and protect areas and sites of prehistoric, cultural, and archaeological significance. **Policy 5.12-1:** Ensure that development avoids potential impacts to sites suspected of being archeologically, paleontologically, or culturally significant, tribal or otherwise, or of concern by requiring appropriate and feasible mitigation. **Action 5.12-1a**: Establish guidelines and mitigation programs when sites of archaeological, paleontological, and/or cultural concern, *tribal or otherwise,* would be disturbed by development, including: • Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive; • Determining the potential effects of development and construction on archaeological or paleontological resources (as required by CEQA); • Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical and archaeological sensitivity; and, • Implementing appropriate measures to avoid the identified impacts, as conditions of project approval. **Policy 5.12-2:** If cultural, archaeological, paleontological, or cultural resources, tribal or otherwise, are discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected until evaluation by a qualified professional is completed. • A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures or appropriate mitigation should be completed, according to CEQA Guidelines. • Use the State Office of Historic Preservation's recommendations for the preparation of Archaeological Resource Management Reports as guidelines.
ENERGY	

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City of Belmont	The City of Belmont Climate Action Plan (2017) contains goals and policies related to energy. The following in the City of Belmont Climate Action Plan are relevant to the Project: **Goal 3.1.1: Increase municipal, residential, and commercial energy efficiency, renewable energy, efficient water use, and green building.**
GEOLOGY, SOILS, AND SEISMICITY	
City of Belmont	The City of Belmont 2035 General Plan (2017) contains goals and policies related to geology, soils, seismicity, and paleontological resources. The following policies in the City of Belmont general plan are relevant to the Project: **Goal 6.1:** M**inimize risks of property damage and personal injury posed by geologic and seismic hazards.** Policy 6.1-1 Continue to maintain and enforce appropriate standards to ensure new development is designed to meet current safety codes and requirements associated with seismic activity. Require public and private development to be located, designed, and constructed to minimize the risk of loss of life and injury in the event of a major earthquake or other natural disaster. **Goal 5.12 Preserve and protect areas and sites of prehistoric, cultural, and archaeological significance.** Policy 5.12-1 Ensure that development avoids potential impacts to sites suspected of being archeologically, paleontologically, or culturally significant, tribal or otherwise, or of concern by requiring appropriate and feasible mitigation. Policy 5.12-2 If cultural, archaeological, paleontological, or cultural resources, tribal or otherwise, are discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected until evaluation by a qualified professional is completed. • A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures or appropriate mitigation should be completed, according to CEQA Guidelines. • Use the State Office of Historic Preservation's recommendations for the preparation of Archaeological Resource Management Reports as guidelines.
GREENHOUSE GAS EMISSIONS	
City of Belmont Climate Action Plan	The City of Belmont's 2017 Climate Action Plan was updated and adopted into the City of Belmont 2035 General Plan (City of Belmont 2017). The City of

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	Belmont selected a goal to reduce its GHG emissions to a level that is 15% below 2005 baseline emissions by 2020, and 50% by 2035. The following goals and measures from the Climate Action Plan are relevant to the Proposed Project: **Goal 3.2.1:** Reduce emissions from transportation through efficient land use, alternate modes of transportation, and operational innovations. **Measure TM1**: Prioritize purchase of efficient vehicles and alternative fuel vehicles (including off-road equipment). Maintain existing vehicles for optimum mileage. Encourage staff to drive minimally and efficiently. Establish government operations idling policy. **Goal 3.3.1:** Reduce solid waste generated and sent to landfills. **Measure WC4:** Increase diversion/recycling of yard waste by landscapers and landscape maintenance businesses and food scraps by residents and businesses. Explore a ban on these organics from landfill.
BAAQMD Clean Air Plan 2017	The Final 2017 Clean Air Plan (BAAQMD 2017a) presents the District's climate and air pollution control strategy. A project must be consistent with the plan in order to be considered to have no significant adverse impact on GHG emissions.
BAAQMD GHG Significance Threshold	The BAAQMD does not have a recommended threshold for construction-related GHG emissions but does have an operational GHG threshold of 1,100 $MTCO_2e/yr$ (BAAQMD 2017a).
HAZARDS AND HAZARDOUS MATERIALS	
No applicable local regulations.	
HYDROLOGY AND WATER QUALITY	
City of Belmont 2035 General Plan	The City of Belmont General Plan (2017) includes the following goals and policies related to hydrology and water quality that are potentially relevant to the Project: **Goal 5.4:** Preserve and restore Belmont's waterways and adjacent corridors as valuable community resources that serve as plant and wildlife habitats, groundwater recharge facilities, flood control and irrigation components, and connections between open space areas. **Policy 5.4-1:** Restore Belmont Creek to enhance ecological functions, biological resources, hydrology function, and flood control. **Policy 5.4-2:** Preserve, where possible, natural watercourses or provide naturalized drainage channels within the city. Where necessary and feasible, implement restoration and rehabilitation measures.

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	Goal 5.5: Preserve water quality by promoting the protection of Belmont's creeks and other natural water bodies from pollution. **Policy 5.5-4:** Ensure that the design and construction of new infrastructure elements does not contribute to stream bank or hillside erosion or creek or wetland siltation, incorporates site design and source control BMPs, construction phase BMPs, and treatment control BMPs to minimize impacts to water quality. **Goal 5.9:** Maintain and improve the reliability of the City's storm drainage system, and promote best management practices to protect this system from flooding, enhance water quality, and prevent infrastructure deterioration. **Policy 5.9-1:** Continue to make improvements and upgrades to the drainage system. Priorities should be to provide curbs and gutters to underserved areas (as feasible), improve facilities in areas that are subject to seasonal flooding, increase capacity of the system, and replace damaged lines in the storm drain system. **Goal 6.2:** Protect the community from risks to life and property posed by flooding. **Policy 6.2-3:** Require all proposed drainage facilities to comply with the city's storm drainage facility requirements to ensure they are properly sized to handle 100-year flood conditions. **Policy 6.2-4:** Seek to reduce flooding hazards by continuing to implement improvements and upgrades to the storm drainage system. **Goal 6.3:** Protect soils, surface water, and groundwater from contamination from hazardous materials.
LAND USE AND PLANNING	
City of Belmont General Plan 2035	The City of Belmont General Plan 2035 provides policies relevant to land use in the Land Use and Open Space chapters. These goals and policies include: **LU Policy 4.5-2** Protect Belmont Creek from future encroachment through regulation, development review, conservation easements, or other appropriate actions. **LU Action 4.5-2b:** Consider creek restoration projects that alter the creek corridor to enhance the function of the waterway, including restoration through Twin Pines Park. **Open Space Goal 4.5** Preserve and protect open space resources using various methods available to the City. **Policy 4.5-2:** Protect Belmont Creek from future encroachment through regulation, development review, conservation easements, or other appropriate actions.

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Belmont Village Specific Plan	The Belmont Village Specific Plan 2035 provides policies relevant land use in the Environmental Sustainability, Health and Safety chapter. **Goal 6.3** Protect and improve the quality of biological resources and habitat areas in the Planning Area. **Policy 6.3-2** Maintain the Belmont Creek corridor west of Sixth Avenue as a functional wildlife corridor and habitat linkage. Provide an appropriate buffer, using landscaping, to preserve and protect the creek water quality. Where feasible, allow public access in the form of open space or a multi-use trail along the creek corridor. Incorporate interpretive signage for educational purposes in public access areas along the creek and in Twin Pines Park.
City of Belmont Zoning Ordinance	The Belmont Zoning Ordinance works in conjunction with the City of Belmont General Plan 2035 and the Belmont Village Specific Plan. It outlines zoning regulations with the intent of promoting and protecting the health, safety, comfort and general welfare of the public, while also providing guidelines for city development.
Twin Pines Park Master Plan	The purpose of this plan is to highlight the existing assets of the park, and the significance it has within the community. The plan also seeks to guide future development through seeing community feedback and prioritizing development opportunities to pursue as funding becomes available. **ESHS Policy 6.1-1** Design storm drainage and flood control structures to minimize erosion and creek sedimentation and to preserve and enhance the wildlife habitat and vegetation of Belmont Creek **ESHS Policy 6.2-2** Continue to collaborate on and implement efforts to restore Belmont Creek and enhance ecological functions, biological resources, hydrology function, and flood control.
Belmont Parks Recreation Open Space (PROS) Master Plan Draft	The Belmont Parks Recreation Open Space (PROS) Master Plan is still in draft form as it is currently undergoing a CEQA initial study (City of Belmont, 2023a). The draft document outlines policies relevant to land use. These goals and policies include: **PROS GOAL 6:** Partner with a variety of agencies, departments, volunteer groups, other entities, and the community to actualize PROS plan goals and policies **Strategy 6.C** Collaborate with other public agencies and community advocates to protect sensitive natural resources while providing compatible recreational access and outdoor opportunities.

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	PROS Goal 7: Develop and implement an Open Space Management Plan (OSMP). **Objective ES-3:** Water Resources Protect and restore natural water courses, wetlands, and hydrologic processes
City of Belmont Municipal Code	The City of Belmont Municipal Code (City of Belmont, 2023c) provides policies relevant to land use in the Chapter 9 – Grading. **Sec. 9-40. - Setbacks.** The setbacks specified in this section are minimums and may be increased by the director of public services or the planning commission when larger setbacks are found necessary for safety or stability or to prevent damage to adjoining properties from deposition or erosion or to provide access for maintenance of the slope and slope drainage. Retaining walls may be used to reduce the required setbacks when permitted by the director of public services or the planning commission. Required setbacks are: (a)Setbacks from property lines. The tops of cuts and toes of fills shall be set back from the outer boundaries of the site as shown in figure 1a. (b)Setbacks from structures. The tops of cuts and toes of fills shall be set back from structures as shown in figure 1. (c)Setbacks from stream channels. No grading which would require a permit under this chapter shall be permitted within fifty (50) feet of a bank of Belmont or East Laurel creeks except grading necessary to assure adequate stream flow and channel maintenance.
MINERAL RESOURCES	
No applicable local regulations.	
NOISE	
City of Belmont Noise Regulations	The City's Noise Regulations contain the following policies applicable to the Proposed Project with regard to noise: **Sec. 15-102. - Noise limitations.** (d) Construction activity. Notwithstanding subsection (c), construction activities and construction activity noise are subject to the following regulations. (1) Except as provided in subsection (d)(2), all construction and related activities which require a city permit, including the use of powered equipment in connection with such activities, are allowed only during the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday except Holidays, and 10:00 a.m. to 5:00 p.m. on Saturdays. All gasoline-powered construction equipment shall be

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	equipped with an operating muffler or baffling system as originally provided by the manufacturer, and no modification to these systems is permitted. (2) The Building Official may allow construction and related activity outside the days and hours provided in subsection (d)(1) when: (A) Necessary for emergency repairs or to protect life or property from imminent threat of harm; (B) The construction site is more than 300 feet from a dwelling unit; or, (C) Noise from the allowed construction activity is in the Building Official's opinion comparable to the noise from non-construction activity in the immediate area. (D) Expanded construction hours provides quantifiable benefit to the public and noise will not unduly interfere with the comfortable enjoyment of life or property. (3) An exception granted under subsection (d)(2) including the scope of allowed activity shall be noted on the building permit. (4) The Building Official may limit, condition, modify or eliminate an exception as necessary to limit noise disturbance.
POPULATION AND HOUSING	
No applicable local regulations.	
PUBLIC SERVICES	
City of Belmont 2035 General Plan	The Parks and Recreation and Safety Elements of the City of Belmont General Plan (2017) contain the following policies and actions for public services that may apply to the proposed project: **Goal 4.1:** Provide an expanded, high quality, and diversified park system that serves the entire Belmont community, enhances community identity, and is conveniently located for community use. **Policy 4.1-2:** Strive to achieve and maintain a citywide standard of at least 5.0 acres of mini, neighborhood, and community parks per 1,000 residents, targeting a breakdown of 3.0 acres/1,000 residents for community parks and 2.0 acres/1,000 residents for neighbor- hood parks. **Goal 4.2:** Ensure that a wide variety of public community and recreation facilities are available to the entire Belmont community for recreational, social, and cultural activities. **Goal 6.7:** Foster an efficient and coordinated response to emergencies and natural disasters.

Law, Regulation, or Policy	Overview
	Policy 6.7-9: Ensure critical use facilities that are important to protecting health and safety in the community remain operational during an emergency **Goal 6.8:** Provide a comprehensive program or safety services including police, fire, and medical response in Belmont. **Policy 6.8-1:** Continue to respond with-out delays to all calls for police assistance as soon as possible consistent with normal precautions and vehicle laws. Establish and periodically review procedures and response times to ensure equitable service across the community. **Action 6.9-1a:** Establish and strive to achieve response and service ration-standards for the Police Department. **Policy 6.8-2:** Continue to respond without delay to all calls for fire and emergency medical assistance as soon as possible consistent with normal safety precautions and vehicle laws. Periodically review procedures and response times to ensure equitable service across the district. **Policy 6.8-3:** Periodically evaluate police and fire services to ensure that the City is providing adequate protection in an efficient, cost-effective manner.
Belmont Village Specific Plan	The Infrastructure and Public Services Element of the Belmont Village Specific Plan (year) identified the following goals and policies with regard to public services: **Goal 5.5:** Maintain Belmont as a safe and livable community. **Policy 5.5-1:** Ensure that the Belmont Police Department has adequate police staff and equipment to serve future growth and new development in the Village. **Goal 5.6:** Ensure that new development adequately addresses public safety considerations in building design and site planning. **Policy 5.6-2:** Work with the Belmont Fire Protection District to ensure that all new development in the Planning Area has adequate emergency access. **Goal 5.7:** Promote adequate and accessible public school facilities for the Planning area. **Policy 5.7-1:** Work closely with Belmont-Redwood Shores School District and Sequoia High School District to ensure appropriate accommodation of the future student population in Belmont. **Goal 5.9:** Provide a diverse range of parks, recreation, and community facilities and programming inside and within a ten-minute walk of the Planning Area.

Law, Regulation, or Policy	Overview
	Policy 5.9-1: Strive to achieve provision of a minimum of 2.2 acres of neighborhood parkland across the Planning Area, recognizing that park space in urban, downtown environments may take the form of plazas, pocket parks, and flexible spaces. **Policy 5.9-5:** Ensure that parks and public spaces in and near the Planning Area offer a diverse range of amenities and are safe and accessible for the entire Belmont community. **Policy 5.9-8:** Support the use of parks, recreation, and community facilities for a diversity of programming and activities to activate these spaces and to provide varied recreational opportunities for the entire Belmont community.
RECREATION	
City of Belmont General Plan 2035	The City of Belmont General Plan 2035 provides policies relevant to recreation in the Parks, Recreation, and Open Space element. These goals and policies include: **PROS Goal4.2** Ensure that a wide variety of public community and recreation facilities are available to the entire Belmont community for recreational, social, and cultural activities. **PROS Policy 4.2-1** Review and update the types, amounts, and locations of community and recreation facilities as part of the Parks, Recreation, and Open Space Master Plan. **PROS Action 4.2-1a**: As part of the Parks, Recreation, and Open Space Master Plan, conduct a facilities needs assessment to determine the Belmont community's current needs and priorities for recreational facility space. The needs assessment should consider the unique needs of various groups within Belmont, including but not limited to children, teens, seniors, and pet-owners. **PROS Goal4.4** Continue to develop and support a balanced and integrated open space system reflecting a variety of considerations, including natural resource conservation, outdoor recreation, and public health and safety, to ensure synergies between various open space components and compatibility with land use planning. **PROS Policy 4.4-1** Continue to designate and protect open space lands for the preservation of scenic areas, natural drainage ways, and plant and wildlife habitats; for outdoor recreation; and for public health and safety **PROS Policy 4.4-4** Maintain and enhance trails in open spaces in Belmont. Continue to support opportunities for shared use of trails among multiple users, including pedestrians and mountain bicyclists. Promote knowledge,

Law, Regulation, or Policy	Overview
	trail etiquette, and consideration of multiple users on trails through education programs and signage **PROS Policy 4.4-6** Develop programs to control invasive plant species that threaten the natural resources. **PROS Goal4.6** Improve and increase public access into open space areas where feasible and safe. **PROS Policy 4.6-1** Maintain and improve access to parks and open space, especially in areas that lack land for additional parkland dedication and in areas where topography and lack of sidewalks inhibits easy pedestrian access to parks and recreation facilities. **PROS Policy 4.6-2** Improve public access and connections to Belmont Creek. Promote use of this waterway corridor for passive recreation, education, and research. **PROS Action 4.6-2a:** When restoring or enhancing the riparian vegetation and habitat along the Belmont Creek corridor, improve public access to and along the waterway, especially near Twin Pines Park and City Hall, where it is safe and feasible.
Belmont Village Specific Plan	The Infrastructure and Public Services Element of the Belmont Village Specific Plan 2017 identified the following goals and policies with regard to recreation: **Goal5.9** Provide a diverse range of parks, recreation, and community facilities and programming inside and within a ten-minute walk of the Planning Area. **Policy 5.9-5** Ensure that parks and public spaces in and near the Planning Area offer a diverse range of amenities and are safe and accessible for the entire Belmont community. **Policy 5.9-6** Improve the physical and visual connections between the Village Core and Twin Pines Park to better integrate the park into the rest of the Village.
Twin Pines Park Master Plan	The purpose of this plan is to highlight the existing assets of the park, and the significance it has within the community. The plan also seeks to guide future development through seeing community feedback and prioritizing development opportunities to pursue as funding becomes available.
Twin Pines Park Master Plan	The purpose of this plan is to highlight the existing assets of the park, and the significance it has within the community. The plan also seeks to guide future development through seeing community feedback and prioritizing development opportunities to pursue as funding becomes available.

Law, Regulation, or Policy	Overview
	Goal #4 - Provide a range of activities and experiences for the Belmont community. Programming should reflect Twin Pine Park role in wholistically (sic) meeting the needs of the Belmont Community. Opportunities: • Consider developing challenge / adventure play experiences for youth and teens on forested hillsides. • Provide creekside loop trails - consider adding a bridge.
Belmont Parks Recreation Open Space (PROS) Master Plan Draft	The Belmont Parks Recreation Open Space (PROS) Master Plan is still in draft form as it is currently undergoing a CEQA initial study (City of Belmont, 2023a). The draft document outlines policies relevant to recreation. These goals and policies include: **PROS Goal 2**: Foster a Healthy Community through Spaces, Amenities, Programs, and Public Art to Encourage Physical Activity, Social Interaction, and Highlight Belmont's Culture. **Strategy 2.A** Develop amenities to facilitate physical exercise in parks and open spaces, such as looped walking paths and fitness equipment. **Strategy 2.B** Create gathering spaces to facilitate social interaction. When replacing or adding seating opportunities, use a clustered or paired seating arrangement to support group conversations in addition to single seats or benches. **Strategy 2.E** Increase quiet and passive use opportunities for users to interact with natural spaces, especially in higher density areas. **PROS Goal 5:** Revitalize the Pros System to be Adaptable, Flexible, and Supportive of Many Uses and Users now and into the Future. **Strategy 5.A** Design new and upgraded park, recreation, and open space amenities and facilities for multi-generational users that are adaptable for flexible uses. **Strategy 5.B** Incorporate looped walking paths within, as connections to, and through parks as safe, accessible, and pleasant experiences to walk, run, or roll. **PROS Goal 7:** Develop and Implement an Open Space Management Plan (OSMP). **Objective BR-1:** Balanced Recreation Uses Provide diverse, nature-dependent recreation activities in the city's open space areas. **PROS Goal 9:** Continue to Enrich Belmont's Outdoor Recreation Opportunities with Trail Improvements, Volunteer Collaborations, and Wayfinding Features.

Law, Regulation, or Policy	Overview
	Strategy 9.B Offer areas of respite - such as benches with shade and trail rest points - along paths and trails to support outdoor recreation for all. **Strategy 9.C** Create trails to vista points or activity spaces that are as accessible as possible given the terrain restrains. **Strategy 9.D** Identify locations where trails can be improved or established in open space to connect the City and other open space areas neighboring Belmont, such as Sugarloaf Mountain and San Juan Canyon.
TRIBAL CULTURAL RESOURCES	
City of Belmont 2035 General Plan	**GOAL 2.23** Conserve designated historic and cultural sites and structures that help define Belmont's identity and character. **Policy 2.23-1** Update the City's inventory of historic resources to ensure that historic resources are preserved and protected in Belmont. **Policy 2.23-2** Ensure that City ordinances adequately recognize and protect historic resources. **Action 2.23-2a**: Incorporate historic preservation in the Zoning Ordinance, rather than elsewhere in the Municipal Code. **Action 2.23-2b**: Update the City's historic preservation regulations to make them more easily understood and to make procedures less cumbersome, such as streamlining the process for issuing building permits for minor repairs and alterations. Include, as appropriate, preservation incentives, such as use of the California Historic Building Code, where appropriate, and other available incentives. **Action 2.23-2c**: Develop a preservation strategy for historic resources, or structures with historic character or qualities, that may not be located within a designated historic district. **Policy 2.23-3** Consider creating a Historic Preservation Commission to administer and advise on historic preservation matters, such as updating the inventory of historic resources and updating the historic preservation ordinance. **Policy 2.23-4** Encourage adaptive reuse of historic structures – preserving their original design and character – as an option for pre-serving sites that are threatened with demolition or degradation. **Policy 2.23-5** Support Notre Dame de Namur University's efforts to restore Ralston Hall as an important community asset.

Law, Regulation, or Policy	Overview
	Policy 2.23-6 Support efforts to increase public awareness and appreciation of local historic resources and promote community history. **GOAL 5.12** Preserve and protect areas and sites of prehistoric, cultural, and archaeological significance. **Policy 5.12-1** Ensure that development avoids potential impacts to sites suspected of being archeologically, paleontologically, or culturally significant, tribal or otherwise, or of concern by requiring appropriate and feasible mitigation. **Action 5.12-1a**: Establish guidelines andmitigation programs when sites of archaeological, paleontological, and/or cultural concern, *tribal or otherwise,* would be disturbed by development, including: • Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive; • Determining the potential effects of development and construction on archaeological or paleontological resources (as required by CEQA); • Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical and archaeological sensitivity; and, • Implementing appropriate measures to avoid the identified impacts, as conditions of project approval. **Policy 5.12-2** If cultural, archaeological, paleontological, or cultural resources, tribal or otherwise, are discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected until evaluation by a qualified professional is completed. • A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures or appropriate mitigation should be completed, according to CEQA Guidelines. • Use the State Office of Historic Preservation's recommendations for the preparation of Archaeological Resource Management Reports as guidelines
TRANSPORTATION	
City of Belmont General Plan	The City of Belmont 2035 General Plan identifies the following goals and policies with regard to transportation:

Law, Regulation, or Policy	Overview
	GOAL 3.4 Accommodate modes of transportation on routes that are designed within the context of the surrounding area to provide for the enjoyment and safety of the individual and to cause minimum interference and appropriate compatibility with adjacent uses of land. **Policy 3.4-1** Maintain and improve existing transportation facilities to ensure safety and reasonable convenience of use. Additional facilities shall be limited to local access roadways for improved connectivity only in areas of dense development, such as the Belmont Village PDA. **Policy 3.4-8** Minimize unsafe conditions due to through traffic in residential areas through reasonable actions taken to re-route the traffic, or otherwise reduce the traffic or mitigate its effects.
UTILITIES AND SERVICE SYSTEMS	
No applicable local regulations.	
WILDFIRE	
City of Belmont General Plan 2035	The City of Belmont General Plan 2035 includes the following goals and policies related to Urban Wildfire Hazards: **Goal 6.6** Protect Belmont residents and businesses from potential fire hazards. **Policy 6.6-6** Promote and support the Belmont Fire Protection District's Vegetation Management Program to reduce fire hazards, particularly in areas in the Wildland Urban Interface. **Policy 6.6-7** Continue to participate in State and regional efforts to develop a clear legislative and regulatory framework to manage the Wildland Urban Interface. Action 6.6-7a: Maintain consistency with the San Mateo and Santa Clara Unit's Fire Management Plan to reduce wildland fires in both counties. **Policy 6.6-9** Continue to require development located within the VHFHSZ to maintain 100 feet of defensible space consistent with California Government Code section 51182. See also Policy 2.14-3 in the Land Use Element regarding defensible space. **Policy 6.6-11** Lessen the risk of wildfire and maintain clear and safe access and evacuation routes in areas of high and very high fire hazard severity by continuing to enforce Belmont Municipal Code section 7-401, which classifies nuisances as, in part, overgrown vegetation; dead, decayed, diseased, or hazardous trees, firewood; weeds and other vegetation that may be a fire hazard.

Law, Regulation, or Policy	Overview
	CO Goal 5.1: Protect and maintain open space for the preservation of natural resources. **CO Policy 5.1-3**: Reduce risk of wildland fire, ecological succession, and pathogen threats (such as Sudden Oak Death) through active maintenance of public spaces and education and enforcement of development standards on private property. **CO Action 5.1-3a:** Develop consistent design standards for the interface between open space and the adjoining neighborhoods, and neighborhoods and the Urban/Wildland Interface Zone. Identify standards for the margin of space needed to allow wildlife, recreation, and aesthetic values to flourish while also reducing the threats of fire and invasive plants.
City of Belmont Municipal Code	The City of Belmont Municipal Code (City of Belmont, 2023c) provides policies relevant to land use in the Chapter 7 – Buildings. **Sec. 7-401. - Classification of nuisances.** The following acts and conditions, when performed or existing upon any lot, piece or parcel of land within the City of Belmont, are hereby defined as and declared to be public nuisances because they are deemed to be injurious or potentially injurious to the public health, safety and welfare and they have a tendency to degrade the appearance and property values of surrounding property or cause damage to public rights-of-way: 1.Property where: a. Erosion, subsidence, or surface water drainage problems exist. b. Overgrown vegetation; dead, decayed, diseased, or hazardous trees, firewood; weeds and other vegetation is likely to harbor rats, vermin or nuisances or may be a fire hazard. …cont. **Sec. 7-403. - Voluntary abatement of nuisances.** The owner or tenant of any building, structure or property found to be a nuisance under the provisions of this article may abate the nuisance at any time within the abatement period by rehabilitation, repair, removal or demolition. The city manager or his or her designee shall be advised of the abatement and shall inspect the premises to ensure that the nuisance has in fact been abated. Any necessary permits and/or approvals shall be obtained by the owner or tenant.
Belmont Parks Recreation Open	The Belmont Parks Recreation Open Space (PROS) Master Plan is still in draft form as it is currently undergoing a CEQA initial study (City of Belmont, 2023a).

Law, Regulation, or Policy	Overview
Space (PROS) Master Plan Draft	The draft document outlines policies relevant to wildfire. These goals and policies include: **PROS Goal 7:** Develop and implement an Open Space Management Plan (OSMP). **Objective NH-1:** Wildfire Hazards Reduce the risk and severity of wildland fire and minimize the impact of fire suppression activities within City open spaces and adjacent residential areas.

ACRONYMS AND ABBREVIATIONS

APSA	Above-ground Petroleum Storage Act
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
CalARP	California Accidental Release Prevention
CEQA	California Environmental Quality Act
CO_2e	carbon dioxide equivalents
CRHR	California Register of Historic Resources
dBA	A-weighted decibels
EBRPD	East Bay Regional Park District
FAA	Federal Aviation Administration
GHG	greenhouse gas emissions
HARD	Hayward Area Recreation and Park District
HMBP	Hazardous Materials Business Plan
HMIS	Hazardous Materials Inventory Statements
HMMP	Hazardous Materials Management Plan
LID	Low-Impact Development
MT	metric tonnes
MTC	Metropolitan Transportation Commission
PM2.5	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM10	particulate matter of aerodynamic radius of 10 micrometers or less
ROG	reactive organic gases
SPCC	Spill Prevention, Control, and Countermeasure
TCR	Tribal Cultural Resources
U.S.C.	U.S. Code
UST	Underground Storage Tank

Appendix B

Air Quality and GHG Emissions Estimates

Belmont Creek Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Belmont Creek
Construction Start Date	6/3/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	Statewide
Windspeed (m/s)	4.70
Precipitation (days)	3.20
Location	37.51604713211945, -122.27866824759562
County	San Mateo
City	Belmont
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1245
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.19

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	0.39	Mile	2.00	0.00	—	—	—	—

Other Asphalt Surfaces	8.00	1000sqft	0.18	0.00	0.00	—	—	—

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.09	4.29	36.3	33.0	0.06	1.75	6.97	8.72	1.61	3.47	5.08	—	7,023	7,023	0.29	0.08	1.93	7,055
Mit.	5.09	4.29	36.3	33.0	0.06	1.75	2.98	4.72	1.61	1.41	3.02	—	7,023	7,023	0.29	0.08	1.93	7,055
% Reduced	—	—	—	—	—	—	57%	46%	—	59%	40%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.60	2.18	18.5	17.7	0.04	0.79	6.74	7.53	0.73	3.41	4.14	—	4,113	4,113	0.17	0.04	0.02	4,130
Mit.	2.60	2.18	18.5	17.7	0.04	0.79	2.75	3.54	0.73	1.36	2.08	—	4,113	4,113	0.17	0.04	0.02	4,130
% Reduced	—	—	—	—	—	—	59%	53%	—	60%	50%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.08	0.91	7.74	7.34	0.02	0.33	2.64	2.97	0.31	1.33	1.64	—	1,690	1,690	0.07	0.02	0.16	1,698
Mit.	1.08	0.91	7.74	7.34	0.02	0.33	1.08	1.41	0.31	0.53	0.84	—	1,690	1,690	0.07	0.02	0.16	1,698
% Reduced	—	—	—	—	—	—	59%	52%	—	60%	49%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.20	0.17	1.41	1.34	< 0.005	0.06	0.48	0.54	0.06	0.24	0.30	—	280	280	0.01	< 0.005	0.03	281
Mit.	0.20	0.17	1.41	1.34	< 0.005	0.06	0.20	0.26	0.06	0.10	0.15	—	280	280	0.01	< 0.005	0.03	281
% Reduced	—	—	—	—	—	—	59%	52%	—	60%	49%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	53.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	53.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	5.09	4.29	36.3	33.0	0.06	1.75	6.97	8.72	1.61	3.47	5.08	—	7,023	7,023	0.29	0.08	1.93	7,055
2025	0.77	0.78	5.32	8.38	0.01	0.23	0.20	0.43	0.21	0.05	0.26	—	1,317	1,317	0.06	0.02	0.81	1,324
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.60	2.18	18.5	17.7	0.04	0.79	6.74	7.53	0.73	3.41	4.14	—	4,113	4,113	0.17	0.04	0.02	4,130

2025	2.42	2.04	16.7	16.6	0.04	0.70	6.74	7.44	0.64	3.41	4.05	—	4,110	4,110	0.17	0.04	0.02	4,127
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.08	0.91	7.74	7.34	0.02	0.33	2.64	2.97	0.31	1.33	1.64	—	1,690	1,690	0.07	0.02	0.16	1,698
2025	0.44	0.39	3.01	3.12	0.01	0.13	1.16	1.28	0.12	0.58	0.70	—	745	745	0.03	0.01	0.08	748
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.20	0.17	1.41	1.34	< 0.005	0.06	0.48	0.54	0.06	0.24	0.30	—	280	280	0.01	< 0.005	0.03	281
2025	0.08	0.07	0.55	0.57	< 0.005	0.02	0.21	0.23	0.02	0.11	0.13	—	123	123	0.01	< 0.005	0.01	124

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/3/2024	6/17/2024	5.00	10.0	—
Paving	Paving	3/31/2025	4/11/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	4/14/2025	4/25/2025	5.00	10.0	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/17/2024	7/17/2024	5.00	23.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	7/18/2024	3/28/2025	5.00	182	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Skid Steer Loaders	Diesel	Average	1.00	8.00	84.0	0.37
Demolition	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31

Demolition	Off-Highway Trucks	Diesel	Average	2.00	2.00	376	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	303	0.38
Linear, Grubbing & Land Clearing	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Linear, Grubbing & Land Clearing	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Linear, Grubbing & Land Clearing	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Grubbing & Land Clearing	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Linear, Grubbing & Land Clearing	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Grubbing & Land Clearing	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Linear, Grubbing & Land Clearing	Off-Highway Trucks	Diesel	Average	2.00	2.00	376	0.38
Linear, Grubbing & Land Clearing	Other Construction Equipment	Diesel	Average	1.00	4.00	82.0	0.42
Linear, Grading & Excavation	Excavators	Diesel	Average	1.00	8.00	303	0.38
Linear, Grading & Excavation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Linear, Grading & Excavation	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43

Linear, Grading & Excavation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Grading & Excavation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Linear, Grading & Excavation	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Linear, Grading & Excavation	Off-Highway Trucks	Diesel	Average	2.00	2.00	376	0.38
Linear, Grading & Excavation	Other Construction Equipment	Diesel	Average	1.00	4.00	82.0	0.42

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Paving	—	—	—	—
Paving	Worker	24.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	24.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Demolition	—	—	—	—
Demolition	Worker	24.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.10	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	25.0	11.7	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.40	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.61	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	22.5	11.7	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.40	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.31	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	480

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1.05	—
Paving	0.00	0.00	0.00	0.00	0.18
Linear, Grubbing & Land Clearing	111	—	2.00	0.00	—
Linear, Grading & Excavation	444	—	2.00	0.00	—

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Linear	0.00	100%
Other Asphalt Surfaces	0.18	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	Project specific start
Construction: Construction Phases	Phase 1 and Phase 2 simultaneously for 10 months
Construction: Off-Road Equipment	Site specific equipment list
Construction: Paving	all defined for parking phase
Construction: Trips and VMT	site specific number of workers and estimated truck trips

Construction Fuel Consumption	**Gasoline**	**Diesel**
Construction On-Road Vehicles	566	1,097
Construction Off-Road Equipment		37,773
Total For Construction	**566**	**38,869**

									Gasoline		Diesel	
	Phase	**Vehicle Type**	**Construction Phase Days**	**Trips Per Day**	**Total Trips**	**Miles Per Trip**	**Total Miles**	**Fuel Type**	**Weighted Fuel Economy (miles/gallon)**	**Fuel Consumption (gallons)**	**Weighted Fuel Economy (miles/gallon)**	**Fuel Consumption (gallons)**
On-Road		Worker	10	24	240	11.7	2,808	LDA,LDT1, LDT2	26.70118167	104.92	34.81870119	0.19
		Vendor	10	18	180	20	3,600	HHDT, MHDT			7.364676622	489
	Demolition	Hauling			0	20	-	HHDT			6.018149872	-
		Worker	10	24	240	11.7	2,808	LDA,LDT1, LDT2	26.70118167	104.92	34.81870119	0.19
		Vendor	10	18	180	20	3,600	HHDT, MHDT			7.364676622	489
	Paving	Hauling			0	20	-	HHDT			6.018149872	-
		Worker	10	24	240	11.7	2,808	LDA,LDT1, LDT2	26.70118167	104.92	34.81870119	0.19
		Vendor	10	0	0	20	-	HHDT, MHDT			7.364676622	-
	Architectural Coating	Hauling			1	20	20	HHDT			6.018149872	3
		Worker	23	25	575	11.7	6,728	LDA,LDT1, LDT2	26.70118167	251.37	34.81870119	0.45
		Vendor	23	0	0	20	-	HHDT, MHDT			7.364676622	-
	r Grubbing and land cl	Hauling			34.5	20	690	HHDT			6.018149872	115
		Worker	182	22.5	4095	11.7	47,912	LDA,LDT1, LDT2	26.70118167	1,790.18	34.81870119	3.21
		Vendor	182	0	0	20	-	HHDT, MHDT			7.364676622	-
	ear Grading &Excavat	Hauling			276.64	20	5,533	HHDT			6.018149872	919
								Total Fuel Consumption (Gallons)		566.12		1,096.63

Notes:

1. Fuel Consumption is total miles multiplied by the percent gasoline or diesel respectively and then divided by fuel economy. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a mix of gasoline and diesel as ratioed by their VMT.

	LDA,LDT1,LDT2	MHDT	HHDT
Gasoline %	99.77%	0	0
Diesel %	0.23%	1	1

Phase name	Offroad Equipment Type	Amount	Days in Phase	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate lb/hp-hr	Diesel Fuel Consumption (gallons)
Demolition	Rubber Tired Dozers	1	10	8	367	0.4	0.367	606
Demolition	Skid Steer Loaders	1	10	8	84	0.37	0.408	143
Demolition	Aerial Lifts	1	10	8	46	0.31	0.408	65
Demolition	Off-Highway Trucks	2	10	2	376	0.38	0.367	295
Paving	Cement and Mortar Mixers	1	10	8	10	0.56	0.408	26
Paving	Pavers	1	10	8	81	0.42	0.408	156
Paving	Paving Equipment	1	10	8	89	0.36	0.408	147
Paving	Rollers	1	10	8	36	0.38	0.408	63
Paving	Tractors/Loaders/Backhoes	1	10	8	84	0.37	0.408	143
Architectural Coating	Air Compressors	1	10	6	37	0.48	0.408	61
Linear, Grubbing & La	Excavators	1	23	8	303	0.38	0.367	1,094
Linear, Grubbing & La	Rubber Tired Dozers	1	23	8	367	0.4	0.367	1,394
Linear, Grubbing & La	Skid Steer Loaders	1	23	8	71	0.37	0.408	277
Linear, Grubbing & La	Plate Compactors	1	23	8	8	0.43	0.408	36
Linear, Grubbing & La	Aerial Lifts	1	23	8	46	0.31	0.408	151
Linear, Grubbing & La	Generator Sets	1	23	8	14	0.74	0.408	109
Linear, Grubbing & La	Pumps	1	23	24	11	0.74	0.408	258
Linear, Grubbing & La	Off-Highway Trucks	2	23	2	376	0.38	0.367	679
Linear, Grubbing & La	Other Construction Equipmer	1	23	4	82	0.42	0.408	182
Linear, Grading & Exc	Excavators	1	182	8	303	0.38	0.367	8,655
Linear, Grading & Exc	Rubber Tired Dozers	1	182	8	367	0.4	0.367	11,034
Linear, Grading & Exc	Plate Compactors	1	182	8	8	0.43	0.408	287
Linear, Grading & Exc	Generator Sets	1	182	8	14	0.74	0.408	866
Linear, Grading & Exc	Skid Steer Loaders	1	182	8	71	0.37	0.408	2,195
Linear, Grading & Exc	Pumps	1	182	24	11	0.74	0.408	2,041
Linear, Grading & Exc	Off-Highway Trucks	2	182	2	376	0.38	0.367	5,370
Linear, Grading & Exc	Other Construction Equipmer	1	182	4	82	0.42	0.408	1,439
Total Diesel Fuel Use from Construction Off-Road								37,773

1. Equipment list is from CalEEMod.
2. Fuel Consumption is 0.408 for less than 100 hp and .367 if greater than or equal to 100 hp based on CARB Off-Road Diesel Engine Emission Factors
3. To convert to gallons the conversion factor of 7.1089 lb/fallon is used
4. Fuel consumption is amount multiplied by usage hours, days in phase, horsepower, loadfactor, and fuel consumption rate divided by conversion factor.

			Weighting					Fuel Economy					Weighted Fuel Economy
			LDA	LDT1	LDT2	MHDT	HHDT	LDA	LDT1	LDT2	MHDT	HHDT	Miles per Gallon
	Worker	LDA, LDT1,LDT2	0.5	0.25	0.25	0	0	29.33817	24.30993	23.81847			26.70118167
	Vendor	HHDT,MHDT	0	0	0	0.5	0.5						0
Gasoline	Hauling	HHDT	0	0	0	0	1						0
	Worker	LDA, LDT1,LDT2	0.5	0.25	0.25	0	0	41.79647	23.7491	31.93276	8.711203	6.01815	34.81870119
	Vendor	HHDT,MHDT	0	0	0	0.5	0.5				8.711203	6.01815	7.364676622
Diesel	Hauling	HHDT	0	0	0	0	1				8.711203	6.01815	6.018149872

Notes:
1. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a mix of gasoline and diesel as ratioed by their VMT.
2. EMFAC 2014 was used to estimate fuel economy based on VMT and fuel consumption.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Statewide
Region: California
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, to

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population	VMT	Trips
Statewide	2024	HHDT	Aggregate	Aggregate	Gasoline	150.1222	3070320	982191.9
Statewide	2024	HHDT	Aggregate	Aggregate	Diesel	307158.3	1.34E+10	1.56E+09
Statewide	2024	LDA	Aggregate	Aggregate	Gasoline	12932359	1.76E+11	2.08E+10
Statewide	2024	LDA	Aggregate	Aggregate	Diesel	46051.86	4.84E+08	67168218
Statewide	2024	LDT1	Aggregate	Aggregate	Gasoline	1316922	1.55E+10	1.99E+09
Statewide	2024	LDT1	Aggregate	Aggregate	Diesel	676.7857	3333702	670156.3
Statewide	2024	LDT2	Aggregate	Aggregate	Gasoline	6196168	8.57E+10	1E+10
Statewide	2024	LDT2	Aggregate	Aggregate	Diesel	21611.88	3.13E+08	35797556
Statewide	2024	MHDT	Aggregate	Aggregate	Gasoline	49136.2	8.66E+08	3.21E+08
Statewide	2024	MHDT	Aggregate	Aggregate	Diesel	277729.4	3.8E+09	1.03E+09

ns/year for Emissions, 1000 gallons/year for Fuel Consumption

Fuel Consumption
806.613441
2218870.864
6009948.623
11569.92729
639414.6512
140.3716937
3599599.864
9793.216131
174320.3431
436104.2337

Appendix C

List of Special-Status Species Known to Occur in the Project Area

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Mateo County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Salt Marsh Harvest Mouse Reithrodontomys raviventris Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/613	Endangered

Birds

NAME	STATUS
California Clapper Rail Rallus longirostris obsoletus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern Sterna antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened

Western Snowy Plover Charadrius nivosus nivosus — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Reptiles

NAME	STATUS

Green Sea Turtle Chelonia mydas — Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

San Francisco Garter Snake Thamnophis sirtalis tetrataenia — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5956

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Foothill Yellow-legged Frog Rana boylii — Proposed Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

Insects

NAME	STATUS

Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Fountain Thistle Cirsium fontinale var. fontinale Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7939	Endangered
Marin Dwarf-flax Hesperolinon congestum Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5363	Threatened
San Mateo Thornmint Acanthomintha obovata ssp. duttonii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2038	Endangered
San Mateo Woolly Sunflower Eriophyllum latilobum Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7791	Endangered
White-rayed Pentachaeta Pentachaeta bellidiflora Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7782	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

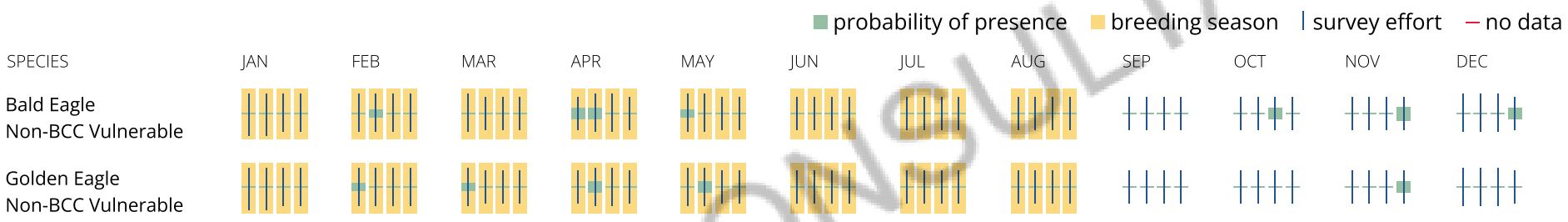
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/ documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every

bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Oystercatcher Haematopus bachmani This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15

Black Turnstone Arenaria melanocephala This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

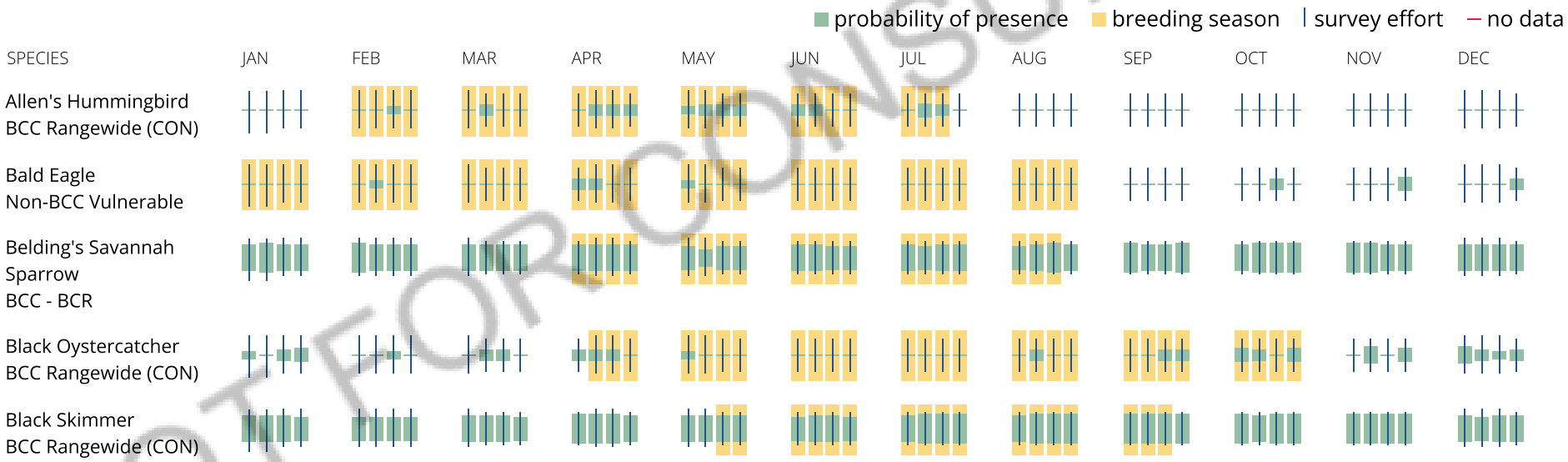
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

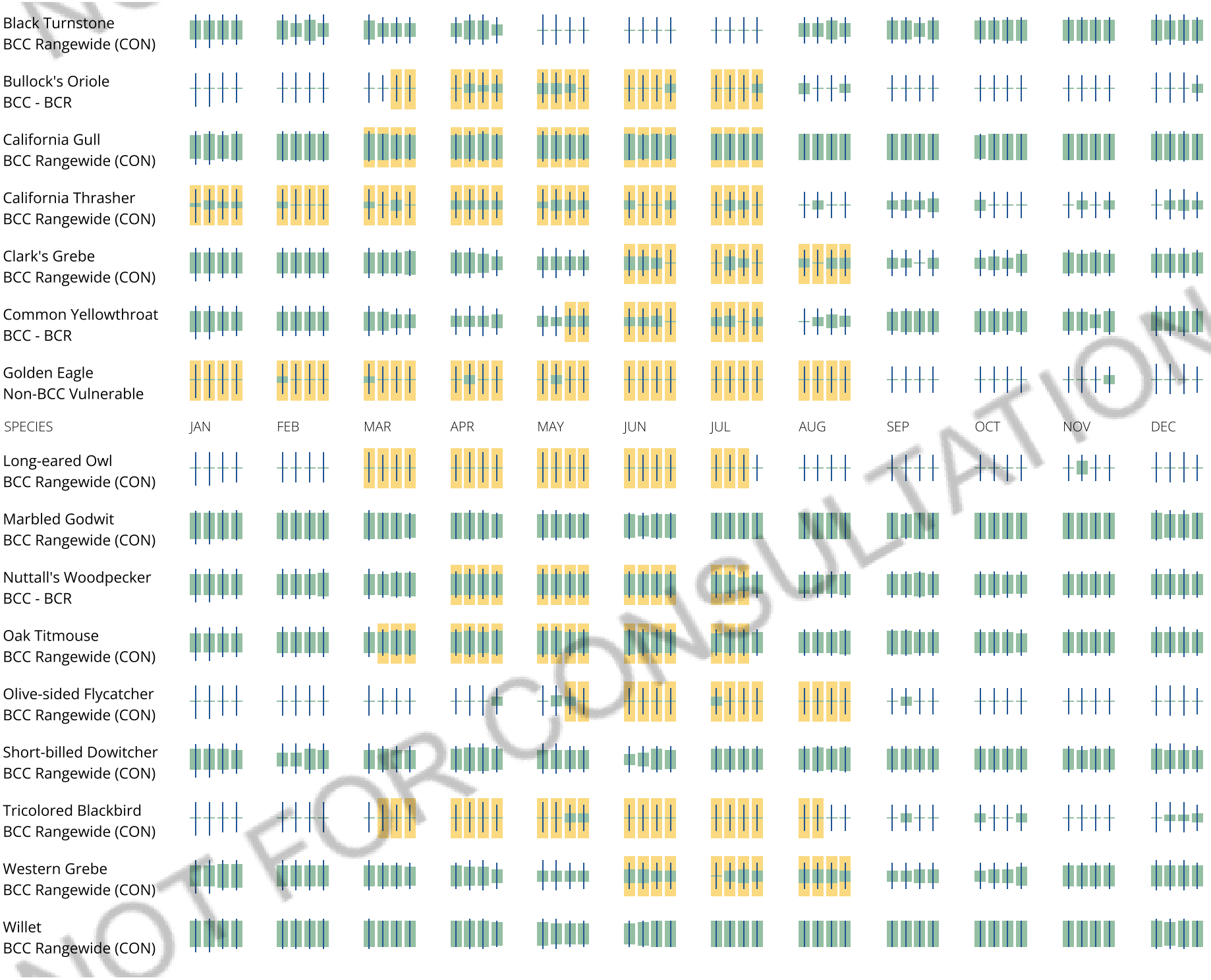
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Wrentit
BCC Rangewide (CON)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The

list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R4SBC

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (San Mateo (3712253) OR San Francisco South (3712264) OR Hunters Point (3712263) OR San Leandro (3712262) OR Redwood Point (3712252) OR Palo Alto (3712242) OR Woodside (3712243) OR Half Moon Bay (3712244) OR Montara Mountain (3712254))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acanthomintha duttonii	PDLAM01040	Endangered	Endangered	G1	S1	1B.1
San Mateo thorn-mint						
Accipiter cooperii	ABNKC12040	None	None	G5	S4	WL
Cooper's hawk						
Acipenser medirostris pop. 1	AFCAA01031	Threatened	None	G2T1	S1	
green sturgeon - southern DPS						
Adela oplerella	IILEE0G040	None	None	G2	S2	
Opler's longhorn moth						
Agrostis blasdalei	PMPOA04060	None	None	G2G3	S2	1B.2
Blasdale's bent grass						
Allium peninsulare var. franciscanum	PMLIL021R1	None	None	G4G5T2	S2	1B.2
Franciscan onion						
Ambystoma californiense pop. 1	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
California tiger salamander - central California DPS						
Amsinckia lunaris	PDBOR01070	None	None	G3	S3	1B.2
bent-flowered fiddleneck						
Aneides niger	AAAAD01070	None	None	G3	S3	SSC
Santa Cruz black salamander						
Antrozous pallidus	AMACC10010	None	None	G4	S3	SSC
pallid bat						
Arctostaphylos andersonii	PDERI04030	None	None	G2	S2	1B.2
Anderson's manzanita						
Arctostaphylos franciscana	PDERI040J3	Endangered	None	GHC	S1	1B.1
Franciscan manzanita						
Arctostaphylos imbricata	PDERI040L0	None	Endangered	G1	S1	1B.1
San Bruno Mountain manzanita						
Arctostaphylos montana ssp. ravenii	PDERI040J2	Endangered	Endangered	G3T1	S1	1B.1
Presidio manzanita						
Arctostaphylos montaraensis	PDERI042W0	None	None	G1	S1	1B.2
Montara manzanita						
Arctostaphylos pacifica	PDERI040Z0	None	Endangered	G1	S1	1B.1
Pacific manzanita						
Arctostaphylos regismontana	PDERI041C0	None	None	G2	S2	1B.2
Kings Mountain manzanita						
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron						

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Asio flammeus short-eared owl	ABNSB13040	None	None	G5	S2	SSC
Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	PDFAB0F7B2	None	None	G2T2	S2	1B.2
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Banksula incredula incredible harvestman	ILARA14100	None	None	G1	S1	
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Brachyramphus marmoratus marbled murrelet	ABNNN06010	Threatened	Endangered	G3	S2	
Caecidotea tomalensis Tomales isopod	ICMAL01220	None	None	G2	S2S3	
Calicina minor Edgewood blind harvestman	ILARA13020	None	None	G1	S1	
Callophrys mossii bayensis San Bruno elfin butterfly	IILEPE2202	Endangered	None	G4T2	S2	
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
Chorizanthe cuspidata var. cuspidata San Francisco Bay spineflower	PDPGN04081	None	None	G2T1	S1	1B.2
Chorizanthe robusta var. robusta robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Cirsium andrewsii Franciscan thistle	PDAST2E050	None	None	G3	S3	1B.2
Cirsium fontinale var. fontinale fountain thistle	PDAST2E161	Endangered	Endangered	G2T1	S1	1B.1
Cirsium occidentale var. compactum compact cobwebby thistle	PDAST2E1Z1	None	None	G3G4T2	S2	1B.2
Cirsium praeteriens lost thistle	PDAST2E2B0	None	None	GX	SX	1A
Collinsia corymbosa round-headed collinsia	PDSCR0H060	None	None	G1	S1	1B.2
Collinsia multicolor San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G2G3	S2S3	SSC
Dipodomys venustus venustus Santa Cruz kangaroo rat	AMAFD03042	None	None	G4T1	S1	
Dirca occidentalis western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
Dufourea stagei Stage's dufourine bee	IIHYM22010	None	None	G1G2	S1	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Eriophyllum latilobum San Mateo woolly sunflower	PDAST3N060	Endangered	Endangered	G1	S1	1B.1
Eryngium aristulatum var. hooveri Hoover's button-celery	PDAPI0Z043	None	None	G5T1	S1	1B.1
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	
Eumetopias jubatus Steller sea lion	AMAJC03010	Delisted	None	G3	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Euphydryas editha bayensis Bay checkerspot butterfly	IILEPK4055	Threatened	None	G5T1	S3	
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Fritillaria biflora var. ineziana Hillsborough chocolate lily	PMLIL0V0M1	None	None	G3G4T1	S1	1B.1
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Gilia capitata ssp. chamissonis blue coast gilia	PDPLM040B3	None	None	G5T2	S2	1B.1
Gilia millefoliata dark-eyed gilia	PDPLM04130	None	None	G2	S2	1B.2
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Grindelia hirsutula var. maritima San Francisco gumplant	PDAST470D3	None	None	G5T1Q	S1	3.2
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Helianthella castanea Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R0W1	None	None	G5T2	S2	1B.2
Hesperevax sparsiflora var. brevifolia short-leaved evax	PDASTE5011	None	None	G4T3	S3	1B.2
Hesperolinon congestum Marin western flax	PDLIN01060	Threatened	Threatened	G1	S1	1B.1
Heteranthera dubia water star-grass	PMPON03010	None	None	G5	S2	2B.2
Hoita strobilina Loma Prieta hoita	PDFAB5Z030	None	None	G2?	S2?	1B.1
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Hydrochara rickseckeri Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
Hydroporus leechi Leech's skyline diving beetle	IICOL55040	None	None	G1?	S2S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Hypogymnia schizidiata island tube lichen	NLT0032640	None	None	G2G3	S2	1B.3
Icaricia icarioides missionensis Mission blue butterfly	IILEPG801A	Endangered	None	G5T2	S2	
Icaricia icarioides pheres Pheres blue butterfly	IILEPG8019	None	None	G5TX	SX	
Ischnura gemina San Francisco forktail damselfly	IIODO72010	None	None	G2	S2	
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasthenia californica ssp. macrantha perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Layia carnosa beach layia	PDAST5N010	Threatened	Endangered	G2	S2	1B.1
Leptosiphon croceus coast yellow leptosiphon	PDPLM09170	None	Endangered	G1	S1	1B.1
Leptosiphon rosaceus rose leptosiphon	PDPLM09180	None	None	G1	S1	1B.1
Lessingia arachnoidea Crystal Springs lessingia	PDAST5S0C0	None	None	G2	S2	1B.2
Lessingia germanorum San Francisco lessingia	PDAST5S010	Endangered	Endangered	G1	S1	1B.1
Lichnanthe ursina bumblebee scarab beetle	IICOL67020	None	None	G2	S2	
Limnanthes douglasii ssp. ornduffii Ornduff's meadowfoam	PDLIM02039	None	None	G4T1	S1	1B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Malacothamnus arcuatus arcuate bush-mallow	PDMAL0Q0E0	None	None	G2Q	S2	1B.2
Melospiza melodia pusillula Alameda song sparrow	ABPBXA301S	None	None	G5T2T3	S2	SSC
Microcina edgewoodensis Edgewood Park micro-blind harvestman	ILARA47010	None	None	G1	S1	
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Myotis thysanodes fringed myotis	AMACC01090	None	None	G4	S3	
Nannopterum auritum double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	AMAFF08082	None	None	G5T2T3	S2S3	SSC
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Northern Maritime Chaparral Northern Maritime Chaparral	CTT37C10CA	None	None	G1	S1.2	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T3Q	S3	
Pentachaeta bellidiflora white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Polemonium carneum Oregon polemonium	PDPLM0E050	None	None	G3G4	S2	2B.2
Polygonum marinense Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
Pomatiopsis californica Pacific walker	IMGASJ9020	None	None	G1	S1	
Potentilla hickmanii Hickman's cinquefoil	PDROS1B370	Endangered	Endangered	G1	S1	1B.1
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G3T1	S2	FP
Rana boylii pop. 4 foothill yellow-legged frog - central coast DPS	AAABH01054	Proposed Threatened	Endangered	G3T2	S2	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Reithrodontomys raviventris salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S3	FP
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Rynchops niger black skimmer	ABNNM14010	None	None	G5	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sanicula maritima adobe sanicle	PDAPI1Z0D0	None	Rare	G2	S2	1B.1
Scapanus latimanus parvus Alameda Island mole	AMABB02031	None	None	G5T1Q	SH	SSC
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Serpentine Bunchgrass Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
Silene scouleri ssp. scouleri Scouler's catchfly	PDCAR0U1MC	None	None	G5T4T5	S2S3	2B.2
Silene verecunda ssp. verecunda San Francisco campion	PDCAR0U213	None	None	G5T1	S1	1B.2
Sorex vagrans halicoetes salt-marsh wandering shrew	AMABA01071	None	None	G5T1	S1	SSC
Spergularia macrotheca var. longistyla long-styled sand-spurrey	PDCAR0W062	None	None	G5T2	S2	1B.2
Speyeria callippe callippe callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
Speyeria zerene myrtleae Myrtle's silverspot butterfly	IILEPJ608C	Endangered	None	G5T1	S1	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Streptanthus albidus ssp. peramoenus most beautiful jewelflower	PDBRA2G012	None	None	G2T2	S2	1B.2
Stuckenia filiformis ssp. alpina northern slender pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
Suaeda californica California seablite	PDCHE0P020	Endangered	None	G1	S1	1B.1
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis sirtalis tetrataenia San Francisco gartersnake	ARADB3613B	Endangered	Endangered	G5T2Q	S2	FP
Trachusa gummifera San Francisco Bay Area leaf-cutter bee	IIHYM80010	None	None	G1	S1	
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Triphysaria floribunda	PDSCR2T010	None	None	G2?	S2?	1B.2
San Francisco owl's-clover						
Triquetrella californica	NBMUS7S010	None	None	G2	S2	1B.2
coastal triquetrella						
Tryonia imitator	IMGASJ7040	None	None	G2	S2	
mimic tryonia (=California brackishwater snail)						
Usnea longissima	NLLEC5P420	None	None	G4	S4	4.2
Methuselah's beard lichen						
Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Needlegrass Grassland						
Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	
Valley Oak Woodland						

Record Count: 150

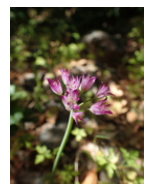
CNPS Rare Plant Inventory

California Native Plant Society

Search Results

97 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [**3712242:3712252:3712262:3712263:3712264:3712244:3712253:3712243:3712254**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Acanthomintha duttonii	San Mateo thorn-mint	Lamiaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1974-01-01	 © 2011 Aaron Schusteff
Agrostis blasdalei	Blasdale's bent grass	Poaceae	perennial rhizomatous herb	May-Jul	None	None	G2G3	S2	1B.2	Yes	1974-01-01	 © 2001 Doreen L. Smith
Allium peninsulare var. *franciscanum*	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G4G5T2	S2	1B.2	Yes	2001-01-01	 © 2019 Aaron Arthur
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01	 © 2011 Neal Kramer
Androsace elongata ssp. *acuta*	California androsace	Primulaceae	annual herb	Mar-Jun	None	None	G5? T3T4	S3S4	4.2		1994-01-01	 © 2008 Aaron Schusteff
Aphyllon robbinsii	Robbins' broomrape	Orobanchaceae	annual herb (achlorophyllous)	Apr-Jul	None	None	G1	S1	1B.1		2023-03-28	 © 2017 Dylan Neubauer

Arabis blepharophylla	coast rockcress	Brassicaceae	perennial herb	Feb-May	None	None	G4	S4	4.3	Yes	1974-01-01
Arctostaphylos andersonii	Anderson's manzanita	Ericaceae	perennial evergreen shrub	Nov-May	None	None	G2	S2	1B.2	Yes	1974-01-01
Arctostaphylos franciscana	Franciscan manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	FE	None	GHC	S1	1B.1	Yes	1974-01-01
Arctostaphylos imbricata	San Bruno Mountain manzanita	Ericaceae	perennial evergreen shrub	Feb-May	None	CE	G1	S1	1B.1	Yes	1974-01-01
Arctostaphylos montana ssp. *ravenii*	Presidio manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar	FE	CE	G3T1	S1	1B.1	Yes	1980-01-01
Arctostaphylos montaraensis	Montara manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	None	None	G1	S1	1B.2	Yes	1974-01-01
Arctostaphylos pacifica	Pacific manzanita	Ericaceae	evergreen shrub	Feb-Apr	None	CE	G1	S1	1B.1	Yes	1974-01-01
Arctostaphylos regismontana	Kings Mountain manzanita	Ericaceae	perennial evergreen shrub	Dec-Apr	None	None	G2	S2	1B.2	Yes	1994-01-01
Astragalus nuttallii var. *nuttallii*	ocean bluff milk-vetch	Fabaceae	perennial herb	Jan-Nov	None	None	G4T4	S4	4.2	Yes	2001-01-01
Astragalus pycnostachyus var. *pycnostachyus*	coastal marsh milk-vetch	Fabaceae	perennial herb	(Apr)Jun-Oct	None	None	G2T2	S2	1B.2	Yes	2001-01-01
Astragalus tener var. *tener*	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	Yes	1994-01-01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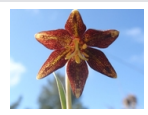
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Calochortus umbellatus	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	None	None	G3?	S3?	4.2	Yes	1980-01-01	No Photo Available
Calochortus uniflorus	pink star-tulip	Liliaceae	perennial bulbiferous herb	Apr-Jun	None	None	G4	S4	4.2		2010-03-04	 © 2021 Scot Loring
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1		1994-01-01	 Dean Wm. Taylor 1997
Castilleja ambigua var. *ambigua*	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	None	None	G4T4	S3S4	4.2		2009-02-04	 ©2011 Dylan Neubauer
Centromadia parryi ssp. *congdonii*	Congdon's tarplant	Asteraceae	annual herb	May-Oct(Nov)	None	None	G3T2	S2	1B.1	Yes	1994-01-01	No Photo Available
Centromadia parryi ssp. *parryi*	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.2	Yes	2004-01-01	 © 2016 John Doyen
Chloropyron maritimum ssp. *palustre*	Point Reyes salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	None	None	G4?T2	S2	1B.2		1974-01-01	 ©2017 John Doyen
Chorizanthe cuspidata var. *cuspidata*	San Francisco Bay spineflower	Polygonaceae	annual herb	Apr-Jul(Aug)	None	None	G2T1	S1	1B.2	Yes	1994-01-01	No Photo Available
Chorizanthe robusta var. *robusta*	robust spineflower	Polygonaceae	annual herb	Apr-Sep	FE	None	G2T1	S1	1B.1	Yes	1980-01-01	No Photo Available
Cirsium andrewsii	Franciscan thistle	Asteraceae	perennial herb	Mar-Jul	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
Cirsium fontinale var. *fontinale*	fountain thistle	Asteraceae	perennial herb	(Apr)May-Oct	FE	CE	G2T1	S1	1B.1	Yes	1974-01-01	No Photo Available
Cirsium occidentale var. *compactum*	compact cobwebby thistle	Asteraceae	perennial herb	Apr-Jun	None	None	G3G4T2	S2	1B.2	Yes	1974-01-01	No Photo Available
Cirsium praeteriens	lost thistle	Asteraceae	perennial herb	Jun-Jul	None	None	GX	SX	1A	Yes	2001-01-01	No Photo Available

Collinsia corymbosa	round-headed collinsia	Plantaginaceae	annual herb	Apr-Jun	None	None	G1	S1	1B.2	Yes	1994-01-01	 ©2007 Steve Matson
Collinsia multicolor	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Cypripedium fasciculatum	clustered lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4	S4	4.2		1980-01-01	 © 2013 Scot Loring
Dirca occidentalis	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2017 Steve Matson
Elymus californicus	California bottle-brush grass	Poaceae	perennial herb	May-Aug(Nov)	None	None	G4	S4	4.3	Yes	1974-01-01	No Photo Available
Eriophyllum latilobum	San Mateo woolly sunflower	Asteraceae	perennial herb	May-Jun	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Eryngium aristulatum var. *hooveri*	Hoover's button-celery	Apiaceae	annual/perennial herb	(Jun)Jul(Aug)	None	None	G5T1	S1	1B.1	Yes	1984-01-01	No Photo Available
Eryngium jepsonii	Jepson's coyote-thistle	Apiaceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	2016-09-13	No Photo Available
Erysimum franciscanum	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1974-01-01	No Photo Available
Fritillaria biflora var. *ineziana*	Hillsborough chocolate lily	Liliaceae	perennial bulbiferous herb	Mar-Apr	None	None	G3G4T1	S1	1B.1	Yes	1994-01-01	 © 2012 Toni Corelli
Fritillaria lanceolata var. *tristulis*	Marin checker lily	Liliaceae	perennial bulbiferous herb	Feb-May	None	None	G5T2	S2	1B.1	Yes	1994-01-01	 © 2020 Barry Rice
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2004 Carol W. Witham
Gilia capitata ssp. *chamissonis*	blue coast gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G5T2	S2	1B.1	Yes	2001-01-01	 © 2017 John Doyen

Gilia millefoliata	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2		2001-01-01
Grindelia hirsutula var. *maritima*	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	None	None	G5T1Q	S1	3.2	Yes	1974-01-01
Helianthella castanea	Diablo helianthella	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01
Hemizonia congesta ssp. *congesta*	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	None	None	G5T2	S2	1B.2	Yes	1988-01-01
Hesperevax sparsiflora var. *brevifolia*	short-leaved evax	Asteraceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2		1994-01-01
Hesperolinon congestum	Marin western flax	Linaceae	annual herb	Apr-Jul	FT	CT	G1	S1	1B.1	Yes	1974-01-01
Heteranthera dubia	water star-grass	Pontederiaceae	perennial herb (aquatic)	Jul-Oct	None	None	G5	S2	2B.2		2013-10-10
Hoita strobilina	Loma Prieta hoita	Fabaceae	perennial herb	May-Jul(Aug-Oct)	None	None	G2?	S2?	1B.1	Yes	2001-01-01
Horkelia cuneata var. *sericea*	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	None	None	G4T1?	S1?	1B.1	Yes	1988-01-01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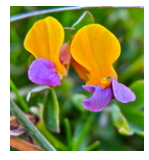
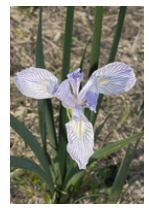
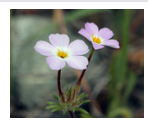
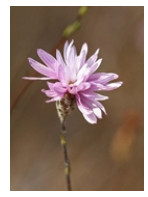
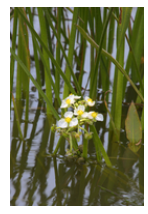
Horkelia marinensis	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2017 John Doyen
Hosackia gracilis	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2		2004-01-01	 © 2015 John Doyen
Hypogymnia schizidiata	island tube lichen	Parmeliaceae	foliose lichen		None	None	G2G3	S2	1B.3		2014-03-01	No Photo Available
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	Yes	2006-10-12	 © 2014 Aaron Schusteff
Lasthenia californica ssp. *macrantha*	perennial goldfields	Asteraceae	perennial herb	Jan-Nov	None	None	G3T2	S2	1B.2	Yes	2001-01-01	 © 2013 John Doyen
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	 © 2013 Neal Kramer
Layia carnosa	beach layia	Asteraceae	annual herb	Mar-Jul	FT	CE	G2	S2	1B.1		1988-01-01	 © 2007 Aaron Schusteff
Leptosiphon ambiguus	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2010 Aaron Schusteff
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01	 © 2007 Len Blumin
Leptosiphon croceus	coast yellow leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	CE	G1	S1	1B.1	Yes	2001-01-01	 © 2018 Neal Kramer

Leptosiphon grandiflorus	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2	Yes	1994-01-01	 © 2003 Doreen L. Smith
Leptosiphon latisectus	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	Yes	2001-01-01	 © 2015 Steve Matson
Leptosiphon rosaceus	rose leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G1	S1	1B.1	Yes	2001-01-01	 © 2013 Aaron Schusteff
Lessingia arachnoidea	Crystal Springs lessingia	Asteraceae	annual herb	Jul-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2008 Neal Kramer
Lessingia germanorum	San Francisco lessingia	Asteraceae	annual herb	(Jun)Jul-Nov	FE	CE	G1	S1	1B.1	Yes	1980-01-01	 © 2019 Aaron Schusteff
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Yes	1994-01-01	 © 2015 Aaron Schusteff
Lessingia tenuis	spring lessingia	Asteraceae	annual herb	May-Jul	None	None	G4	S4	4.3	Yes	1974-01-01	 © 2020 Keir Morse
Limnanthes douglasii ssp. *ornduffii*	Ornduff's meadowfoam	Limnanthaceae	annual herb	Nov-May	None	None	G4T1	S1	1B.1	Yes	2014-03-18	 © 2021 Eva Buxton
Lupinus arboreus var. *eximius*	San Mateo tree lupine	Fabaceae	perennial evergreen shrub	Apr-Jul	None	None	G2Q	S2	3.2	Yes	1980-01-01	No Photo Available
Malacothamnus arcuatus	arcuate bush-mallow	Malvaceae	perennial deciduous shrub	Apr-Sep	None	None	G2Q	S2	1B.2	Yes	1974-01-01	 © 2017 Keir Morse

Monardella sinuata ssp. *nigrescens*	northern curly-leaved monardella	Lamiaceae	annual herb	(Apr)May-Jul(Aug-Sep)	None	None	G3T2	S2	1B.2	Yes	2013-12-31	 © 2014 John Doyen
Monolopia gracilens	woodland woollythreads	Asteraceae	annual herb	(Feb)Mar-Jul	None	None	G3	S3	1B.2	Yes	2010-04-06	 © 2016 Richard Spellenberg
Pentachaeta bellidiflora	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Piperia michaelii	Michael's rein orchid	Orchidaceae	perennial herb	Apr-Aug	None	None	G3	S3	4.2	Yes	1984-01-01	No Photo Available
Plagiobothrys chorisianus var. *chorisianus*	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	None	None	G3T1Q	S1	1B.2	Yes	1984-01-01	No Photo Available
Plagiobothrys chorisianus var. *hickmanii*	Hickman's popcornflower	Boraginaceae	annual herb	Apr-Jun	None	None	G3T3Q	S3	4.2	Yes	2001-01-01	No Photo Available
Polemonium carneum	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	None	None	G3G4	S2	2B.2		2008-11-03	 ©2018 John Doyen
Polygonum marinense	Marin knotweed	Polygonaceae	annual herb	(Apr)May-Aug(Oct)	None	None	G2Q	S2	3.1	Yes	1974-01-01	No Photo Available
Potentilla hickmanii	Hickman's cinquefoil	Rosaceae	perennial herb	Apr-Aug	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2		1974-01-01	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Sanicula maritima	adobe sanicle	Apiaceae	perennial herb	Feb-May	None	CR	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2		1994-01-01	No Photo Available

Silene scouleri ssp. *scouleri*	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	None	None	G5T4T5	S2S3	2B.2		2017-12-13	 ©2015 Vernon Smith
Silene verecunda ssp. *verecunda*	San Francisco campion	Caryophyllaceae	perennial herb	(Feb)Mar-Jul(Aug)	None	None	G5T1	S1	1B.2	Yes	1980-01-01	No Photo Available
Spergularia macrotheca var. *longistyla*	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May	None	None	G5T2	S2	1B.2	Yes	2017-06-16	No Photo Available
Streptanthus albidus ssp. *peramoenus*	most beautiful jewelflower	Brassicaceae	annual herb	(Mar)Apr-Sep(Oct)	None	None	G2T2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
Stuckenia filiformis ssp. *alpina*	northern slender pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	None	None	G5T5	S2S3	2B.2		1994-01-01	 Dana York (2016)
Suaeda californica	California seablite	Chenopodiaceae	perennial evergreen shrub	Jul-Oct	FE	None	G1	S1	1B.1	Yes	1988-01-01	No Photo Available
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01	 © 2005 Dean Wm Taylor
Triphysaria floribunda	San Francisco owl's-clover	Orobanchaceae	annual herb	Apr-Jun	None	None	G2?	S2?	1B.2	Yes	1974-01-01	No Photo Available
Triquetrella californica	coastal triquetrella	Pottiaceae	moss		None	None	G2	S2	1B.2		2001-01-01	No Photo Available
Usnea longissima	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2		2014-03-01	 © 2021 Scot Loring

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Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 26 September 2023].

The potential for each species to occur in the Project Area was assessed using the criteria outlined below.

None: the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.

Not Expected: suitable habitat or key habitat elements might be present but might be of poor quality or isolated from the nearest extant occurrences, and/or the species is not known to occur in the area.

Possible: presence of suitable habitat or key habitat elements that potentially support the species.

Present: the species was either observed directly or its presence was confirmed by field investigations or in previous studies in the area.

Table C-1. Special-Status Plant Species Special Status Plant Species Known to Occur in the Vicinity of the Proposed Project and Their Potential to Occur in the Project Area

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Acanthomintha duttonii San Mateo thorn-mint	FE / SE / 1B.1	Chaparral, valley and foothill grassland. Uncommon serpentinite vertisol clays; in relatively open areas. 50-185 m.	**None.** Suitable habitat is not present in the Project.
Agrostis blasdalei Blasdale's bent grass	- / - / 1B.2	Coastal dunes, coastal bluff scrub, coastal prairie. Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 5-365 m.	**None.** Suitable habitat is not present in the Project.
Allium peninsulare var. franciscanum Franciscan onion	- / - / 1B.2	Cismontane woodland, valley and foothill grassland. Clay soils; often on serpentine; sometimes on volcanics. Dry hillsides. 5-320 m.	**Possible.** Presence of marginally suitable habitat present in Project. Closest recorded occurrence ~ 1.5 miles to the west within Belmont Creek watershed (CNDDB 2023).
Amsinckia lunaris bent-flowered fiddleneck	- / - / 1B.2	Cismontane woodland, valley and foothill grassland, coastal bluff scrub. 3-795 m.	**Possible.** Presence of marginally suitable habitat present in Project. Closest recorded occurrence ~ 3.4 miles to the west (CNDDB 2023).
Arctostaphylos andersonii Anderson's manzanita	- / - / 1B.2	Broadleafed upland forest, chaparral, north coast coniferous forest. Open sites, redwood forest. 95-765 m.	**None.** Suitable habitat is not present in the Project.
Arctostaphylos franciscana Franciscan manzanita	FE / - / 1B.1	Chaparral. Serpentine outcrops in chaparral. 30-215 m.	**None.** Suitable habitat is not present in the Project.
Arctostaphylos imbricata San Bruno Mountain manzanita	- / SE / 1B.1	Chaparral, coastal scrub. Mostly known from a few sandstone outcrops in chaparral. 275-305 m.	**None.** The Project is not within the elevation range for this species.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Arctostaphylos montana ssp. *ravenii* Presidio manzanita	FE / SE / 1B.1	Chaparral, coastal prairie, coastal scrub. Open, rocky serpentine slopes. 20-215 m.	**None.** Suitable habitat is not present in the Project.
Arctostaphylos montaraensis Montara manzanita	- / - / 1B.2	Chaparral, coastal scrub. Slopes and ridges. 270-460 m.	**None.** Suitable habitat is not present in the Project.
Arctostaphylos pacifica Pacific manzanita	- / SE / 1B.1	Coastal scrub, chaparral. 320 m.	**None.** Suitable habitat is not present in the Project.
Arctostaphylos regismontana Kings Mountain manzanita	- / - / 1B.2	Broadleafed upland forest, chaparral, north coast coniferous forest. Granitic or sandstone outcrops. 240-705 m.	**None.** Suitable habitat is not present in the Project.
Astragalus pycnostachyus var. *pycnostachyus* coastal marsh milk-vetch	- / - / 1B.2	Coastal dunes, marshes and swamps, coastal scrub. Mesic sites in dunes or along streams or coastal salt marshes. 0-155 m.	**None.** Suitable habitat is not present in the Project.
Astragalus tener var. *tener* alkali milk-vetch	- / - / 1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-170 m.	**None.** Suitable habitat is not present in the Project.
Carex comosa bristly sedge	-/-	Marshes and swamps, coastal prairie, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta island. 5-1010 m.	**Not expected.** Marginally suitable habitat is present in the Project. No recorded occurrences within 5 miles of Project (CNDDB 2023).
Centromadia parryi ssp. *congdonii* Congdon's tarplant	- / - / 1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0-245 m.	**None.** Suitable habitat is not present in the Project.
Centromadia parryi ssp. *parryi* pappose tarplant	- / - / 1B.2	Chaparral, coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland. Vernally mesic, often alkaline sites. 1-500 m.	**None.** Suitable habitat is not present in the Project.
Chloropyron maritimum ssp. *palustre* Point Reyes salty bird's-beak	- / - / 1B.2	Coastal salt marsh. Usually in coastal salt marsh with *Salicornia, Distichlis, Jaumea, Spartina*, etc. 0-115 m.	**None.** Suitable habitat is not present in the Project.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Chorizanthe cuspidata var. *cuspidata* San Francisco Bay spineflower	- / - / 1B.2	Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. Closely related to *C. pungens*. Sandy soil on terraces and slopes. 2-550 m.	**None.** Suitable habitat is not present in the Project.
Chorizanthe robusta var. *robusta* robust spineflower	FE / - / 1B.1	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. 5-245 m.	**None.** Suitable habitat is not present in the Project.
Cirsium andrewsii Franciscan thistle	- / - / 1B.2	Coastal bluff scrub, broadleafed upland forest, coastal scrub, coastal prairie. Sometimes serpentine seeps. 0-295 m.	**None.** Suitable habitat is not present in the Project.
Cirsium fontinale var. *fontinale* fountain thistle	FE / SE / 1B.1	Valley and foothill grassland, chaparral, cismontane woodland, meadows and seeps. Serpentine seeps and grassland. 45-185 m.	**Not expected.** Marginally suitable habitat is present in the Project. Nearest occurrence record is located ~3.25 miles to the west (CNDDB 2023).
Cirsium occidentale var. *compactum* compact cobwebby thistle	- / - / 1B.2	Chaparral, coastal dunes, coastal prairie, coastal scrub. On dunes and on clay in chaparral; also in grassland. 5-245 m.	**None.** Suitable habitat is not present in the Project.
Cirsium praeteriens lost thistle	- / - / 1A	Little information exists on this plant; it was collected from the Palo Alto area at the turn of the 20th Century. Although not seen since 1901, this Cirsium is thought to be quite distinct from other *Cirsiums* acc. to D. Keil. 0-100 m.	**None.** Suitable habitat is not present in the Project.
Collinsia corymbosa round-headed Chinese-houses	- / - / 1B.2	Coastal dunes. 0-30 m.	**None.** Suitable habitat is not present in the Project.
Collinsia multicolor San Francisco collinsia	- / - / 1B.2	Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus; sometimes on serpentine. 10-275 m.	**Possible** Suitable habitat present in the Project. Nearest occurrence record within Belmont Creek watershed ~1.5 miles to the west (CNDDB 2023)

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Dirca occidentalis western leatherwood	- / - / 1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. 20-640 m.	**Possible.** Suitable habitat present in the Project. Nearest occurrence record within Belmont Creek watershed ~1.5 miles to the west.
Eriophyllum latilobum San Mateo woolly sunflower	FE / SE / 1B.1	Cismontane woodland, coastal scrub, lower montane coniferous forest. Often on roadcuts; found on and off of serpentine. 30-610 m.	**Possible.** Suitable habitat present in the Project. Nearest occurrence record ~4 miles to the north west.
Eryngium aristulatum var. *hooveri* Hoover's button-celery	- / - / 1B.1	Vernal pools. Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. 1-50 m.	**None.** Suitable habitat is not present in the Project.
Eryngium jepsonii Jepson's coyote-thistle	- / - / 1B.2	Vernal pools, valley and foothill grassland. Clay. 3-305 m.	**None.** Suitable habitat is not present in the Project.
Fritillaria biflora var. *ineziana* Hillsborough chocolate lily	- / - / 1B.1	Cismontane woodland, valley and foothill grassland. Probably only on serpentine; most recent site is in serpentine grassland. 90-170 m.	**None.** Suitable habitat is not present in the Project.
Fritillaria lanceolata var. tristulis *Marin checker lily*	- / - / 1B.1	Coastal bluff scrub, coastal scrub, coastal prairie. Occurrences reported from canyons and riparian areas as well as rock outcrops; often on serpentine. 30-300m.	**None.** Suitable habitat is not present in the Project.
Fritillaria liliacea fragrant fritillary	- / - / 1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 3-385 m.	**None.** Suitable habitat is not present in the Project. Nearest occurrence record is located approximately ~3 miles to the north west (CNDDB 2023).
Gilia capitata ssp. *chamissonis* blue coast gilia	- / - / 1B.1	Coastal dunes, coastal scrub. 3-200 m.	**None.** Suitable habitat is not present in the Project.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Gilia millefoliata dark-eyed gilia	- / - / 1B.2	Coastal dunes. 1-60 m.	**None.** Suitable habitat is not present in the Project.
Grindelia hirsutula var. *maritima* San Francisco gumplant	- / - / 3.2	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Sandy or serpentine slopes, sea bluffs. 15-305 m.	**None.** Suitable habitat is not present in the Project.
Helianthella castanea Diablo helianthella	- / - / 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. 45-1070 m.	**Not expected.** Marginal suitable habitat in the Project Site. No recorded occurrences within 5 miles of Project (CNDDB 2023).
Hemizonia congesta ssp. *congesta* congested-headed hayfield tarplant	- / - / 1B.2	Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. 5-520 m.	**None.** Suitable habitat is not present in the Project.
Hesperevax sparsiflora var. *brevifolia* short-leaved evax	- / - / 1B.2	Coastal bluff scrub, coastal dunes, coastal prairie. Sandy bluffs and flats. 0-640 m.	**None.** Suitable habitat is not present in the Project.
Hesperolinon congestum Marin western flax	FT / ST / 1B.1	Chaparral, valley and foothill grassland. In serpentine barrens and in serpentine grassland and chaparral. 60-400 m.	**None.** Suitable habitat is not present in the Project.
Heteranthera dubia water star-grass	- / - / 2B.2	Marshes and swamps. Alkaline, still or slow-moving water. Requires a pH of 7 or higher, usually in slightly eutrophic waters. 15-1510 m.	**None.** Suitable habitat is not present in the Project.
Hoita strobilina Loma Prieta hoita	- / - / 1B.1	Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. 60-975 m.	**None.** Although **s**uitable habitat is present in the Project. This species is not known for San Mateo County.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Horkelia cuneata var. *sericea* Kellogg's horkelia	- / - / 1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	**None.** Suitable habitat is not present in the Project.
Horkelia marinensis Point Reyes horkelia	- / - / 1B.2	Coastal dunes, coastal prairie, coastal scrub. Sandy flats and dunes near coast; in grassland or scrub plant communities. 2-775 m.	**None.** Suitable habitat is not present in the Project.
Hypogymnia schizidiata island tube lichen	- / - / 1B.3	Chaparral, closed-cone coniferous forest. On bark and wood of hardwoods and conifers. 255-545 m.	**None.** Suitable habitat is not present in the Project.
Lasthenia californica ssp. *macrantha* perennial goldfields	- / - / 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. 5-185 m.	**None.** Suitable habitat is not present in the Project.
Lasthenia conjugens Contra Costa goldfields	FE / - / 1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-450 m.	**None.** Suitable habitat is not present in the Project. Not known in San Mateo County.
Layia carnosa beach layia	FE / SE / 1B.1	Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 3-30 m.	**None.** Suitable habitat is not present in the Project.
Leptosiphon croceus coast yellow leptosiphon	- / SE / 1B.1	Coastal bluff scrub, coastal prairie. 10-150 m.	**None.** Suitable habitat is not present in the Project.
Leptosiphon rosaceus rose leptosiphon	- / - / 1B.1	Coastal bluff scrub. 10-140 m.	**None.** Suitable habitat is not present in the Project.
Lessingia arachnoidea Crystal Springs lessingia	- / - / 1B.2	Coastal sage scrub, valley and foothill grassland, cismontane woodland. Grassy slopes on serpentine; sometimes on roadsides. 90-200 m.	**None.** Suitable habitat is not present in the Project.
Lessingia germanorum San Francisco lessingia	FE / SE / 1B.1	Coastal scrub. On remnant dunes. Open sandy soils relatively free of competing plants. 3-155 m.	**None.** Suitable habitat is not present in the Project.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Limnanthes douglasii ssp. *ornduffii* Ornduff's meadowfoam	- / - / 1B.1	Meadows and seeps, agricultural fields. 5-15 m.	**None.** Suitable habitat is not present in the Project.
Malacothamnus arcuatus arcuate bush-mallow	- / - / 1B.2	Chaparral, cismontane woodland. Gravelly alluvium. 1-735 m.	**None.** Suitable habitat is not present in the Project.
Monardella sinuata ssp. *nigrescens* northern curly-leaved monardella	- / - / 1B.2	Coastal dunes, coastal scrub, chaparral, lower montane coniferous forest. Sandy soils. 10-245 m.	**None.** Suitable habitat is not present in the Project.
Monolopia gracilens woodland woollythreads	- / - / 1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. 120-975 m.	**None.** The Project is not within the elevation range for this species.
Pentachaeta bellidiflora white-rayed pentachaeta	FE / SE / 1B.1	Valley and foothill grassland, cismontane woodland. Open dry rocky slopes and grassy areas, often on soils derived from serpentine bedrock. 35-610 m.	**None.** Suitable habitat is not present in the Project.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	- / - / 1B.2	Chaparral, coastal scrub, coastal prairie. Mesic sites. 5-705 m.	**None.** Suitable habitat is not present in the Project.
Polemonium carneum Oregon polemonium	- / - / 2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest. 15-1525 m.	**None.** Suitable habitat is not present in the Project.
Polygonum marinense Marin knotweed	- / - / 3.1	Marshes and swamps. Coastal salt marshes and brackish marshes. 0-10 m.	**None.** Suitable habitat is not present in the Project.
Potentilla hickmanii Hickman's cinquefoil	FE / SE / 1B.1	Coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, marshes and swamps. Freshwater marshes, seeps, and small streams in open or forested areas along the coast. 5-125 m.	**Not expected.** Nearest recorded occurrence to Project is located ~8 miles to the north west.
Sagittaria sanfordii Sanford's arrowhead	- / - / 1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m.	**None.** Suitable habitat is not present in the Project.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Sanicula maritima adobe sanicle	- / SR / 1B.1	Meadows and seeps, valley and foothill grassland, chaparral, coastal prairie. Moist clay or ultramafic soils. 15-215 m.	**Not expected.** This species is presumed extirpated in San Mateo County (CNPS 2022).
Senecio aphanactis chaparral ragwort	- / - / 2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 20-1020 m.	**None.** Suitable habitat is not present in the Project.
Silene scouleri ssp. *scouleri* Scouler's catchfly	- / - / 2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland. 5-315 m.	**None.** Suitable habitat is not present in the Project.
Silene verecunda ssp. *verecunda* San Francisco campion	- / - / 1B.2	Coastal scrub, valley and foothill grassland, coastal bluff scrub, chaparral, coastal prairie. Often on mudstone or shale; one site on serpentine. 30-645 m.	**None.** Suitable habitat is not present in the Project.
Spergularia macrotheca var. *longistyla* long-styled sand-spurrey	- / - / 1B.2	Marshes and swamps, meadows and seeps. Alkaline. 0-220 m.	**None.** Suitable habitat is not present in the Project. This species is presumed extirpated in San Mateo County (CNPS 2023).
Streptanthus albidus ssp. *peramoenus* most beautiful jewelflower	- / - / 1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 90-1040 m.	**None.** Suitable habitat is not present in the Project. This species is presumed extirpated in San Mateo County (CNPS 2023).
Stuckenia filiformis ssp. *alpina* northern slender pondweed	- / - / 2B.2	Marshes and swamps. Shallow, clear water of lakes and drainage channels. 5-2,325 m.	**None.** Suitable habitat is not present in the Project.
Suaeda californica California seablite	FE / - / 1B.1	Marshes and swamps. Margins of coastal salt marshes. 0-5 m.	**None.** Suitable habitat is not present in the Project.
Trifolium amoenum two-fork clover	FE / - / 1B.1	Valley and foothill grassland, coastal bluff scrub. Sometimes on serpentine soil, open sunny sites, swales. Most recently cited on roadside and eroding cliff face. 5-310 m.	**None.** Suitable habitat is not present in the Project.

Scientific Name **Common Name**	**Listing status* (Federal/ State/CNPS)**	**Habitat Association**	**Potential to Occur in the Project**
Trifolium hydrophilum saline clover	- / - / 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m.	**None.** Suitable habitat is not present in the Project.
Triphysaria floribunda San Francisco owl's-clover	- / - / 1B.2	Coastal prairie, coastal scrub, valley and foothill grassland. On serpentine and non-serpentine substrate (such as at Pt. Reyes). 1-150 m.	**None.** Suitable habitat is not present in the Project.
Triquetrella californica coastal triquetrella	- / - / 1B.2	Coastal bluff scrub, coastal scrub. Grows within 30m from the coast in coastal scrub, grasslands and in open gravels on roadsides, hillsides, rocky slopes, and fields. On gravel or thin soil over outcrops. 20-1175 m.	**None.** Suitable habitat is not present in the Project.
Usnea longissima Methuselah's beard lichen	- / - / 4.2	North coast coniferous forest, broadleafed upland forest. Grows in the "redwood zone" on tree branches of a variety of trees, including big leaf maple, oaks, ash, Douglas-fir, and bay. 45-1465 m in California.	**Not expected.** This species is presumed extirpated in San Mateo County (CNPS 2023).

* List of Abbreviations for Species Status follow below:
FE = Federal endangered
FT = Federal threatened
FC = Federal Candidate
SC = State Candidate
SE = State Endangered (California)
ST = State Threatened (California)
SR = State Rare (California)
SCC = Species of Special Concern
FP= Fully Protected

References:
California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database.

CA Rare Plant Rank
1A = Plants presumed extinct in California and rare/extinct elsewhere
1B.1 = Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2 = Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
1B.3 = Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California
2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

Table C-2. Special-Status Wildlife Species Known to Occur in the Vicinity of the Proposed Project and Their Potential to Occur in the Project Area

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
Invertebrates			
Bombus crotchii Crotch bumble bee	- /SC	Coastal areas east to the Sierra-Cascade crest and south into Mexico. Food plant include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum*.	**Not expected.** Suitable foraging habitat present in the vicinity of Project. The Project area generally lacks key habitat elements for crotch bumble bee as a result of anthropomorphic disturbance. Site modifications limit suitable food supply (flowers that produce the nectar and pollen they require), nest sites (e.g. abandoned rodent), and hibernation sites for over-wintering. No CNDDB occurrences within 5 miles of Project. Project is within the historic range and mapped range of this species (CDFW 2023)
Bombus occidentalis western bumble bee	- /SC	Open grasslands, shrublands, chaparral, desert margins, including Joshua tree and creosote scrub, and semi-urban settings. Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease. Western bumble bee populations in California are currently largely restricted to high elevation sites in the Sierra Nevada and a few records on the northern California coast (Xerces Society et al. 2018). Food plant include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum*.	**None.** The Project is within the historic range of this species; however, it is not within the current mapped range (CDFW 2023). Nearest CNDDB occurrence ~2.5 miles to the south of Project

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
			in Redwood City from 1963 (CNDDB 2023).
Callophrys mossii bayensis San Bruno elfin butterfly	FE/-	Coastal, mountainous areas with grassy ground cover, mainly in the vicinity of San Bruno Mountain, San Mateo County. Colonies are located on steep, north-facing slopes within the fog belt. Larval host plant is *Sedum spathulifolium.*	**None.** Suitable habitat is not present in the Project.
Danaus plexippus monarch butterfly	FC/-	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Possible.** Marginally suitable foraging habitat present in Project.
Euphydryas editha bayensis Bay checkerspot butterfly	FT/-	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant*; Orthocarpus densiflorus* and *O. purpurscens* are the secondary host plants.	**None.** Suitable habitat is not present in the Project.
Icaricia icarioides missionensis Mission blue butterfly	FE/-	Inhabits grasslands of the San Francisco peninsula. Three larval host plants: *Lupinus albifrons, L. variicolor,* and *L. formosu*s, of which *L. albifrons* is favored.	**None.** Suitable habitat is not present in the Project.
Speyeria callippe callippe callippe silverspot butterfly	FE/-	Restricted to the northern coastal scrub of the San Francisco peninsula. Hostplant is *Viola pedunculata*. Most adults found on E-facing slopes; males congregate on hilltops in search of females.	**None.** Suitable habitat is not present in the Project.
Speyeria zerene myrtleae Myrtle's silverspot butterfly	FE/-	Restricted to the foggy, coastal dunes/hills of the Point Reyes peninsula; extirpated from coastal San Mateo County. Larval foodplant thought to be *Viola adunca*.	**None.** Suitable habitat is not present in the Project.
Tryonia imitator mimic tryonia (=California brackishwater snail)	-/-	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	**None.** Suitable habitat is not present in the Project.
Amphibians			
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	FT/ST	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**None.** Suitable habitat is not present in the Project. Dense urban development surrounding the Project area restricts species dispersal.

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
Aneides niger Santa Cruz black salamander	-/SSC	Mixed deciduous and coniferous woodlands and coastal grasslands in San Mateo, Santa Cruz, and Santa Clara counties. Adults found under rocks, talus, and damp woody debris.	**Not expected.** Recorded occurrence ~5 miles west of the Project area. Dense urban development surrounding the Project area restricts species dispersal.
Dicamptodon ensatus California giant salamander	- / SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	**Not expected.** Recorded occurrence ~7 miles west of the Project area. Dense urban development surrounding the Project area restricts species dispersal.
Rana boylii foothill yellow-legged frog	- / SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	**None.** Suitable habitat is not present in the Project.
Rana draytonii California red-legged frog	FT / SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**Possible**. Marginally suitable habitat in Project. Potential for stochastic dispersal into Belmont Creek watershed. Recorded occurrence ~3 miles west of the Project area.
Taricha rivularis red-bellied newt	- / SSC	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Isolated population of uncertain origin in Santa Clara County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean rocky substrate.	**Not expected**. Marginally suitable habitat in Project. Nearest current recorded occurrence ~16 miles south of the Project area.
Reptiles			

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
Chelonia mydas green sea turtle	FT/ --/--	Globally distributed and generally found in tropical and subtropical waters along continental coasts and islands between 30° North and 30° South. In the eastern North Pacific, occurs from Baja California to southern Alaska. Nests on oceanic beaches, feeds in benthic grounds in coastal areas, and frequents convergence zones in the open ocean.	**None.** Suitable habitat is not present in the Project.
Emys marmorata western pond turtle	- / SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Possible**. Marginally suitable habitat in Project. Potential for stochastic dispersal into Belmont Creek watershed. Recorded occurrence ~3 miles west of the Project area.
Thamnophis sirtalis tetrataenia San Francisco gartersnake	FE/SE/FP	Vicinity of freshwater marshes, ponds and slow-moving streams in San Mateo County and extreme northern Santa Cruz County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also very important.	**Possible**. Marginally suitable habitat in Project. Project area is within a current recorded occurrence.
Fish			
Acipenser medirostris pop. 1 green sturgeon - southern DPS	- / SSC	The green sturgeon ranges from Mexico to at least Alaska in marine waters, and is observed in bays and estuaries up and down the west coast of North America. Green sturgeon are believed to spawn in the Rogue River, Klamath River Basin, and the Sacramento River, and rarely occur in the Umpqua River. Green sturgeon appear to occasionally occupy the Eel River, and may also be using the Trinity River.	**None.** Suitable habitat is not present in the Project.
Archoplites interruptus Sacramento perch	- / SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essental for young. Tolerates wide range of physio-chemical water conditions.	**None.** Suitable habitat is not present in the Project.
Eucyclogobius newberryi tidewater goby	FE / SSC / -	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**None.** Suitable habitat is not present in the Project.
Hypomesus transpacificus Delta smelt	FT / SE / -	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	**None.** Suitable habitat is not present in the Project.

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
Mylopharodon conocephalus *hardhead*	- / - /SSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	**None.** Suitable habitat is not present in the Project.
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	FT / - / -	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.	**None.** Suitable habitat is not present in the Project. Closest recorded occurrence ~10 miles west of the Project area. Lower reach of Belmont Creek culverted several times. Not a recorded fish barrier.
Spirinchus thaleichthys longfin smelt	FC /ST, SSC	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	**None.** Suitable habitat is not present in the Project.
Birds			
Agelaius tricolor Tricolored Blackbird	- / SC, SCC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**None.** Suitable habitat is not present in the Project.
Aquila chrysaetos Golden Eagle	- / FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**None.** Suitable habitat is not present in the Project.
Asio flammeus Short-Eared Owl	- / SSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	**None.** Suitable habitat is not present in the Project
Athene cunicularia Burrowing Owl	- / SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**None.** Suitable habitat is not present in the Project
Brachyramphus marmoratus Marbled Murrelet	FT / SE	Found from the western Aleutian Islands through northern central California. Nests from May through early August in Washington. Outside of the breeding season, found in coastal areas, mainly in salt water within 2 km of shore, including bays and	**None.** Suitable habitat is not present in the Project

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
		sounds. Nests in trees in terrestrial habitat including alpine, conifer forest, and Tundra	
Buteo swainsoni Swainson's Hawk	- / ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**None.** Suitable habitat is not present in the Project
Charadrius alexandrinus nivosus Western Snowy Plover	FT / SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**None.** Suitable habitat is not present in the Project
Circus cyaneus Northern Harrier	- / SSC	Coastal salt and fresh-water marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	**None.** Suitable habitat is not present in the Project
Coturnicops noveboracensis yellow rail	- / SSC	Summer resident in eastern Sierra Nevada in Mono County. Marshlands.	**None.** Suitable habitat is not present in the Project
Cypseloides niger Black Swift	- / SSC	Coastal belt of Santa Cruz and Monterey Counties; central and southern Sierra Nevada; San Bernardino and San Jacinto Mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely	**None.** The Project is not within the known breeding range of this species.
Elanus leucurus White-Tailed Kite	- / 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.	**Not expected.** Marginally suitable habitat is present in the Project.
Falco peregrinus anatum American Peregrine Falcon	FDL / SDL, FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	**None.** Suitable habitat is not present in the Project.
Geothlypis trichas sinuosa Saltmarsh Common Yellowthroat	- / 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.	**None.** Suitable habitat is not present in the Project
Haliaeetus leucocephalus Bald Eagle	FDL / SE, FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mi of water. Nests in large, old-growth, or dominant live tree w/open branches, especially ponderosa pine. Roosts communally in winter.	**None.** Suitable habitat is not present in the Project.

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
Laterallus jamaicensis coturniculus California Black Rail	- / 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.	**None.** Suitable habitat is not present in the Project.
Melospiza melodia maxillaris Suisun Song Sparrow	- / SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and *Salicornia;* also known to frequent tangles bordering sloughs.	**None.** Suitable habitat is not present in the Project.
Melospiza melodia pusillula Alameda Song Sparrow	- / SSC	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits *Salicornia* marshes; nests low in *Grindelia* bushes (high enough to escape high tides) and in *Salicornia*.	**None.** Suitable habitat is not present in the Project.
Melospiza melodia samuelis San Pablo Song Sparrow	- / SSC	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the *Salicornia* marshes; nests in *Grindelia* bordering slough channels.	**None.** Suitable habitat is not present in the Project
Rallus longirostris obsoletus California Clapper Rail	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.	**None.** Suitable habitat is not present in the Project.
Riparia riparia Bank Swallow	- / ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**None.** Suitable habitat is not present in the Project.
Sternula antillarum browni California Least Tern	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.	**None.** Suitable habitat is not present in the Project
Strix occidentalis caurina Northern Spotted Owl	FT / ST, SSC	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests w/patches of big trees. High, multistory canopy dominated by big trees, many trees w/cavities or broken tops, woody debris and space under canopy.	**None.** Suitable habitat is not present in the Project.
Xanthocephalus xanthocephalus Yellow-Headed Blackbird	- / SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	**None.** Suitable habitat is not present in the Project
Mammals			
Antrozous pallidus pallid bat	- / SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Possible.** Marginally suitable foraging habitat is present in the Project.

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project
Corynorhinus townsendii Townsend's big-eared bat	- / SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Possible.** Marginally suitable foraging habitat is present in the Project.
Microtus californicus sanpabloensis San Pablo vole	- / SSC	Saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay. Constructs burrow in soft soil. Feeds on grasses, sedges and herbs. Forms a network of runways leading from the burrow	**None.** The Project is not within the known current range of this species.
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	- / SSC	Forest habitats of moderate canopy and moderate to dense understory. May prefer chaparral and redwood habitats. Constructs nests of shredded grass, leaves and other material. May be limited by availability of nest-building materials.	**Possible.** Suitable habitat is present in the Project.
Nyctinomops macrotis big free-tailed bat	- / SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	**None.** Suitable habitat is not present in the Project.
Reithrodontomys raviventris salt marsh harvest mouse	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.	**None.** Suitable habitat is not present in the Project.
Sorex ornatus sinuosus Suisun shrew	- / SSC	Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying cover and driftweed and other litter above the mean hightide line for nesting and foraging.	**None.** Suitable habitat is not present in the Project.
Sorex vagrans halicoetes salt-marsh wandering shrew	- / SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6-8 ft above sea level where abundant driftwood is scattered among *Salicornia*.	**None.** Suitable habitat is not present in the Project.
Taxidea taxus American badger	- / SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**None.** Suitable habitat is not present in the Project.

*** List of Abbreviations for Federal and State Species Status follow below:** **FE = Federal endangered** **FT = Federal threatened** **FC = Federal candidate**	**SE = State endangered** **ST = State threatened** **SC = State candidate** **SSC = Species of special concern (CDFW)** **FP = Fully protected (CDFW)**

Source: California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database

Appendix D

Native American Correspondence Log

Native American Correspondence Log

No.	Date	From	To	CC	Type	Subject
1	August 17, 2022	Robin Hoffman (Environmental Science Associates [ESA])	California Native American Heritage Commission (NAHC) General Information		email with attachment (1, formal Sacred Lands File (SLF) search and Native American contacts request with attachment)	Request for a SLF search and Native American contacts list for the Twin Pines Park Storm Water Capture Project.
2	September 29, 2022	Cody Campagne (NAHC)	Robin Hoffman (ESA)		email with attachment (2 - SLF results; contacts list)	SLF search results (negative) and list of eight Native American contacts representing six California Native American Tribes.
3	February 13, 2023	Robin Hoffman (ESA)	Tony Cerda (Chairperson, Costanoan Rumsen Carmel Tribe)	Selena Lau (City of Belmont [City]); Karen Lancelle (ESA); Merrill Taylor (Craft Water [CW])	email with attachment (1 - formal notification), with delivery receipt	Background on both Twin Pines Park Storm Water Capture Project (Storm Water Project) and Belmont Creek Restoration Project, including results of preliminary cultural resources study, and request that Tribe contact ESA and/or the City if they would like to participate in development of the Archaeological Testing Plan (ATP) and/or have concerns regarding potential impacts from the projects on cultural resources or tribal cultural resources.
4	February 13, 2023	Robin Hoffman (ESA)	Andrew Galvan (Chairperson, The Ohlone Indian Tribe [TOIT])	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification), with delivery receipt	Background on both Storm Water Project and Belmont Creek Restoration Project, including results of preliminary cultural resources study, and request that Tribe contact ESA and/or the City if they would like to participate in development of the ATP and/or have concerns regarding potential impacts from the projects on cultural resources or tribal cultural resources.
5	February 13, 2023	Robin Hoffman (ESA)	Charlene Nijmeh (Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area [MOIT])	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification), with delivery receipt	Background on both Storm Water Project and Belmont Creek Restoration Project, including results of preliminary cultural resources study, and request that Tribe contact ESA and/or the City if they would like to participate in development of the ATP and/or have concerns regarding potential impacts from the projects on cultural resources or tribal cultural resources.
6	February 13, 2023	Robin Hoffman (ESA)	Ann Marie Sayers (Chairperson, Indian Canyon Mutsun Band of Costanoan)	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification), with delivery receipt	Background on both Storm Water Project and Belmont Creek Restoration Project, including results of preliminary cultural resources study, and request that Tribe contact ESA and/or the City if they would like to participate in development of the ATP and/or have concerns regarding potential impacts from the projects on cultural resources or tribal cultural resources.
7	February 13, 2023	Robin Hoffman (ESA)	Kenneth Woodrow (Chairperson, Wuksache Indian Tribe/Eshom Valley Band)	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification), with delivery receipt	Background on both Storm Water Project and Belmont Creek Restoration Project, including results of preliminary cultural resources study, and request that Tribe contact ESA and/or the City if they would like to participate in development of the ATP and/or have concerns regarding potential impacts from the projects on cultural resources or tribal cultural
8	February 13, 2023	Robin Hoffman (ESA)	Irene Zwierlein (Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista)	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification), with delivery receipt	Background on both Storm Water Project and Belmont Creek Restoration Project, including results of preliminary cultural resources study, and request that Tribe contact ESA and/or the City if they would like to participate in development of the ATP and/or have concerns regarding potential impacts from the projects on cultural resources or tribal cultural resources.
9	April 11, 2023	Robin Hoffman (ESA)	Monica Arellano (Vice Chairperson, MOIT)		phone call	Voicemail box was full.
10	April 11, 2023	Robin Hoffman (ESA)	Monica Arellano (MOIT)	Charlene Nijmeh (MOIT), Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification)	Follow-up email to original notification email and letter explaining that City seeks Tribal input on the archaeological testing. [Email responded as undeliverable]
11	April 17, 2023	Robin Hoffman (ESA)	Andrew Galvan (TOIT)		phone call and voicemail	Follow-up call/message to original notification email and letter explaining that City seeks Tribal input on the archaeological testing.
12	April 17, 2023	Robin Hoffman (ESA)	Andrew Galvan (TOIT)	Desiree Vigil (THPO, TOIT), Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification)	Follow-up email to original notification email and letter explaining that City seeks Tribal input on the archaeological testing.
13	April 17, 2023	Andrew Galvan (TOIT)	Robin Hoffman (ESA)		phone call and voicemail	Stating that Tribe is interested in participating in the project.
14	April 18, 2023	Robin Hoffman (ESA)	Andrew Galvan (TOIT)		phone call	Discussed project and City's desire for Tribal input in archaeological testing program and IS/MND review. Galvan requested that Hoffman send him an email with the cultural resources survey report, City project contacts, and request for Galvan to send a rate sheet for consultation and fieldwork labor and expenses.
15	April 18, 2023	Robin Hoffman (ESA)	Andrew Galvan (TOIT)	Desiree Vigil (THPO, TOIT), Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email with attachment (1 - formal notification)	Providing original project notification, link to download cultural resources survey report for the project, provided City point of contact, requested that Tribe provide rate sheet for consultation services, and summarized proposed archaeological testing program key steps and requested Tribal input.
16	April 28, 2023	Robin Hoffman (ESA)	Andrew Galvan (TOIT)	Desiree Vigil (THPO, TOIT), Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email	Follow-up to 04/18/2023 email to Galvan.
17	April 28, 2023	Andrew Galvan (TOIT)	Robin Hoffman (ESA)		call	Stating that Galvan will review the Project background and cultural resources tech report and also send along Tribe's rate schedule soon.
18	May 3, 2023	Robin Hoffman (ESA)	Andrew Galvan (TOIT)	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email	Follow-up to 04/282023 call regarding Galvan providing Tribe's rate schedule.
19	May 3, 2023	Andrew Galvan (TOIT)	Robin Hoffman (ESA)	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email	Providing Tribe's rate schedule.
20	May 3, 2023	Andrew Galvan (TOIT)	Robin Hoffman (ESA)	Selena Lau (City); Karen Lancelle (ESA); Merrill Taylor (CW)	email	Providing Tribe's preferred payment term.
21	June 13, 2023	Cody Campagne (NAHC)	Serena Lau (City)	Holly Benedict (San Mateo County Coroner); Paul Zimmer (ESA); Monica Arellano (MOIT); Charlene Nijmeh (MOIT)	email	NAHC designation of MOIT as most likely decendant (MLD) for human remains encountered during ESA's June 2023 archaeological investigations.
22	June 13, 2023	Monica Arellano (MOIT)	Serena Lau (City); Cody Campagne (NAHC)	Holly Benedict (San Mateo County Coroner); Paul Zimmer (ESA); Alan Leventhal	email	Arellano would like to conduct a site visit to the human remains.
23	June 13, 2023	Paul Zimmer (ESA)	Monica Arellano (MOIT)		email	Outreach to discuss treatment of human remains, and explanation of interim treatment measures taken.
24	June 13, 2023	Monica Arellano (MOIT)	Paul Zimmer (ESA)	Charlene Nijmeh (MOIT); Alan Leventhal	email	Stating that Arellano would like to conduct a site visit.

Native American Correspondence Log

No.	Date	From	To	CC	Type	Subject
25	June 13, 2023	Paul Zimmer (ESA)	Monica Arellano (MOIT); Serena Lau (City); Cody Campagne (NAHC)	Holly Benedict (San Mateo County Coroner); Alan Leventhal	email	Confirming site visit time.
26	June 14, 2023	Monica Arellano (MOIT)	Paul Zimmer (ESA); Serena Lau (City)	Holly Benedict (San Mateo County Coroner); Cody Campagne (NAHC); Charlene Nijmeh (MOIT); Brandon Tyler; Sam Todd; Peter Brown (City); Colin Busby (Basin); Chris Canzonieri (Basin)	email	Confirming site visit time.
27	June 14, 2023	Paul Zimmer (ESA)	Monica Arellano (MOIT); Serena Lau (City)	Andrew Galvan (TOIT); Peter Brown (City); Robin Hoffman (ESA); Karen Lancelle (ESA)	email	Providing a summary of ESA's June 2023 archaeological investigations, including methods and results, and treatment of human remains, per MLD recommendations.
28	June 22, 2023	Paul Zimmer (ESA)	Monica Arellano (MOIT)	Serena Lau (City); Peter Brown (City); Robin Hoffman (ESA); Karen Lancelle (ESA)	email	Providing a link to download the Project Archaeological and Architectural Resources Inventory Report (Sims et al., 2022) and Archaeological Testing Plan (Hoffman, 2023). Asking if Arellano could provide treatment recommendations for the Project.
29	June 26, 2023	Monica Arellano (MOIT)	Paul Zimmer (ESA)	Serena Lau (City); Charlene Nijmeh (MOIT); Alan Leventhal	email	Thanking for the information and stating that treatment recommendations will be sent soon.
30	June 26, 2023	Monica Arellano (MOIT)	Paul Zimmer (ESA); Serena Lau (City)	Charlene Nijmeh (MOIT); Cody Campagne (NAHC; Colin Busby (Basin); Chris Canzonieri (Basin); Alan Leventhal	email with attachments (7)	Providing MLD recommendations for treatment of human remains and future treatment of human remains and associated grave goods.