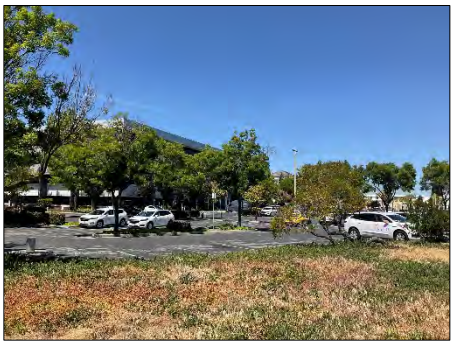
Appendix C

Biological Resources Report



H. T. HARVEY & ASSOCIATES

Ecological Consultants

1301 Shoreway Road Project
Biological Resources Report

H. T. Harvey #4640-01

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June 2022

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Section 1. Introduction

This report describes the biological resources present on the 1301 Shoreway Road Project site, as well as the potential biological impacts of proposed project development activities and measures necessary to reduce these impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This assessment is based on the project's plans and description provided to H. T. Harvey & Associates by ICF and Four Corners Properties as of May 17, 2022.

1.1 Project Location

The approximately 6.9-acre project site consists of a single parcel located at 1301 Shoreway Road in the City of Belmont, California (Figure 1). The site is bounded by Shoreway Road and Highway 101 to the southwest, commercial development to the northwest, a Pacific Gas and Electric (PG&E) substation to the southeast, and a tidal section of Belmont Creek and narrow strip of ruderal grassland to the northeast (Figure 2). The project site is located on the *San Mateo*, *California* 7.5-minute United States Geological Survey (USGS) quadrangle.

1.2 Project Description

The applicant is seeking entitlements to construct a Class-A building for office, technology, and/or R&D, including life sciences. As shown on Figure 1, the project would consist of demolition of all existing on-site uses and construction of an eight-story 270,446 square foot building (Building 1), a seven-story 271,589 square-foot building (Building 2), and a 441,280 square foot parking garage with nine levels above grade. The total proposed building footprint on the project site would be 983,315 gross square feet. The parking garage and surface parking lots would provide approximately 1,626 parking stalls.

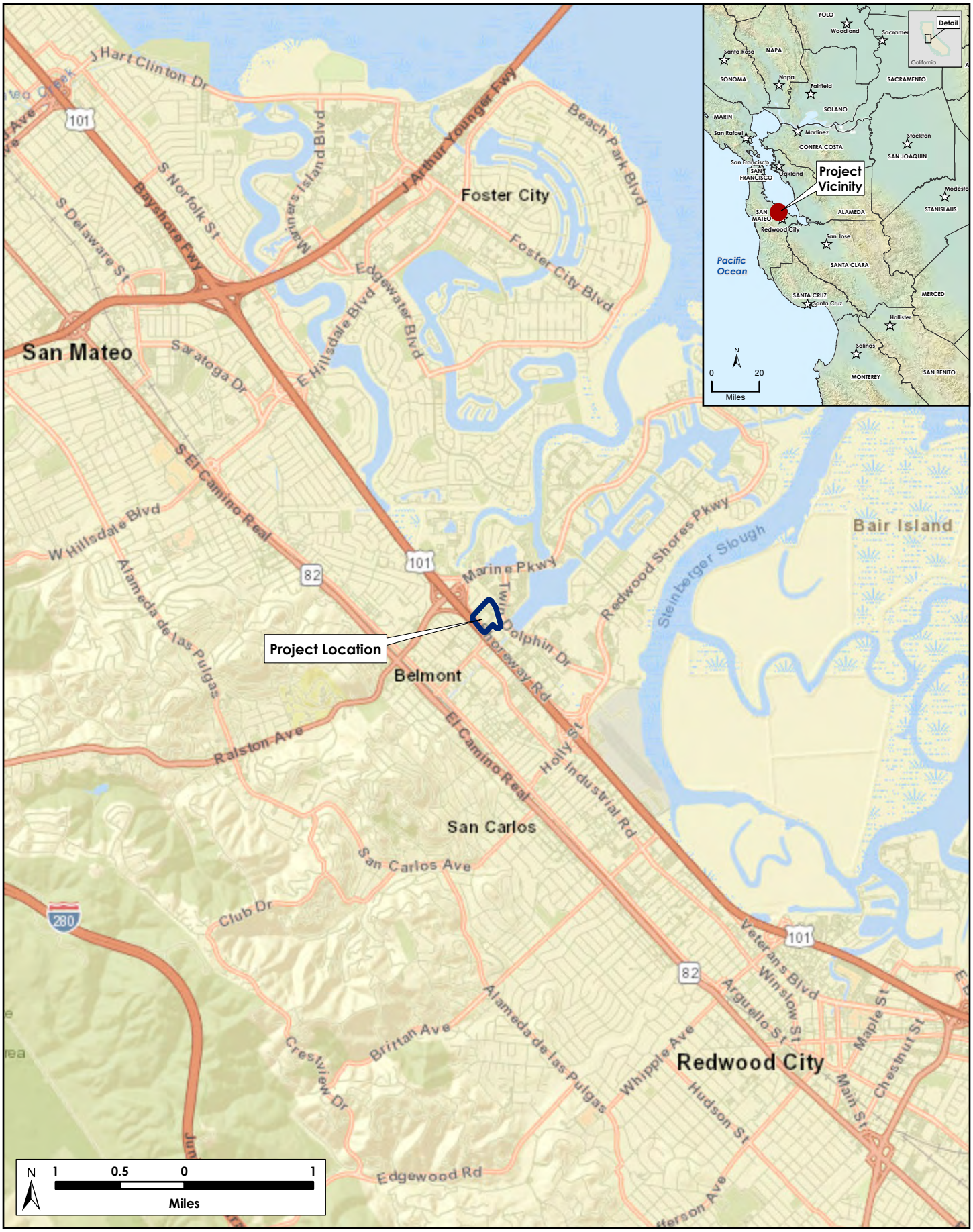

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Figure 1. Vicinity Map

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Figure 2. Project Site
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Section 2. Methods

2.1 Background Review

Prior to conducting a site visit, H. T. Harvey and Associates ecologists reviewed background information on the sensitive biological resources potentially present in and immediately adjacent to the project site. The information reviewed included records from the California Natural Diversity Database (CNDDB 2022) and the California Native Plant Society's (CNPS's) Online Rare Plant Inventory (2022), focused on the *San Mateo, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (which includes the project site) and three adjacent quadrangles to the north, northwest, and west: *San Francisco South*, *Hunter's Point*, and *Montara Mountain*. Our searches focused on the distribution and habitats of vascular plants designated as California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, or 3 that occur in any of the USGS quadrangles listed above.

We reviewed CNDDB records for special-status animals and natural communities of concern in the vicinity of the project site, defined in this report as the area within a 5-mile (mi) radius of the project site. Additionally, the Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify soils that underlay the project site (NRCS 2022), and the USFWS's National Wetland Inventory (NWI) Wetlands Mapper was consulted to review pre-existing mapping of aquatic features, including wetlands, streams, and sloughs, that may be present in the project site (NWI 2022). Historical aerial imagery of the project site obtained from Google Earth Pro (Google, Inc. 2022) was also evaluated. Other information reviewed included various technical publications available through the USFWS, California Department of Fish and Wildlife (CDFW), and other sources.

2.2 Site Visits

H. T. Harvey & Associates plant ecologist Mark Bibbo, M.S., surveyed the "project study area" (defined as the project boundary plus surrounding areas within 100 feet, which were studied to allow for assessment of indirect impacts of the project) on April 25, 2022. H. T. Harvey & Associates wildlife ecologists Jane Lien, B.S. and Steve Rottenborn, Ph.D. surveyed the project study area on May 3 and May 10, 2022, respectively. The purpose of these surveys was to (1) assess existing biotic habitats and plant and animal communities in the project site, (2) assess the site for its potential to support special-status species and their habitats, and (3) identify potential jurisdictional habitats (such as waters of the U.S./State) on and adjacent to the project site. Mr. Bibbo mapped the edge of tidal marsh just outside the project site boundary to help define the upper limits of the San Francisco Bay Conservation and Development Commission's (BCDC's) bay jurisdiction.

H. T. Harvey & Associates mapped biotic habitats within the project study area using a combination of field observations (recorded via the Apple iPad GIS Kit Pro application) and aerial imagery signatures. Habitat types were distinguished using natural community descriptions discussed in Holland (1986), Sawyer et al. (2009), and CDFW's Vegetation Classification and Mapping Program (CDFW 2022). Plant species within each habitat were

identified using Baldwin et al. (2012). Habitat acreages were calculated using geographic information systems (GIS) and aerial imagery interpretation.

Section 3. Regulatory Setting

Biological resources within the project footprint are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal Regulations

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, U.S. Army Corps of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) mark, which is defined in Title 33, Code of Federal Regulations, Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may be subject to USACE jurisdiction. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 Code of Federal Regulations Part 328.3 as "the line of intersection of the land with the water's surface at the maximum height reached by a rising tide."

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of Section 401 Water Quality Certification. The State Water Resources Control Board (SWRCB) is the state agency (together with the Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

Project Applicability: No wetlands or other waters of the United States are present on the project site. Outside of the project site to the northeast, the tidal channel that is Belmont Creek as well as the tidal salt marsh habitat along its banks would be considered wetlands and waters of the U.S. subject to CWA jurisdiction. The landward edge of the tidal salt marsh habitat is shown on Figure 3. However, the project does not include any impacts to Belmont Creek or its associated wetlands, and therefore no Clean Water Act permit from the USACE would be necessary for project implementation.

3.1.2 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the creation of any obstruction to the navigable capacity of waters of the U.S., including discharge of fill and the building of any wharfs, piers, jetties, and other structures without Congressional approval or authorization by the Chief of Engineers and Secretary of the Army (33 U.S.C. 403).

Navigable waters of the U.S., which are defined in 33 CFR, Part 329.4, include all waters subject to the ebb and flow of the tide, and/or those which are presently or have historically been used to transport commerce. The shoreward jurisdictional limit of tidal waters is further defined in 33 CFR, Part 329.12 as "the line on the shore reached by the plane of the mean (average) high water." It is important to understand that the USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of Bay habitat, and that there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR, Part 329.9, a waterbody that was once navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce as a result of changed conditions and/or the presence of obstructions. Historical Section 10 waters may occur behind levees in areas that are not currently exposed to tidal or muted-tidal influence, and meet the following criteria: (1) the area is presently at or below the mean high water line; (2) the area was historically at or below mean high water in its "unobstructed, natural state"; and (3) there is no evidence that the area was ever above mean high water.

As mentioned above, Section 404 of the CWA authorizes the USACE to issue permits to regulate the discharge of dredged or fill material into waters of the U.S. If a project also proposes to discharge dredged or fill material and/or introduce other potential obstructions in navigable waters of the U.S., a Letter of Permission authorizing these impacts must be obtained from the USACE under Section 10 of the Rivers and Harbors Act.

Project Applicability: Belmont Creek adjacent to the project site represents Section 10 waters, and tidal wetlands below the mean high water elevation are also regulated under Section 10. Any work within Section 10 waters would require a Letter of Permission from the USACE. However, the project does not include any impacts to Belmont Creek or its associated wetlands, and therefore no Section 10 permit from the USACE would be necessary for project implementation.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or *take*, which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." *Take* can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as *take* even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA, but may become listed in the near future and are often included in their review of a project.

Project Applicability: No federally listed plant species occur on or near the project site. Federally listed animal species are also absent from the project site itself. However, several federally listed animals occur, or could

potentially occur, in tidal wetlands and waters along Belmont Creek, including the green sturgeon (*Acipenser medirostris*), Central California Coast steelhead (*Oncorhynchus mykiss*), California Ridgway's rail (*Rallus obsoletus obsoletus*), and salt marsh harvest mouse (*Reithrodontomys raviventris*). The longfin smelt (*Spirinchus thaleichthys*), a federal candidate species, may also occur in Belmont Creek. Of these species, the salt marsh harvest mouse is the only one that could potentially occur in upland ruderal grassland habitat immediately adjacent to the site, though implementation of avoidance and minimization measures (described in Section 6.1.5) would avoid the need for incidental take approval for this species.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from the NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with the NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by the NMFS.

Project Applicability: EFH and FMP-managed fish species are absent from the project site itself. However, all subtidal and intertidal habitats within Belmont Creek are designated as EFH for a number of species that are federally managed under the following three FMPs:

- Coastal Pelagic FMP – northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinops sagax*), mackerel, squid
- Pacific Groundfish FMP – various rockfish, soles, and sharks
- Pacific Salmon FMP – Chinook salmon (*Oncorhynchus tshawytscha*)

The northern anchovy, starry flounder (*Platichthys stellatus*), English sole (*Parophrys vetulus*), Chinook salmon, and leopard shark (*Triakis semifasciata*) may use tidal channels, mudflats, and marsh edge habitats of the lowermost reaches of Belmont Creek as nursery and foraging habitat. In addition, juvenile and adult Chinook salmon and steelhead may stray into Belmont Creek when foraging. Juvenile Chinook salmon also use marsh edges, protected tidal channels, and creeks for foraging and growth. The project does not include any direct impacts to Belmont Creek or its associated wetlands, and implementation of avoidance and minimization measures (described in Section 6.1.5) would avoid impacts on EFH or FMP-managed fish.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and it prohibits the possession of all nests of protected bird species whether they are active or inactive. An *active* nest is defined as having eggs or young, as described by the USFWS in its June 14, 2018 memorandum "Destruction and Relocation of Migratory Bird

Nest Contents". Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

Project Applicability: All native bird species that occur on the project site are protected under the MBTA.

3.1.6 Marine Mammal Protection Act

The Marine Mammal Protection Act prohibits the take of marine mammals, with certain exceptions, in waters under the jurisdiction of the U.S. or by citizens of the U.S. on the high seas, as well as the importation of marine mammals and marine mammal products into the U.S. Take is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Harassment is defined as "any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."

Project Applicability. No marine mammals are expected to occur on the project site itself. However, all waters within Belmont Creek are waters under the jurisdiction of the U.S., and all marine mammals that occur in these waters are protected under the Marine Mammal Protection Act. One of six recognized Pacific harbor seal (*Phoca vitulina richardsi*) haul-out sites on the west side of the South San Francisco Bay is located in the lower reaches of Belmont Creek (Fox 2008), but harbor seals are not expected to wander upstream to forage adjacent to the project site due to the shallow depth and narrow width of the channel adjacent to the project site. Therefore, the project will not result in impacts to protected marine mammals.

3.2 State Regulations

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the state include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. In these new guidelines, riparian habitats are not specifically described as waters of

the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The *Procedures* describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state.

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that a proposed project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the state require Water Quality Certification even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: No wetlands or other waters of the state are present on the project site. Outside of the project site to the northeast, the tidal channel that is Belmont Creek as well as the tidal salt marsh habitat along its banks would be considered wetlands and waters of the state. However, the project does not include any impacts to Belmont Creek or its associated wetlands, and therefore no Clean Water Act or Porter-Cologne approvals from the RWQCB would be necessary for project implementation.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in *take* of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of *take* under the California Fish and Game Code. The CDFW, however, has interpreted *take* to include the "killing of a member of a species which is the proximate result of habitat modification."

Project Applicability: No state-listed plant species occur on or near the project site. State-listed animal species that occur, or could potentially occur, in tidal wetlands and waters along Belmont Creek adjacent to the project site are the longfin smelt, California Ridgway's rail, California black rail (*Laterallus jamaicensis coturniculus*), and salt marsh harvest mouse. Of these species, the salt marsh harvest mouse is the only one that could potentially occur in upland ruderal grassland habitat immediately adjacent to the site, though implementation of avoidance and minimization measures (described in Section 6.1.5) would avoid take of this species.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to avoid or reduce significant environmental impacts of projects that they approve when it is feasible to do so by adopting project alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Natural Resources Agency promulgated guidelines for implementing CEQA known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the FESA and the CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per CEQA Guidelines Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the CNPS Inventory of Rare and Endangered Plants. The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed - review list.
- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA's Section 15380 criteria, and adverse effects to these species may be considered significant. Impacts on plants that are listed by the CNPS on CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2022). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP's) currently accepted list of vegetation alliances and associations (CDFW 2022).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the project in the context of this biological resources report. Project impacts are discussed in Section 6 below.

3.2.4 California Fish and Game Code

Streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Using this definition, the CDFW extends its jurisdiction to encompass riparian habitats that function as part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of the CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, the CDFW would claim jurisdiction over a stream's bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, the CDFW regulates any project proposed by any person that will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds." California Fish and Game Code Section 1602 requires an entity to notify the CDFW of any proposed activity that may modify a river, stream, or lake. If the CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife, and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Specific sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW. Raptors (i.e., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered "take" by the CDFW.

Under the California Fish and Game Code Section 7050, the Marine Life Management Act (MLMA) requires the CDFW to ensure the sustainable use of California's living marine resources.

Project Applicability: CDFW jurisdiction under Section 1602 of the California Fish and Game Code would extend up to the tops of the banks of Belmont Creek adjacent to (but outside of) the project site and include all associated tidal salt marsh habitat. However, the project does not include any impacts to Belmont Creek or its associated wetlands or banks, and therefore no Section 1602 Streambed Alteration Agreement from the CDFW would be necessary for project implementation.

Most native bird, mammal, and other wildlife species that occur on the project site and in the immediate vicinity are protected by the California Fish and Game Code. Project impacts on these species are discussed in Section 6.

3.2.5 State Water Resources Control Board Stormwater Regulation

Construction Phase. Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with state requirements to control the discharge of stormwater pollutants under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended). Prior to the start of construction/demolition, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Pollution Prevention Plan must be developed and maintained during the project and it must include the use of best management practices (BMPs) to protect water quality until the site is stabilized.

Standard permit conditions under the Construction General Permit requires that the applicant utilize various measures including: on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors. Additionally, the Construction General Permit does not extend coverage to projects if stormwater discharge-related activities are likely to jeopardize the continued existence, or result in take of any federally listed endangered or threatened species.

Post-Construction Phase. In many Bay Area counties, including San Mateo County, projects must also comply with the California RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2015-0049, as amended). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design that prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors.

Project Applicability. The project will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit.

3.3 Local Regulations

3.3.1 City of Belmont General Plan

Section 5, *Conservation Element*, of the City of Belmont 2035 General Plan (City of Belmont 2017) includes a number of policies designed to protect and conserve biological resources in the City. General Plan policies that may be applicable to the 1301 Shoreway Road project include the following:

- 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.
- 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 5.3-6: Avoid light pollution and unnecessary glare by requiring development projects to use design features and shielding methods that cast outdoor light downward and minimize glare and to install the minimum amount of outdoor lighting necessary for safety and security.
- 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.
- 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.
- Policy 5.5-3: Require development projects to incorporate structural and non-structural BMPs to mitigate or reduce the projected increases in pollutant loads, in accordance with the NPDES permit guidelines.

Project Applicability: The project is subject to policies of the City's General Plan protecting biological resources.

3.3.2 City of Belmont Tree Ordinance

The City provides tree protection under the Municipal Code (2017-1120) and Municipal Code Chapter 25: *Trees*. This ordinance details permit requirements for tree related work, including the removal, pruning, and planting of trees. Pruning or removal of street trees is illegal without a permit issued by the City, and doing so without a permit may result in a fine. The City ordinance includes the following classes of trees; 1) coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), coast redwood (*Sequoia sempervirens*), madrone (*Arbutus menziesii*), bay laurel

(*Umbellularia californica*) and buckeye (*Aesculus californica*) having a single main stem or trunk of ten inches or more diameter at breast height (dbh), measured across the widest face of the trunk at four and one-half (4.5) feet above the natural grade, 2) all other species with a main stem or trunk of 14 inches or more dbh; and 3) multi-stemmed trees totaling eighteen inches or more dbh. In addition to a permit application, an independent arborist report is required when the tree is in good health, the tree is growing within 10 feet or closer to existing structures, being removed as part of a building structure not within the footprint of the new structure, and for any protected sized redwoods and coast live oak trees.

AMMs for trees that can be protected on site typically include implementation of tree protection zones (i.e., protecting trees that are intended to remain on the site from incidental project disturbance) and development of a tree protection plan by a certified arborist. In addition, the project proponent would be required to comply with the City of Belmont Municipal Code and submit permit applications for removal or damage of all trees covered by the ordinance.

Project Applicability: Trees potentially subject to the City's tree ordinance are present on the site, and some will likely be removed by project construction. The project will comply with the City of Belmont tree replacement guidelines and policies for any protected trees that will be removed as part of the project.

3.3.3 The McAteer-Petris Act

The McAteer-Petris Act, enacted on September 17, 1965, serves as a legal provision under California state law to preserve San Francisco Bay from indiscriminate filling. The act initially established the BCDC as a temporary state agency charged with preparing a plan for the long-term use of the San Francisco Bay. In August 1969, the McAteer-Petris Act was amended to make BCDC a permanent regulatory agency to incorporate the policies of the Bay Plan (BCDC 2012). BCDC jurisdiction includes a 100-foot wide band along the shoreline of the San Francisco Bay. The *shoreline* is defined as all areas that are subject to tidal action from the south end of the San Francisco Bay to the Golden Gate (Point Bonita–Point Lobos), and to the Sacramento River line (a line between Stake Point and Simmons Point, extended northeasterly to the mouth of Marshall Cut). The BCDC will claim all sloughs (specifically marshlands lying between mean high tide and up to 5 feet above mean sea level where marsh vegetation is present); tidelands (lands between mean high tide and mean low tide); and submerged lands (land lying below mean low tide) in this region. The McAteer-Petris Act also requires that "maximum feasible public access, consistent with a project be included as part of each project to be approved by the BCDC."

Project Applicability: Along the majority of the Bay shoreline, where the land is bordered by the open waters of the Bay and vegetated marsh is absent, BCDC's Bay jurisdiction is defined by the mean high water (MHW) elevation, which is 6.39 feet NAVD88. Along the tidal channel of Belmont Creek, where narrow bands of tidal salt marsh are present, BCDC's Bay jurisdiction is defined as MHW plus the upper extent of marsh vegetation. A 100-foot area extending landward of the extent of Bay jurisdiction is defined as the BCDC shoreline band (Figure 3). Although the project does not propose any activities within BCDC's Bay jurisdiction (e.g., within the tidal marsh), the 100-foot shoreline band extends onto the project site. If any project activities are proposed within the shoreline band, a permit from BCDC may be necessary.

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Figure 3. Biotic Habitats Map
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Section 4. Environmental Setting

4.1 General Project Area Description

The project site and study area is located in the City of Belmont, on the edge of the Redwood Shores development. The study area is bounded by Shoreway Road and Highway 101 to the southwest, commercial development to the northwest, a PG&E substation to the southeast, and a tidal section of Belmont Creek and narrow strip of ruderal grassland to the northeast (Figure 2). A public access trail is present on the levee between the project site and the Belmont Creek.

According to historical mapping of the shoreline in this area by the San Francisco Estuarine Institute (SFEI), the general area of the project site consists of land that was historically tidal marsh lands that were filled in the mid-20th century. The study area is generally topographically uniform and flat with elevations ranging from approximately 10 to 12 feet (ft) (WGS84) (Google, Inc. 2022). Soils are mapped as Urban land-Orthents, reclaimed complex, 0 to 2 percent slopes, which is a common soil classification for locations along the San Francisco Bay Shoreline that consists of fill soils.

4.2 Land Cover/Habitat Types

The entire 6.9-acre project site is developed and landscaped, being occupied by an existing commercial building, extensive surrounding pavement, and associated landscaping. Just outside the project site boundary, additional land cover/habitat types mapped within the study area include ruderal grassland in a narrow strip immediately east of the project site and open water/tidal aquatic habitat and tidal salt marsh habitat along Belmont Creek. These habitat types are depicted on Figure 3 and are described in detail below. Plant species observed during the reconnaissance survey are listed in Appendix A, and representative photos of these habitat types are provided in Appendix B.

4.2.1 Developed/Landscaped

Vegetation. Developed/landscaped areas comprise the dominant land cover type in the study area, occupying the entire project footprint. This land cover type includes the existing building on the site, the large paved parking lot surrounding the building, and associated landscaping throughout the site as well as along the perimeter. Landscaping on the site consists of ornamental trees, shrubs, and groundcovers that are typical of commercial developments in the area.

Wildlife. The hardscape on the project site provides limited habitat for wildlife species, and wildlife species that are present in these areas are tolerant of human disturbance and adapted to breeding or foraging on developed structures and surfaces. Non-native European starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) may nest on adjacent developed structures and forage on hardscape on the project site. Native

raccoons (*Procyon lotor*) and non-native Virginia opossums (*Didelphis virginianus*), Norway rats (*Rattus norvegicus*), black rats (*Rattus rattus*), and feral cats (*Felis catus*) that inhabit nearby lands will forage in developed areas.

The landscaped portions of the project site provide habitat for wildlife species that are adapted to breeding in or foraging on non-native landscaped vegetation. During the June 2022 surveys, native bird species such as the black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), and house finch (*Haemorhous mexicanus*) were observed foraging in the landscape vegetation on the project site. In addition, many of the wildlife species that use adjacent ruderal and marsh habitats may move through the landscaped portions of the project site when traveling between more natural habitats.

4.2.2 Ruderal Grassland

Vegetation. Just outside the project site boundary, along the eastern edge of the site, vegetation consists of ruderal grassland occupying the space between the edge of the project site's landscaping and the levee slope along the tidal marsh. This vegetation is dominated by non-native annual grasses such as wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*), and fobs such as fennel (*Foeniculum vulgare*) and cheeseweed (*Malva neglecta*). Other common and abundant non-native species present include Chilean sea fig (*Carpobrotus chilensis*), black mustard (*Brassica nigra*), stork's bill filaree (*Erodium cicutarium*), vetch (*Vicia sativa*), summer mustard (*Hirschfeldia incana*), wild lettuce (*Lactuca serriola*), and horseweed (*Erigeron canadensis*).

Wildlife. Wildlife use of ruderal habitat on the site is limited by high levels of human disturbance in adjacent areas, the limited extent of the ruderal habitat, and the isolation of these habitat remnants from more extensive habitats elsewhere in the region. As a result, truly grassland-associated wildlife species are absent from the small patch of ruderal habitat on the project site. Instead, the wildlife species that occur in this habitat on the site are species that occur in adjacent urban or marsh areas and use this ruderal habitat for foraging. Such species include birds such as the native Brewer's blackbird (*Euphagus cyanocephalus*), song sparrow (*Melospiza melodia*), American crow (*Corvus brachyrhynchos*), black phoebe, mourning dove (*Zenaida macroura*), house finch, northern mockingbird (*Mimus polyglottos*), and the nonnative European starling. Reptiles such as the western fence lizard (*Seloporus occidentalis*) and gopher snake (*Pituophis catenifer*), and mammals such as the raccoon, striped skunk (*Mephitis mephitis*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), and Valley pocket gopher (*Thomomys bottae*) occur in the ruderal grassland as well.

4.2.3 Tidal Salt Marsh and Open Water/Tidal Channel

Vegetation. Outside the project site boundary, but within the expanded 100-foot component of the project study area, tidal salt marsh is present along Belmont Creek. Tidal salt marsh occurs with a 100 to 200 foot corridor confined by approximately five-foot-tall levees on either side of the creek corridor. The tidal salt marsh is dominated by a dense monoculture of pickleweed (*Salicornia pacifica*). Other species present with low cover or along the edge of the salt marsh include gumplant (*Grindelia stricta*), alkali heath (*Frankenia salina*), and jaumea (*Jaumea carnosa*). Non-native species present in the salt marsh include Algerian sea lavender (*Limonium ramosissimum*), alkali Russian thistle (*Salsola soda*), and seaside alkaligrass (*Puccinellia maritima*).

Belmont Creek runs through the middle of the tidal salt marsh and is shown on Figure 3 as open water/tidal channel (areas below the Mean High Water elevation of 6.39 ft. NAVD88). Due to the tidal nature of Belmont Creek in this reach, those areas are alternately inundated or exposed mud based on the daily tidal cycle. These areas are occupied by a continuous cover of nonnative smooth cordgrass (*Spartina alterniflora*), especially along the upper edges of the primary channel. Two side channels branch from the main stem of Belmont Creek within the study area and emanate from culverts in the levee.

Wildlife. Northern coastal salt marsh supports some of the most imperiled wildlife species in the San Francisco Bay, as much of this habitat was historically converted to other land uses. However, many of these rare species do not occur in the project study area, or will only occur as occasional dispersants or foragers, due to the limited extent of the marsh habitat in the project study area. The California Ridgway's rail, for example, nests in more extensive marshes downstream of the project site in cordgrass, dense stands of pickleweed, and marsh gumplant (McBroom 2020, CNDDB 2022). Similarly, California black rails are known to occur in northern coastal salt marsh downstream of the project study area, primarily as winter residents (CNDDB 2022). Neither rail species is expected to nest in the project study area, however, due to the narrow extent of the marsh and high levels of human disturbance. The salt marsh harvest mouse occurs in the upper zone of tidal salt marshes, especially where pickleweed is the dominant plant, and may nest in the tidal marshes and forage in upland habitats adjacent to the project site. Alameda song sparrows (*Melospiza melodia pusillula*) also nest in salt marshes in dense herbaceous vegetation and may nest in the marshes adjacent to the project site. Shorebirds, swallows, herons, egrets, blackbirds, and other avian species roost and forage in small numbers here as well, but most do not breed in these areas. Common waterbirds such as mallards (*Anas playtrhynchos*), American coots (*Fulica americana*), and gadwall (*Anas strepera*) forage within Belmont Creek, while wading birds such as herons and egrets forage along the shoreline. However, diving ducks and other waterbirds typical of the lower reaches of Belmont Slough and the bay itself are absent, or present only in low numbers, in this portion of Belmont Creek due to the narrow nature of the channel and high levels of human disturbance.

4.3 Wildlife Movement

Wildlife movement in the site vicinity takes many forms, and is different for the various suites of species associated with the area. Bird and bat species move readily over the landscape, foraging over and within both natural lands and landscaped areas of Redwood Shores, adjacent Cities of Redwood City and Belmont, and the adjacent Bair Island. Fish species move along the Belmont Creek corridor, some as residents and some as occasional foragers from the San Francisco Bay. Mammals of different species move within their home ranges, but also disperse between patches of habitat. Generally, reptiles and amphibians similarly settle within home ranges, sometimes moving to central breeding areas, upland refugia, or hibernacula in a predictable manner, but also dispersing to new areas. Some species, especially among the birds and bats, are migratory, moving into or through Redwood Shores during specific seasons. Aside from bats, there are no other mammal species in the site vicinity that are truly migratory. However, the young of many mammal species disperse from their natal home ranges, sometimes moving over relatively long distances in search of new areas in which to establish.

For many species, the landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. On a broader level, corridors also function as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas. In extreme cases, environmental corridors provide narrow connectivity past poor or hostile habitat areas between large areas of open space on a local or regional scale.

4.3.1 Belmont Creek

Belmont Creek, which lies directly adjacent to the project site, originates on the eastern slope of Pulgas Ridge and flows eastward for 3 mi through residential and commercial areas of San Carlos and Belmont before reaching the tidal portions of the creek via an engineered channel. This tidal slough eventually makes its way to the San Francisco Bay approximately 1.6 mi downstream of the project site. The reach of the slough adjacent to the project site is relatively narrow, and measures approximately 160 ft, between the north and south levees.

Belmont Creek functions as a wildlife movement corridor, connecting aquatic habitats associated with the San Francisco Bay with high-density residential and commercial habitats to the south. This creek is not known to support a steelhead run, or to have supported steelhead historically (Leidy 1984), though other fish are expected to move up and down Belmont Creek past the site.

The tidal marsh habitat and exposed mudflats along the Belmont Creek corridor are useful for migrating birds, which stop to rest and forage there. In addition, the portion of Belmont Creek and adjacent upland habitats on the project site support a suite of native medium-sized mammals (e.g., raccoons, skunks, and black-tailed jackrabbits) and small mammals (e.g., California ground squirrels and deer mice). However, due to the presence of Highway 101 (a significant impediment to movement of terrestrial wildlife along Belmont Creek) not far upstream from the project site, as well as the intensive urban development southwest of Highway 101, Belmont Creek does not provide an important corridor for wildlife movement between bayside areas and natural habitats in the foothills of the Santa Cruz Mountains to the west.

4.3.2 Pacific Flyway Stopover

The wetlands along the edge of the San Francisco Bay comprise one of the most important coastal wintering and migratory stopover foraging habitats for Pacific Flyway shorebirds and waterfowl, most of which do not breed in the Bay but which use it during migration and in winter for feeding and resting. The San Francisco Bay supports higher proportions of the total wintering and migrating shorebirds on the U.S. Pacific coast than any other wetland (Western Hemisphere Shorebird Reserve Network 2009). Hundreds of thousands of shorebirds and approximately 25 species of waterfowl making their way south from the Arctic, Alaska, and western Canada pass through the region in the fall. The Western Hemisphere Shorebird Reserve Network has designated the San Francisco Bay Estuary as a site of "Hemispheric Importance" (its highest ranking), and the North American Waterfowl Management Plan has listed it as one of 34 waterfowl habitats of major concern in North America. However, the wetlands in Belmont Creek are not particularly valuable to these migratory birds

owing to the limited extent of these habitats, adjacent human disturbance, and the narrow nature of Belmont Creek adjacent to the project site.

Migratory birds, including terrestrial species and waterbirds associated with the Bay, migrate along the edge of San Francisco Bay. For example, nocturnal migrant birds that find themselves over the Bay in the morning will seek roosting and foraging areas along the edge of the Bay. As a result, numbers of migrant birds moving through/past the project site would be higher than expected based on the low quality of habitat currently present on the predominantly developed site.

In summary, the project footprint is not a particularly important area for movement by non-flying wildlife, and it does not contain any high-quality corridors allowing dispersal of such animals. However, migratory birds are expected to occur adjacent to, or at least fly through/past, the project site in moderate abundance.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3 above.

For purposes of this analysis, "special-status" plants are considered plant species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

For purposes of this analysis, "special-status" animals are considered animal species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Information concerning threatened, endangered, and other special-status species that potentially occur on the project site was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figures 4 and 5 depict CNDDB records of special-status plant and animal species, respectively in the general vicinity of the project site. These generalized maps show areas where special-status species are known to occur or have occurred historically.

5.1 Special-Status Plant Species

The CNPS (2022) and CNDDB (2022) identify 110 special-status plant species as potentially occurring in at least one of the nine USGS quadrangles containing or surrounding the project site for CRPR 1 or 2 species, or in Santa Mateo County for CRPR 3 and 4 species. All 110 of those potentially occurring special-status plant species were determined to be absent from the project site for at least one of the following reasons: (1) lack of

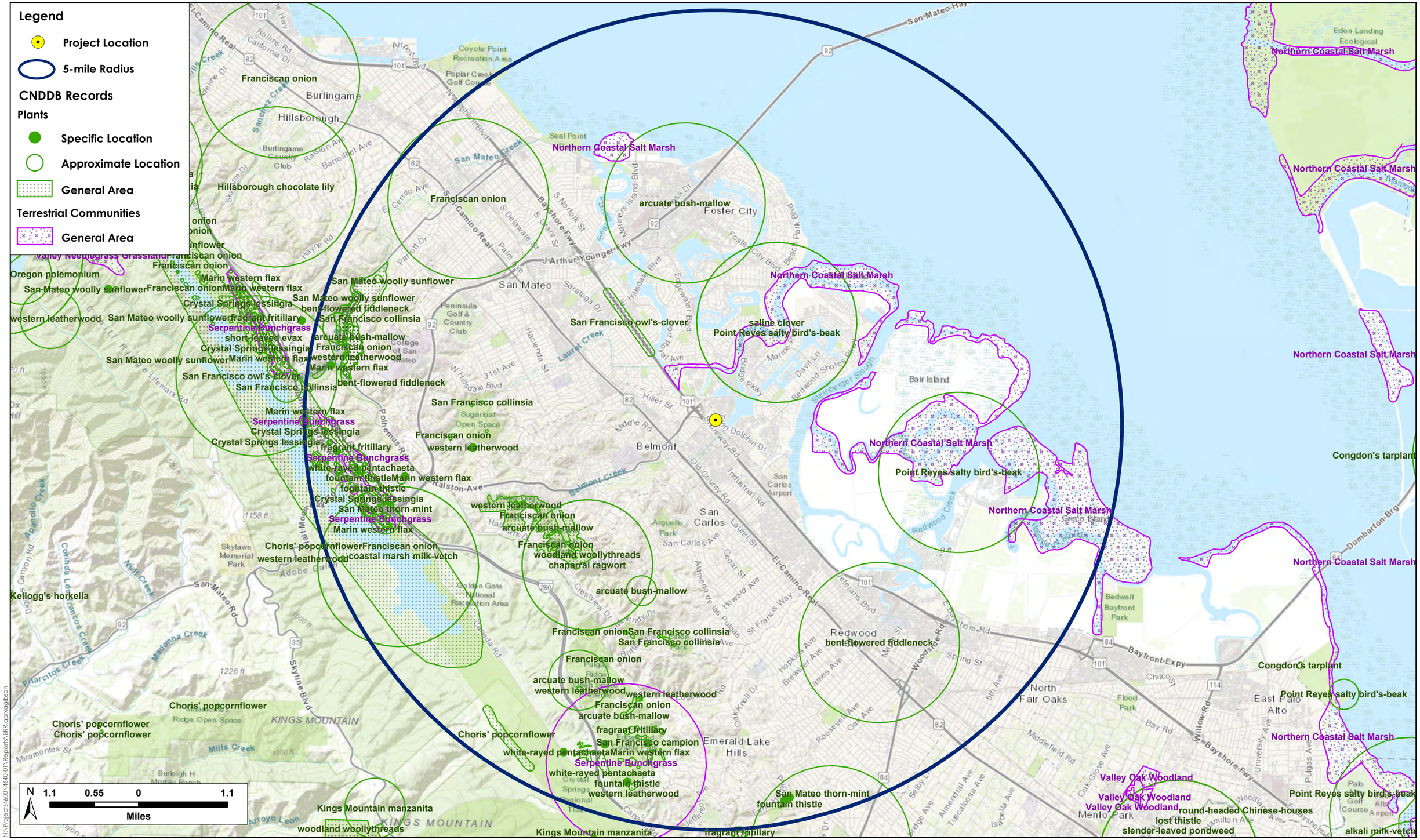

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Figure 4. CNDDB-Mapped Records of Special-Status Plants
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Legend

- Project Location
- 5-mile Radius

CNDDB Records

- Critical Habitat
- Critical Habitat

Wildlife

- Specific Location
- Approximate Location
- General Area

Note: CTS = California Tiger Salamander, CRLF = California Red-legged Frog

N 1.1 0.55 0 1.1 Miles

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Figure 5. CNDDB-Mapped Records of Special-Status Animals

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suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the project site; and/or (4) the species is considered extirpated. The project site itself is entirely developed and lacks suitable habitat for special-status plant species. The tidal salt marsh within the project study area was not considered suitable habitat for special-status plant species that are known from the vicinity for the following reason; 1) there are no extant records of special-status species that typically occur in tidal salt marsh elsewhere along the San Francisco South Bay shoreline (e.g. California sea-blite [*Suaeda californica*], Alkali milk-vetch [*Astragalus tener* var. *tener*], or Point Reyes bird's beak [*Chloropyron maritimum* ssp. *palustre*]) within a 5-mile radius of the project site, and 2) the tidal salt marsh present in the study area is a monoculture of pickleweed and the suitable microhabitat required for those species (e.g. openings in the pickleweed cover) are absent. Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) is a special-status plant species that can sometimes be present in ruderal grassland along the Bay Shoreline. However, the ruderal grassland present on the levee face and along the Bay Trail was not considered suitable habitat for Congdon's tarplant due to the dense cover of fennel and non-native annual grasses (wild oats and bromes). In addition, this species, even when it occurs in ruderal grassland habitat, is typically associated with seasonally moist swales in ruderal grassland, which are not present in the study area.

5.2 Special-Status Animal Species

The legal status and likelihood of occurrence of special-status animal species known to occur or potentially occurring in the general project region are presented in Table 1. Figure 5 depicts the CNDDB-mapped locations of special-status animals in the project vicinity.

No special-status animal species are expected to reside or breed on, or otherwise heavily use, the project site itself due to the lack of suitable habitat on the entirely developed/landscaped site. However, the following special-status animal species may reside or breed in habitats within the study area adjacent to the site: the salt marsh harvest mouse, Alameda song sparrow, white-tailed kite (*Elanus leucurus*), and salt marsh wandering shrew.

Several other special-status animal species may occur on or immediately adjacent to the project site only as occasional foragers, migrants, or transients; these are the monarch butterfly (*Danaus plexippus*), California Ridgway's rail, California black rail, western pond turtle (*Actinemys marmorata*), American peregrine falcon (*Falco peregrinus anatum*), tricolored blackbird (*Agelaius tricolor*), pallid bat (*Antrozous pallidus*), and western red bat (*Lasiurus blossevillii*). In addition, several special-status animal species may occur as occasional foragers, migrants, or transients in the aquatic habitat in Belmont Creek adjacent to the project site. These are the green sturgeon, longfin smelt, Central California coast steelhead, and Central Valley fall-run Chinook salmon. None of these species is expected to breed on or near the project site, or to regularly use the project site, and the project site itself does not provide important habitat for these species. Thus, the project's effects on nonbreeding habitat for these species are not expected to result in appreciable impacts on regional populations, and no avoidance or minimization measures for these species are warranted.

Several special-status bird species are protected as California species of special concern only when nesting. Vaux's swift occurs on the project site as an uncommon visitor during migration, but suitable nesting habitat for this species is absent from the site and from adjacent areas. Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), yellow warbler (*Setophaga petechia*), and northern harrier (*Circus hudsonius*) may also occur in adjacent habitats as occasional nonbreeding foragers, but are not expected to nest on or adjacent to the site. Because these species only occur on the project site as nonbreeders, they are not considered "special-status" when they occur.

Eleven of the special-status animal species listed in Table 1 are not expected to occur on or adjacent to the project site because the study area lacks suitable habitat and/or is outside the known range of the species. These are the California red-legged frog (*Rana draytonii*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), western snowy plover (*Charadrius nivosus nivosus*), California least tern (*Sternula antillarum browni*), black skimmer (*Rynchops niger*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), California brown pelican (*Pelecanus occidentalis californicus*), golden eagle (*Aquila chrysaetos*), and Pacific harbor seal. These species are determined to be absent from the study area.

Table 1. Special-status Animal Species, Their Status, and Potential for Occurrence on the Project Site

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Federal or State Endangered, Threatened, or Candidate Species			
Monarch butterfly (*Danaus plexippus*)	FC	Requires milkweeds (*Asclepias* spp.) for egg-laying and larval development, but adults obtain nectar from a wide variety of flowering plants in many habitats. Individuals congregate in winter roosts, primarily in Mexico and in widely scattered locations on the central and southern California coast.	**Absent as Breeder.** The monarch butterfly occurs within the project region primarily as a migrant. Monarchs are known to form over-wintering congregations near Newark in Alameda County and in coastal locations (CNDDB 2022). However, no such congregations are known from the project site or its vicinity. Breeding habitat (i.e., milkweed plants) is absent from the project site, and due to the extensive hardscape on the site, few nectar plants were observed. Therefore, if this species occurs on the site, it does so only as a transient during spring and fall migration.
Green sturgeon (*Acipenser medirostris*)	FT, CSSC	Spawns in large river systems such as the Sacramento River; forages in nearshore oceanic waters, bays, and estuaries.	**Absent (May be Present in Adjacent Areas).** No aquatic habitat is present on the project site. Green sturgeon are relatively rare in the South San Francisco Bay and may forage infrequently and in low numbers in accessible portions of Belmont Creek. However, the reach of Belmont Creek adjacent to the project site is too shallow to be accessible to the species except at high tide, and no suitable spawning habitat is present in or upstream of Belmont Creek. Thus, the species may occur in Belmont Creek only as an occasional forager and only during high tide. All tidally influenced areas of the San Francisco Bay, up to the elevation of mean higher high water, including the portion of Belmont Creek adjacent to the project site, have been designated as critical habitat for this species.
Longfin smelt (*Spirinchus thaleichthys*)	FC, ST	Spawns in fresh water in the upper end of the San Francisco Bay; may occur year-round in the South Bay.	**Absent (May be Present in Adjacent Areas).** No aquatic habitat is present on the project site, and the species is not known to spawn in aquatic habitat in the project vicinity. However, adults and yearling juveniles may be present as occasional foragers in Belmont Creek adjacent to the project site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Central California coast steelhead (*Oncorhynchus mykiss*)	FT	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	**Absent (May be Present in Adjacent Areas).** No aquatic habitat is present on the project site. Steelhead were not found in Belmont Creek during fish sampling in the 1980s (Leidy 1984, Leidy et al. 2005) and are thought to be absent from the Belmont Creek watershed (Becker et al. 2007). However, Belmont Creek adjacent to the project site is tidally influenced and there are no complete barriers to steelhead moving up the slough to forage. Therefore, the possibility of occasional individuals straying into Belmont Creek cannot be ruled out. All tidally influenced areas of the San Francisco Bay, up to the elevation of mean higher high water, including the portion of Belmont Creek adjacent to the project site, have been designated as critical habitat for this species.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	**Absent.** The California red-legged frog is known to occur 5 mi to the west at Crystal Springs Reservoir and 8 mi to the northwest near the San Francisco International Airport. However, this species has been extirpated from the majority of the project region, and the project site is too isolated and distant from existing breeding populations to sustain a population of red-legged frogs. Thus, California red-legged frogs are determined to be absent from the project site.
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)	FE, SE, SP	Prefer densely vegetated freshwater habitats. May use upland burrows for aestivation.	**Absent.** The San Francisco garter snake occurs at very few locations in San Mateo County. The only known population of San Francisco garter snakes on the east side of the San Francisco peninsula occurs near the San Francisco International Airport, 8 mi to the northwest. No suitable habitat for this species is present on the project site, and the site is isolated from the nearest known remaining populations by extensive urbanization. Thus, this species is determined to be absent.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
California Ridgway's rail (*Rallus obsoletus obsoletus*)	FE, SE, SP	Salt marsh habitat dominated by pickleweed and cordgrass.	**Absent (May be Present in Adjacent Areas).** Annual surveys conducted for California Ridgway's rails as part of the Invasive Spartina Project detected Ridgway's rails during the breeding season within 1.25 miles of the project site in lower portions of Belmont Slough in 2017 and 2020 (McBroom 2018 and 2021). In 2019, rails were detected in the upper portion of the slough, approximately 0.25 mile north of the project site (McBroom 2019). However, no marsh habitat is present on the project site to provide habitat for this species. Further, the marsh habitat along the portion of Belmont Creek adjacent to the site does not provide high-quality nesting habitat for California Ridgway's rails due to the narrow width of the marsh habitat, the short and sparse vegetation present, the regular inundation of this habitat by daily tides, and high levels of adjacent human disturbance. Further, eBird records from this portion of slough indicate that birders have detected no individual Ridgway's rails, despite a relatively large number (392) of complete checklists of detected species (Cornell Lab of Ornithology 2022). This species typically nests and forages in broader salt or brackish marshes with well-developed tidal channels (conditions that are absent from the portion of Belmont Creek adjacent to the site). Thus, if Ridgway's rails occur in the adjacent portion of Belmont Creek at all, they are expected to occur only as occasional foragers. They are not expected to nest in portions of the marsh within 700 feet (the typical no-disturbance buffer distance for this species) of the project site.
California black rail (*Laterallus jamaicensis coturniculus*)	ST, SP	Nests in fresh, brackish, and tidal salt marsh.	**Absent (May be Present in Adjacent Areas).** Few black rails have been observed in marshes on the east side of the San Francisco peninsula, and most recent records are from the nonbreeding season (CNDDB 2022). The marsh habitat adjacent to the project site does not provide suitable nesting habitat for black rails due to the narrow width of the marsh habitat; the short, sparse vegetation present; the regular inundation of this habitat by daily tides; and high levels of adjacent human disturbance. This habitat does provide marginally suitable foraging habitat for black rails. Thus, at most, stray individuals may forage along Belmont Creek on or adjacent to the site infrequently and in low numbers, if at all.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Western snowy plover (*Charadrius nivosus nivosus*)	FT, CSSC	Sandy beaches on marine and estuarine shores and salt pans in San Francisco Bay saline managed ponds.	**Absent.** No suitable nesting or foraging habitat for snowy plovers occurs on the project site due to a lack of suitable salt pan habitat and high levels of human disturbance. Snowy plover nests were observed on salt evaporator ponds in the Bair Island area 2.5 mi to the southeast of the project site in 1975–1976 (CNDDB 2022). However, snowy plovers are no longer known to nest at Bair Island. No critical habitat for snowy plovers has been designated within, or in the vicinity of, the project site (USFWS 2012).
California least tern (*Sternula antillarum browni*)	FE, SE, SP	Nests along the coast on bare or sparsely vegetated, flat substrates. In the South Bay, nests in salt pannes and on an old airport runway. Forages for fish in open waters.	**Absent.** Least terns are not known or expected to nest on or adjacent to the project site. In 1976, least terns nested on dried salt evaporator ponds 5–6 mi to the southeast (CNDDB 2022), but least terns are no longer known to nest at these locations. Least terns forage primarily in managed ponds and over the open Bay and have not been observed foraging in narrow tidal sloughs (such as the portion of Belmont Creek adjacent to the project site). Thus, least terns are not expected to forage on or immediately adjacent to the project site. The site also lacks suitable roosting habitat, as immediately adjacent human disturbance precludes the use of upland areas as least tern roost sites, and no such least tern roosts have been observed in these areas.
Tricolored blackbird (*Agelaius tricolor*)	ST	Nests near fresh water in dense emergent vegetation.	**Absent as Breeder.** Tricolored blackbirds typically nest in extensive stands of tall emergent herbaceous vegetation in nontidal freshwater marshes and ponds, which are not present on or immediately adjacent to the project site. This species is not known to nest in tidal habitats in the Redwood Shores area, and has not been recorded nesting on or near the project site. However, tricolored blackbirds may forage on the project site during the nonbreeding season.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Salt marsh harvest mouse (*Reithrodontomys raviventris*)	FE, SE, SP	Salt marsh habitat dominated by common pickleweed. Also occurs in diked and brackish marshes, nontidal wetlands, and some adjacent upland habitats.	**Absent (May be Present in Adjacent Areas).** Salt marsh harvest mice have been documented along Belmont Creek approximately 1.25 mi northeast (2.0 mi downstream) of the project site, as well as in marshes at the end of the Redwood Shores Peninsula (Shellhammer 2005). While no suitable marsh habitat for this species is present on the project site, suitable pickleweed-dominated habitat for this species occurs east of and adjacent to the project site in the tidal salt marsh. Recent radio tracking studies have demonstrated that the species uses a wider array of habitats than previously understood, including brackish marshes, nontidal managed wetlands, and some adjacent upland habitats as well (Smith 2019). Further, the species has a much broader diet than the pickleweed-centered diet previously assumed; when presented a variety of seasonally abundant foods, salt marsh harvest mouse diets comprised 45 different native and non-native plant species, including several nonnative annual grasses (Smith 2019). Thus, the ruderal grassland that borders Belmont Creek adjacent to the project site may offer suitable foraging habitat, and individual salt marsh harvest mice may forage occasionally in these areas. Individuals inhabiting adjacent marsh habitat could also take refuge in these ruderal areas during extreme high tides (i.e., king tides). A narrow pedestrian trail parallels the marsh habitat, and longitudinally divides this upland grassland habitat; however, the trail is not so wide (approximately 3-4 feet) as to be an absolute barrier to dispersal. Thus, salt marsh harvest mice may occur in the ruderal grassland habitat adjacent to the project site, though they are expected do so infrequently and in very small numbers.
California Species of Special Concern			
Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*)	CSSC	Cool rivers and large streams that reach the ocean and that have shallow, partly shaded pools, riffles, and runs.	**Absent (May be Present in Adjacent Areas).** There is no aquatic habitat on the project site, and no suitable spawning habitat for this species occurs in Belmont Creek. The status of salmonid use of the Belmont Creek watershed is unknown, but Chinook salmon are not known to spawn in Belmont Creek (Leidy et al. 2005). Nevertheless, small numbers of juveniles or fall-run adults from other runs could potentially occur as migrants or foragers in Belmont Creek.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Western pond turtle (*Actinemys marmorata*)	CSSC	Permanent or nearly permanent water in a variety of habitats.	**Absent (May be Present in Adjacent Areas).** The nearest CNDDB (2022) record is from 4.5 mi to the west near the Crystal Springs Reservoir. Suitable foraging habitat for western pond turtles may be present within Belmont Creek upstream of the project site. However, breeding populations of western pond turtles have been extirpated from most urbanized areas in the project region. Nevertheless, it is possible that occasional pond turtles from populations in freshwater habitats upstream in Belmont Creek could potentially disperse downstream to Belmont Creek, although they would be expected to do so in extremely low numbers, if at all.
Black skimmer (*Rynchops niger)*	CSSC (nesting)	Nests on abandoned levees and islands in saline managed ponds and marshes.	**Absent.** No suitable islands for nesting are present on the project site or in Belmont Creek, and the portion of the slough adjacent to the site is too narrow to support foraging by this species. Thus, black skimmers are not expected to occur on or adjacent to the project site.
Northern harrier (*Circus hudsonius*)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	**Absent as Breeder.** Habitat within and immediately adjacent to the project site is not suitable for nesting by northern harriers due to high levels of adjacent human disturbance. Northern harriers nest at Bair Island and may nest in larger, more remote marsh habitats along lower Belmont Creek, and are common foragers along Belmont Creek. This species may occasionally forage in the ruderal habitat on the project site. Due to the proximity of human disturbance, northern harriers are not expected to nest close enough (i.e., within 300 ft) to project impact areas to be disturbed by project activities.
Vaux's swift (*Chaetura vauxi*)	CSSC (nesting)	Nests in snags in coastal coniferous forests or, occasionally, in chimneys. Forages aerially over many habitats.	**Absent as Breeder.** Vaux's swifts are not known to nest in the Foster City/Belmont area (Sequoia Audubon Society 2001). No snags or chimneys are present on or immediately adjacent to the project site to provide suitable sites for nesting. Occasional migrants forage aerially over the site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Burrowing owl (*Athene cunicularia*)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels.	**Absent.** Historically, burrowing owls nested approximately 2.5 mi southeast of the project site near Bair Island (Sequoia Audubon Society 2001), but nesting in this area is not a regular occurrence. Burrowing owls have also been observed during the winter months in various locations surrounding the project site, but have not been recorded on the project site itself (Cornell Lab of Ornithology 2022). Burrows of California ground squirrels suitable for nesting and roosting by burrowing owls are not currently present on or adjacent to the project site, and burrowing owls are not expected to occur on the site due to the narrow, restricted extent of the available grassland habitat, absence of small mammal burrows, and high levels of human disturbance.
Loggerhead shrike (*Lanius ludovicianus*)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	**Absent.** Loggerhead shrikes occur occasionally in the project vicinity during the winter months (Cornell Lab of Ornithology 2022). However, the small areas of ruderal habitat on the project site are too narrow and isolated from more expansive grasslands in the region to provide suitable nesting or foraging habitat for this species (even by migrants).
Yellow warbler (*Setophaga petechia*)	CSSC (nesting)	Nests in riparian woodland and scrub, forages in a variety of habitat types.	**Absent.** Although yellow warblers are common migrants in and adjacent to the project site, they are not known or expected to nest in the study area due to the absence of suitable habitat, and this species is considered a species of special concern only when nesting.
San Francisco common yellowthroat (*Geothlypis trichas sinuosa*)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	**Absent.** Common yellowthroats occur year-round in marshes of the Redwood Shores peninsula (Cornell Lab of Ornithology 2022). The ruderal habitat on the project site is not suitable for nesting by common yellowthroats due to the relatively low height and only intermittently dense cover of the vegetation. Further, the marsh habitat adjacent to the site in Belmont Creek does not provide suitable nesting or foraging habitat for this species due to the low height of the vegetation. Although this species may occur elsewhere along Belmont Creek, it is not expected to nest or forage on or adjacent to the project site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Alameda song sparrow (*Melospiza melodia pusillula*)	CSSC	Nests in salt marsh habitat, primarily in marsh gumplant and cordgrass along channels.	**Absent as Breeder (May Breed in Adjacent Areas).** Suitable vegetation for nesting by a few pairs of Alameda song sparrows is present in the marsh habitat immediately adjacent to the project site, and this species may forage on the site during the breeding season. The location of the interface between populations of the Alameda song sparrow (*pusillula*) and the common race that breeds in freshwater riparian habitats in the region (*gouldiii*) is not definitive due to difficulties distinguishing these subspecies in the field. However, the *pusillula* subspecies is known to nest in marsh habitat in the project region, and is presumed to be present in the marshes along Belmont Creek. Individual song sparrows from several subspecies may forage on the project site year-round.
Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*)	CSSC	Nests in pickleweed dominant salt marsh, adjacent ruderal habitat, moist grasslands, and, rarely, drier grasslands.	**Absent as Breeder.** In the South San Francisco Bay, Bryant's savannah sparrows nest primarily in short pickleweed-dominated portions of diked/muted tidal salt marsh habitat and in adjacent ruderal habitats (Rottenborn 2007). The marsh and ruderal habitats along Belmont Creek are ostensibly suitable for nesting by Bryant's savannah sparrows, but the species is not expected to nest on or adjacent to the site due to the narrow nature of the channel along this portion of the slough. During the nonbreeding season, *alaudinus* and other savannah sparrow subspecies may forage in open habitats throughout the project site.
Salt marsh wandering shrew (*Sorex vagrans halicoetes*)	CSSC	Medium to high marsh 6–8 ft above sea level with abundant driftwood and common pickleweed.	**Absent (May be Present in Adjacent Areas).** Salt marsh wandering shrews occur most often in medium-to-high wet tidal marsh (6–8 ft above sea level), with abundant driftwood and other debris for cover (Shellhammer 2000). Typically, they are found in fairly tall pickleweed, in which they build nests, and they may be found in Belmont Creek in areas of tall pickleweed. No suitable marsh habitat to support this species occurs on the project site, but suitable pickleweed-dominated habitat for this species occurs immediately outside the project site in northern coastal salt marsh habitat. Occasional individuals inhabiting adjacent marsh habitat could take refuge in ruderal areas adjacent to the marsh habitat during king tides, but they are not expected to move so far from the marsh that they occur on the ruderal areas immediately adjacent to the project site.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	**Absent as Breeder.** No known extant populations of pallid bats occur on in the project region. Suitable breeding habitat for pallid bats is absent from the project site and immediately adjacent areas. Individual pallid bats may move through the site occasionally, as this species forages for miles surrounding a maternity colony.
Western red bat (*Lasiurus blossevillii*)	CSSC	Roosts in foliage in forest or woodlands, especially in or near riparian habitat.	**Absent as Breeder.** Individual western red bats occur in the project vicinity in low numbers as migrants and winter residents, but this species does not breed in the project vicinity. Individual western red bats may roost in the foliage of trees virtually anywhere in the project region, but are expected to roost primarily in riparian areas. Occasional individuals may forage over the site year-round.
State Fully Protected Species			
California brown pelican (*Pelecanus occidentalis californicus*)	SP	Undisturbed islands near estuarine, marine, subtidal, and marine pelagic waters.	**Absent.** Brown pelicans are regular nonbreeding visitors in San Mateo County. They are occasionally known to forage in open-water habitat near the project site, but Belmont Creek is too narrow to provide suitable foraging habitat for this species. Thus, brown pelicans are absent from the project site, even as occasional nonbreeding foragers.
American peregrine falcon (*Falco peregrinus anatum*)	SP	Forages in many habitats; nests on cliffs and tall bridges and buildings.	**Absent as Breeder.** Suitable nesting habitat (e.g. cliffs, tall buildings, or electrical towers) is absent from the project site and its immediate vicinity. Further, peregrine falcons are not known or expected to nest on or adjacent to the project site due to high levels of human disturbance. Individuals of this species occur as occasional foragers in the vicinity (Cornell Lab of Ornithology 2022) and may occasionally forage along Belmont Creek on and adjacent to the project site.
Golden eagle (*Aquila chrysaetos*)	SP	Nests on cliffs or in large trees (rarely on electrical towers), forages in open areas.	**Absent.** Suitable nesting habitat is absent from the project site. Occasional nonbreeding individuals are observed in the Redwood City area infrequently (Cornell Lab of Ornithology 2022), but golden eagles are not known to nest in the vicinity. This species is expected to forage infrequently in open habitats in the project region, such as at Bair Island, but is not expected to forage on or adjacent to the project site due to the limited extent of available foraging habitat and high levels of adjacent human disturbance.

Name	Regulatory Status	Habitat	Potential for Occurrence on the Project Site
White-tailed kite (*Elanus leucurus*)	SP	Nests in tall shrubs and trees, forages in grasslands, marshes, and ruderal habitats.	**May be present.** White-tailed kites are known to nest in eastern San Mateo County throughout the open areas bordering the San Francisco Bay (Sequoia Audubon Society 2001, Cornell Lab of Ornithology 2022). Suitable trees for nesting are absent from the project site, but up to one pair of white-tailed kites could nest in suitable nest trees within 300 feet of the project site, which is the typical nest buffer distance for this species. Individuals may forage occasionally on the project site and in adjacent marsh habitat year-round.
Other Special-status Species			
Pacific harbor seal (*Phoca vitulina richardsi*)	MMPA	Throughout the northern Atlantic and Pacific Oceans along coastal waters, river mouths, and bays	**Absent.** Harbor seals are permanent residents of the San Francisco Bay, and a primary haul-out site for harbor seals is located near the mouth of Belmont Creek 2.5 mi northeast of the project site. However, no pupping sites or suitable haul-out sites are present on or adjacent to the project site, and the slough adjacent to the project site is too narrow and shallow to provide suitable foraging habitat. The species is thus determined to be absent.

Key to Abbreviations:
Status: Federally Endangered (FE); Federally Threatened (FT); Federal Candidate (FC); State Endangered (SE); State Threatened (ST); State Fully Protected (SP); California Species of Special Concern (CSSC); Protected under the Marine Mammal Protection Act (MMPA).

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDB 2022). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings reflect the condition of a habitat within natural communities and are defined using NatureServe's standard heritage program methodology as follows (Faber-Langendoen et al. 2012):

- G1/S1: Critically imperiled
- G2/S2: Imperiled
- G3/S3: Vulnerable
- G4/S4: Apparently secure
- G5/S4: Secure

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1–G3, all of the vegetation associations within it will also be of high priority (CDFW 2022). The CDFW provides VegCAMP's currently accepted list of vegetation alliances and associations (CDFW 2022). Impacts on CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

Sensitive Natural Communities. A query of sensitive habitats in the CNDDB (2022) identified five sensitive natural communities as occurring within the twelve 7.5-minute USGS quadrangles containing or surrounding the project site: (1) northern coastal salt marsh (Rank G3/S3.2), (2) northern maritime chaparral (Rank G1/S1.2), (3) serpentine bunchgrass (Rank G2/S2.2), (4) valley needlegrass grassland (Rank G3/S3.1), and (5) valley oak woodland (Rank G3/S2.1). None of these sensitive natural communities is present on the project site itself. Northern coastal salt marsh is characterized by Holland (1986) as occurring along sheltered inland margins of bays, often co-dominated by pickleweed, cordgrass, and sometimes saltgrass. The tidal salt marsh adjacent to the project site, along Belmont Creek, is dominated by pickleweed therefore represents northern coastal salt marsh. The other sensitive habitats recorded in the region by CNDDB (northern maritime chaparral,

serpentine bunchgrass, valley needlegrass grassland, and valley oak woodland) are all absent from the project site.

Sensitive Vegetation Alliances. The tidal salt marsh in the project study area qualifies as a *Sarcocornia pacifica* (*Salicornia depressa*) (Pickleweed mats) Alliance (CDFW 2022). This alliance is ranked as G4/S3; globally it is "apparently secure", but on a state-wide level it is "vulnerable" (S3), and therefore would be considered by CDFW as sensitive natural community. However, no sensitive vegetation alliances are present on the project site itself.

Sensitive Habitats (Wetlands and Waters of the U.S./State). No sensitive habitats are present on the project site itself, although Belmont Creek and its associated tidal marsh, east of the site, are considered sensitive habitats. While a formal wetland delineation was not carried out as part of this analysis, the extent of the aquatic habitat and adjacent tidal marsh wetland as shown on Figure 3 represents the approximate extent of Waters of the U.S. In addition, the ruderal levee slope along the creek's banks may be considered a "buffer" of waters of the State by the RWQCB. The bed and banks of Belmont Creek would also be regulated by the CDFW under Section 1602 of the California Fish and Game Code.

Essential Fish Habitat. No EFH or FMP-managed fish species are present on the project site itself. As discussed in Section 3.1.4, the intertidal and subtidal habitats within Belmont Creek adjacent to the project site are considered EFH by NMFS. EFH is habitat that is essential to the long-term survival and health of a fishery and includes those habitats that support all life stages and all habitats that support breeding, spawning, feeding, and growth to maturity of a managed species. The San Francisco Bay has been designated EFH for three FMPs within the project vicinity: the Pacific Coast Groundfish, Coastal Pelagic Species, and Pacific Coast Salmon. In the study area, intertidal habitats within Belmont Creek up to the elevation of mean higher high water are considered to be EFH. However, these habitats are outside of the project footprint.

Section 6. Impacts and Recommended Measures

CEQA and the State CEQA Guidelines provide guidance in evaluating impacts of projects on biological resources and determining which impacts will be significant. The Act defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project."

Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G (Chapter IV) may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

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

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

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

D. "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites"

E. "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance"

F. "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan"

Potential impacts on biological resources as a result of the proposed project were systematically evaluated at the project level. These impacts were first evaluated to qualitatively describe how proposed project activities could impact biological resources. The potential significance of each impact was then determined, first without implementation of any recommended measures to avoid or minimize impacts. If an impact was determined to be potentially significant, in the absence of any recommended measures, then measures to reduce the impact to a less-than-significant level were identified and described.

6.1 Impacts on Special-Status Species: 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 (Less than Significant with Recommended Measures)

6.1.1 Impacts on Common Species and Habitats (Less than Significant)

The project will impact virtually all 6.9 acres of developed/landscaped land uses on the project site in some way, either through conversion to other developed areas or conversion of currently developed areas to landscaping. While landscape plans are not currently available, the conversion of parking lot and hardscape to landscaped habitat will increase the overall quality of habitat on the project site. Individuals of the common plant and animal species that currently inhabit the project site will be temporarily impacted through the removal of trees and buildings, construction of new structures and amenities, and landscaping. However, those common plant and animal species that occur on the site are regionally abundant and are present in widely available habitats in the region. As a result, the project would impact only a very small proportion of their regional populations. Furthermore, once the project is completed, the site will support higher-quality habitat and many of those species that occupy the site now will occupy the site after construction. Thus, these impacts do not meet the CEQA standard of having a *substantial* adverse effect, and would not be considered significant under CEQA.

6.1.2 Impacts on Fish and Fish Habitat (Less than Significant with Recommended Measures)

No suitable habitat for fish, including special-status fish, designated critical habitat for federally listed fish, EFH, and FMP-managed species will be impacted directly by the project. During very high flows, fish could potentially occur as close as the near edge of the tidal marsh along Belmont Creek, approximately 40 ft or more from the project site, but no closer. However, construction of the project may result in indirect adverse effects on fish and their habitats due to short-term increases in suspended sediment and turbidity near the project site as a result of run-off and potential leaking or spills of chemical contaminants or hazardous materials (gasoline, oil, grease, concrete) onto the ground from use of heavy equipment adjacent to slough. Increased suspended sediment and turbidity may have direct effects on special-status fish and FMP-managed species by interfering with visual foraging, interfering with migratory behavior, and injuring gills. Indirect effects could include increasing susceptibility to predation and reducing availability of food. Leaking or spills of chemical contaminants or hazardous materials could be toxic to special-status fish, FMP-managed species, and their prey. Due to the regional rarity of special-status fish and the ecological importance of EFH and FMP-managed fish species, such impacts would be significant under CEQA in the absence of recommended measures to avoid or minimize impacts.

As described in Section 3.2.5, the project will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit. Collectively, these requirements are likely to reduce the project's impacts on water quality in Belmont Creek substantially. In addition, implementation of the following recommended measure would reduce impacts on fish and their habitat due to project construction and associated water-quality effects to less-than-significant levels.

Water Quality. During construction, the project shall employ the following measures to treat and minimize runoff from the project site.

- All relevant erosion control, sediment control, source control, treatment control, material management, and stormwater management measures consistent with the latest edition of the California Stormwater Quality Association "Stormwater Best Management Practices Handbook," available at www.capmphandbooks.com, will be implemented.
- Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations). Feasible measures shall be implemented to ensure that hazardous materials are properly handled and the quality of wetland and aquatic resources is protected.
- If any fueling of equipment needs to occur in areas directly draining to the wetlands along Belmont Creek, containment shall be provided in such a manner that any accidental spill of fuel shall not be able to enter the water or contaminate sediments that may come in contact with water.
- A hazardous materials management/fuel spill containment plan will be developed and implemented by the construction contractor and given to all contractors working on the project, with at least one copy of the plan located on the site at all times. The purpose of the plan is to provide construction managers, environmental compliance monitors, and regulatory agencies with a detailed description of hazardous materials management, spill prevention, and spill response/cleanup measures associated with the construction of the project elements. The primary objective of the plan is to prevent a spill of hazardous materials. Elements of the plan will include, but are not limited to the following:
    - A discussion of hazardous materials management, including delineation of hazardous material and hazardous waste storage area, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas;
    - Materials Safety Data Sheets for all chemicals used and stored on site;
    - An inventory list of emergency equipment;
    - Spill control and countermeasures including employee spill prevention/response training;
    - Notification and documentation procedures; and
    - A monthly reporting plan.
- Vehicles will be checked daily for oil or fuel leaks and will be washed only at an approved area. No washing of vehicles will occur within areas directly draining to the wetlands along Belmont Creek.
- Within 100 ft of tidal wetlands along Belmont Creek, the work site, areas adjacent to the site, and access areas will be maintained in an orderly condition, free and clear from debris and discarded

materials. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust onto adjacent areas or wetlands or waterways. Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the project site.

- Stockpiled materials in areas draining to the tidal wetlands along Belmont Creek will be covered by plastic sheeting, tarps, or similar material that can be secured during wind and rain. A sediment fence or berm will be installed around stockpiled dredged material to prevent runoff from transporting sediment into sensitive habitats (such as wetlands and open waters).
- Water conservation methods will ensure that water used in the project site does not create surface flows capable of carrying pollutants to the nearby slough channel. All personnel, including sub-contractors, will be instructed on the practical methods of preventing leaks or over-use of watering, and will be required to adhere to the practices in the detail sheets provided.
- Silt fencing will be erected along the limits of disturbance between the project site and wetlands along Belmont Creek during construction activities that could potentially result in siltation of wetlands and open waters of Belmont Creek.

6.1.3 Impacts on Breeding Birds (Less than Significant with Recommended Measures)

Although no special-status birds breed on the project site itself, two special-status bird species may breed in low numbers in habitats adjacent to the site – the Alameda song sparrow and white-tailed kite. Given these species' territorial nature and the quality of habitat adjacent to the site, no more than 2-3 pairs of song sparrows and one pair of white-tailed kites is expected to breed close to the site. Because no suitable habitat for these species is present within the project site itself, the project will not result in direct, physical impacts to individuals or nests of these species, or in the loss of these species' habitat. However, activities that occur during the nesting season (generally February 1 through August 31) and cause a substantial increase in noise or human activity near active nests may result in the abandonment of active nests (i.e., nests with eggs or young). Heavy ground disturbance, noise, and vibrations caused by project activities could potentially disturb nesting and foraging individuals and cause them to move away from work areas.

In addition, a number of non-special-status bird species may nest on or adjacent to the site. Some of these species nest in ornamental vegetation or on the existing building on the site, while others nest in similar substrates in immediately adjacent areas. Demolition and construction activities during the avian breeding season could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. Due to the lack of sensitive habitats on the project site, the habitats on the project site support only regionally common, urban-adapted breeding birds and support only a very small proportion of these species' regional populations. In addition, birds are expected to nest and forage on the project site in greater abundance after project construction is completed due to the proposed landscaping.

All native bird species that nest on or adjacent to the project site, including both special-status species such as the Alameda song sparrow and white-tailed kite and non-special-status species, are protected by the federal MBTA and the California Fish and Game Code. Implementation of the following recommended measures would reduce project impacts on nesting birds by avoiding disturbance of active nests during project demolition and construction.

Seasonal Avoidance. To the extent feasible, tree removal, demolition, and the start of construction activities should be scheduled to avoid the nesting season. If such activities take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Preconstruction/Pre-disturbance Surveys. If it is not possible to schedule construction activities between September 1 and January 31, then preconstruction surveys for nesting birds should be conducted by a qualified biologist to ensure that no nests of migratory birds will be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of tree removal, demolition, ground disturbance, or construction activities for each construction phase. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings, and the ground) in and immediately adjacent to the impact areas for migratory bird nests.

Buffers. If an active nest is found within areas that would be disturbed by project activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

6.1.4 Impacts on Nonbreeding Special-Status Birds (Less than Significant)

Several special-status bird species may occur within or near the project site as nonbreeding migrants, transients, or foragers, but they are not known or expected to breed on or near the project impact area due to the absence of suitable breeding habitat. These are the California Ridgway's rail and California black rail, which may occasionally forage in the tidal marsh along Belmont Creek adjacent to the project site; American peregrine falcon, which may occasionally forage over or adjacent to the site (most likely along Belmont Creek); and tricolored blackbird, which may forage adjacent to the site near Belmont Creek.

Project activities would not result in the loss or disturbance of any suitable habitat for these species, as the project site does not currently provide suitable foraging habitat. Although individuals foraging in adjacent habitats may be temporarily disturbed by construction activities, such disturbance would not result in injury, mortality, or loss of important foraging opportunities for these species. As a result, the project will have very little impact on these species' regionally available foraging habitat and no impact on regional populations of these species. For all these reasons, impacts of the project on nonbreeding special-status birds would be less than significant.

6.1.5 Impacts on the Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew (Less than Significant with Recommended Measures)

Small numbers of salt marsh harvest mice and salt marsh wandering shrews may occur in pickleweed-dominated habitats along Belmont Creek, and individual salt marsh harvest mice and salt marsh wandering shrews may forage and/or take refuge during king tides within the ruderal grassland habitat located adjacent to the project boundary. Although these species are not expected to disperse into the construction area itself, they could potentially occur (at least in low numbers and infrequently in ruderal habitat immediately adjacent to the construction area). In the absence of recommended measures, project activities may result in the injury or mortality of salt marsh harvest mice and salt marsh wandering shrews as a result of crushing by equipment, vehicle traffic, and worker foot traffic if those activities are not clearly confined to the project site.

Small mammals within suitable habitat outside the project site will be subjected to increased noise and vibrations during construction. However, no studies have been conducted to determine what noise levels result in disturbance of salt marsh harvest mice. Should salt marsh harvest in nearby marsh habitat be disturbed by project activities, including noise or vibration, and move away from the source, they would move away from the project site and toward higher-quality marsh habitat farther out in Belmont Creek. Thus, project noise levels are not expected to cause salt marsh harvest mice or salt marsh wandering shrews to flush out into the open, or to increase mortality of individuals due to of predation. Furthermore, suitable habitat adjacent to the project site would only be subjected to substantially increased noise and vibrations during construction; following completion of construction, individual mice or shrews would re-occupy any habitat that was vacated during construction. Therefore, project noise impacts would not result in take of individual salt marsh harvest mice or salt marsh wandering shrews.

Building 2 and the parking structure would be located closer to the tidal marsh along Belmont Creek than the existing building, and the roofs of these buildings could potentially be used as perched by predatory birds that may prey on salt marsh harvest mice and salt marsh wandering shrews. However, ample perches in the form of trees, fencelines, light poles, and other structures are already present along the creek under existing conditions, and the construction of these buildings is not expected to result in a substantial increase in predation pressure on these special-status mammals.

Given the rarity of these species, any loss of use of suitable habitat or increase in predation of these species as a result of an increase in lighting would be a significant impact. Implementation of recommended measures

below, as well as recommended measures to minimize potential impacts of lighting (*Lighting Impact Reduction Measures* below), would reduce these potential impacts on salt marsh harvest mice, salt marsh wandering shrews, and their habitat to less-than-significant levels.

Worker Environmental Awareness Program. Before any construction activities begin, a qualified biologist will conduct a training session for all construction personnel. At a minimum, the training will include descriptions of the salt marsh harvest mouse and salt marsh wandering shrew, their habitats, the laws protecting them, the general measures that are being implemented to conserve these species as they relate to the project, and the boundaries within which the project may be accomplished.

Exclusion Barrier. Prior to the start of construction activities along the eastern edge of the project site, a barrier will be installed at the outer limits of the work area on the east side of the project site to exclude salt marsh harvest mice and salt marsh wandering shrews from the project site. This barrier will consist of a 3-ft tall, tight cloth, smooth plastic, or sheet-metal (or similar material) fence toed into the soil at least 3 inches deep and supported with stakes placed on the inside of the barrier. Following the installation of the barrier, designated construction personnel will check its integrity each morning that construction activities occur, and will initiate repairs immediately as needed.

Environmentally Sensitive Area Fencing. Prior to the start of construction activities along the eastern edge of the project site, the project limits on the east side of the site will be clearly demarcated with highly visible Environmentally Sensitive Area fencing to avoid inadvertent disturbance of any habitat outside of the designated construction area during construction activities. This fencing can be combined with the exclusion barrier but must not be outside that barrier.

Immediate Work Stoppage. If a salt marsh harvest mouse, salt marsh wandering shrew, or an animal that could be one of these species is observed on the project site during project activities, all work that could result in the injury or death of the individual will stop immediately and a qualified biologist will be immediately notified. The animal will be allowed to leave the area on its own and will not be handled.

6.1.6 Impacts on Nonbreeding Special-Status Mammals (Less than Significant)

The western red bat (a California species of special concern) usually roosts in the foliage of trees (Pierson et al. 2006). Day and night roosts are often located along the edges of riparian areas, near streams, grasslands, and even urban areas. During the breeding season, western red bats establish individual tree roosts and occasionally small maternity colonies in riparian habitats (Zeiner et al. 1990). Western red bats do not breed in San Mateo County, but may occasionally be present on the project site as a migrant or winter resident. Unlike most birds, bats experience daily bouts of torpor to save energy during seasonally cool periods. As a result, torpid bats cannot immediately fly away when disturbed, and typically require upwards of 40 minutes to arouse and flee. Therefore, there is some potential for tree removal to injure or kill individual red bats. Although little is known about the habitat use of western red bats during the nonbreeding season (Pierson et al. 2006), western red bats are uncommon, and no more than one or two individuals could be impacted by the project.

The pallid bat is a crevice-roosting bat, and there is some potential that dispersing individuals could roost in crevices in trees or in buildings on the project site. Removal of trees or demolition of existing buildings could result in injury or mortality of individual pallid bats if any area present at the time. However, due to the intensity of urban development in the project area and lack of habitat for a large roost, there is no expectation that a maternity colony or large roost of pallid bats would occur on the site. Therefore, the number of individuals that could be impacted is very low, if any are impacted at all.

Because of the low probability of such impacts, and because such limited impacts on the western red bat and pallid bat would affect only a very small proportion of regional populations of these species, project impacts would not rise to the CEQA standard of having a *substantial* adverse effect and would therefore be less than significant.

6.1.7 Impacts on Animals due to Increased Lighting (Less than Significant with Recommended Measures)

The installation of lighting on buildings and around roads, paths, and parking lots may result in potential impacts on animal species. Many animals, both special-status and common species, are sensitive to light cues, which influence their physiology and shape their behaviors, particularly during the breeding season (Ringer 1972, de Molenaar et al. 2006). Artificial light has been used as a means of manipulating breeding behavior and productivity in captive birds for decades (de Molenaar et al. 2006), and has been shown to influence the territorial singing behavior of wild birds (Longcore and Rich 2004, Miller 2006, de Molenaar et al. 2006). While it is difficult to extrapolate results of experiments on captive birds to wild populations, it is known that photoperiod (the relative amount of light and dark in a 24-hour period) is an essential cue triggering physiological processes as diverse as growth, metabolism, development, breeding behavior, and molting (de Molenaar et al. 2006). This holds true for mammals and other taxa as well (Beier 2006), suggesting that increases in ambient light may interfere with these processes across a wide range of species, resulting in impacts on wildlife populations. Artificial lighting may also indirectly affect animals by increasing the nocturnal activity of predators such as owls, hawks, and mammalian predators (Negro et al 2000, Longcore and Rich 2004, DeCandido and Allen 2006, Beier 2006). The presence of artificial light may influence habitat use by rodents (Beier 2006) and breeding birds (Rogers et al. 2006, de Molenaar et al. 2006) by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.

Evidence that migrating birds are attracted to artificial light sources is abundant in the literature as early as the late 1800s (Gauthreaux and Belser 2006). Although the mechanism causing migrating birds to be attracted to bright lights is unknown, the attraction is well documented (Longcore and Rich 2004, Gauthreaux and Belser 2006). Migrating birds are frequently drawn from their migratory flight paths into the vicinity of an artificial light source, where they will reduce their flight speeds, increase vocalizations, and/or end up circling the lit area, effectively "captured" by the light (Herbert 1970, Gauthreaux and Belser 2006, Sheppard and Phillips 2015, Van Doren et al. 2017). When birds are drawn to artificial lights during their migration, they may become disoriented and possibly blinded by the intensity of the light (Gauthreaux and Belser 2006). The disorienting and blinding effects of artificial lights directly impact migratory birds by causing collisions with light structures,

buildings, communication and power structures, or even the ground (Gauthreaux and Belser 2006). Indirect impacts on migrating birds might include orientation mistakes and increased length of migration due to light-driven detours.

Up-lighting refers to light that projects upwards above the fixture. There are two primary ways in which the luminance of up-lights might impact the movements of birds. First, local birds using habitats on a site may become disoriented during flights among foraging areas and fly toward the lights, colliding with the lights or with nearby structures. Second, nocturnally migrating birds may alter their flight direction or behavior upon seeing lights; the birds may be drawn toward the lights or may become disoriented, potentially striking objects such as buildings, adjacent power lines, or even the lights themselves.

The project will result in the construction of buildings and other features that will necessitate lighting within and around the project footprint. Lighting from the project would be the result of light fixtures illuminating buildings, building architectural lighting, and parking structure and pedestrian lighting. Depending on the location, direction, and intensity of exterior lighting, this lighting can potentially spill into adjacent natural areas such as Belmont Creek. If lighting of Belmont Creek were to increase, animals using these areas (including special-status species such as salt marsh harvest mice and salt marsh wandering shrews) may be subject to increased predation, decreased habitat availability (for species that show aversions to increased lighting), and alterations of physiological processes if development under the proposed project produces appreciably greater illuminance than the existing conditions. This impact on local wildlife populations is potentially significant under CEQA due to the high ecological value of the adjacent portion of Belmont Creek and its tidal wetlands. In addition, lighting from the project also has some potential to attract and/or disorient birds, especially during inclement weather when nocturnally migrating birds descend to lower altitudes. As a result, some birds moving along the San Francisco Bay at night may be (1) attracted to the site, where they are more likely to collide with buildings; and/or (2) disoriented by night lighting, potentially causing them to collide with the buildings (bird collision impacts are described further in Section 6.4.2).

As described in Section 3.3.1, the City of Belmont 2035 General Plan (City of Belmont 2017) includes Policy 5.3-6 to avoid and minimize light pollution ("Avoid light pollution and unnecessary glare by requiring development projects to use design features and shielding methods that cast outdoor light downward and minimize glare and to install the minimum amount of outdoor lighting necessary for safety and security"). Compliance with General Plan Policy 5.3-6 will minimize impacts of outdoor lighting on ecologically sensitive habitats and sensitive species associated with Belmont Creek. In combination with Policy 5.3-6, implementation of the following recommended measures would reduce impacts of project lighting on animals to less-than-significant levels.

> **Lighting Impact Reduction Measures.** The following measures will be implemented to reduce spillover of lighting into, or glare/increased luminance perceived by animals using Belmont Creek, as well as adverse effects of lighting on migratory birds.

- Exterior lighting shall be minimized (e.g., by turning lights off) in accordance with recommendations from the International Dark-Sky Association (2011) from midnight until dawn, at a minimum, except as needed for safety and City code compliance.

- Spillage of lighting from building interiors shall be minimized using occupancy sensors, dimmers, or other mechanisms from midnight until dawn, at a minimum, during bird migration seasons (February–May and August–November). If desired, this measure may be voluntarily implemented year-round.

6.2 Impacts on Sensitive Communities: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Recommended Measures)

6.2.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (Less than Significant with Recommended Measures)

The CDFW defines sensitive natural communities and vegetation alliances using NatureServe's standard heritage program methodology (CDFW 2022), as described above in Section 5.3. Aquatic, wetland, and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS (see Section 6.3 below). Project impacts on sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, were considered and evaluated.

The project will not have direct impacts on tidal salt marsh (considered a sensitive natural community as "northern coastal salt marsh"), or open water/tidal aquatic habitat. However, construction could result in impacts on water quality, which would degrade these sensitive habitats, as described in Section 6.1.2; in the absence of recommended measures to avoid and minimize such impacts, these impacts could be significant given the ecological value of tidal wetland and aquatic habitats.

Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with State requirements to control the discharge of stormwater pollutants under the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Board describing the project. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and maintained during the project and it must include the use of BMPs to protect water quality until the site is stabilized. Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control best management practices, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances or wash racks, among other elements.

In many Bay Area counties, including San Mateo County, projects must also comply with the *California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit* (MRP) (Water Board Order No. R2-2015-0049). This MRP requires that all projects implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors. These same features will be used to treat any stormwater that flows to the off-site brackish marsh during large storm events. Compliance with these stormwater requirements and implementation of the recommended measure (*Water Quality*) in Section 6.1.2 would reduce water-quality impacts to less-than-significant levels.

Shading from Building 2 and the parking garage could have some effect on vegetation in wetlands along Belmont Creek. Building 2 would be seven stories tall and the parking garage would be nine stories tall. Given their proximity to the edge of the tidal wetlands (approximately 110 ft), these buildings could cast some shade over wetlands along the creek. Being situated on the southwest side of the creek, these buildings will cast a shadow on tidal wetlands during portions of the afternoon. However, the setbacks between the buildings and the creek's tidal wetlands, and the northern, eastern, and southern exposure of these wetlands to the sun (without shading from buildings) most of the time, are expected to minimize any adverse effects of shading from buildings on wetlands along Belmont Creek, and no substantial loss or degradation of tidal wetlands will result from increased shading.

6.3 Impacts on Wetlands: 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 (Less than Significant with Recommended Measures)

As described in Section 6.2, the project will not have direct impacts on tidal salt marsh or open water/tidal aquatic habitat. However, construction could result in impacts on water quality, which would degrade these sensitive habitats, as described in Section 6.1.2; in the absence of recommended measures to avoid and minimize such impacts, these impacts could be significant given the ecological value of tidal wetland and aquatic habitats. Compliance with stormwater requirements and implementation of the recommended measure (*Water Quality*) in Section 6.1.2 would reduce impacts on water quality within wetlands to less-than-significant levels. Wetlands could also be impacted by shading from new buildings, but for reasons described in Section 6.2, such impacts would not result in substantial loss or degradation of tidal wetlands.

6.4 Impacts on Wildlife Movement: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife

corridors, or impede the use of native wildlife nursery sites (Less than Significant with Recommended Measures)

6.4.1 Impacts on Terrestrial Wildlife Movement (Less than Significant)

The marsh and upland habitats along Belmont Creek serve as a movement pathway for terrestrial species, providing vegetative cover and foraging opportunities. Common, urban-adapted species such as raccoons and striped skunks may use the vegetation along Belmont Creek and landscaped areas along its margins to move east and west through the Redwood Shores area. Small mammals, such as mice and shrews, will also use this vegetation as cover to move between habitats. The project site does not extend beyond the current developed footprint; thus, development of the site would not impede animal movement along this wildlife movement pathway. In addition, the project site already consists of heavily disturbed habitats that are currently of little value to migrating wildlife. The redevelopment of the project site will have very little impact on wildlife movement, especially given that the adjacent marsh that will remain intact and navigable. Further, the terrestrial wildlife species that use these habitats are acclimated to high levels of disturbance and habitat fragmentation in the Belmont area. Therefore, construction of the project is not expected to result in significant impacts on the movements of individuals, and would not rise to the level of a substantial adverse effect on habitat connectivity and wildlife movement under CEQA.

6.4.2 Impacts due to Bird Collisions with Buildings (Less than Significant with Recommended Measures)

Under existing conditions, terrestrial land uses and habitat conditions on the project site and in surrounding vicinity consist primarily of developed areas such as buildings, parking lots, and busy roadways. Vegetation in most of these areas is very limited in extent, and consists primarily of non-native landscape trees and shrubs. Belmont Creek borders the project site on the east, and consists of a narrow tidal marsh, lined with nonnative ruderal grassland and scattered, nonnative, ornamental landscape trees. Nonnative vegetation supports fewer of the resources required by native birds than native vegetation, and the structural simplicity of the vegetation (without well-developed ground cover, understory, and canopy layers) further limits resources available to birds. Thus, although a number of urban-adapted bird species will regularly use the vegetation on the project site and surrounding developed areas, they typically do so in low numbers. As a result, the number of individual landbirds that inhabit and regularly use vegetation on the project site at any given time under existing conditions is relatively low.

Following project construction, the number of birds that use the site may increase somewhat due to the proposed expansion of landscaped areas on the site and the planting of additional landscape trees, shrubs, and herbaceous vegetation. Landscape plantings throughout the project site will consist of a mix of native and nonnative trees, as well as primarily native shrubs and herbaceous plants. Some of this vegetation, including native coast live oak trees (*Quercus agrifolia*), will offer relatively high-value foraging and cover resources for native birds relative to existing conditions. Overall, however, due to the continued lack of large areas of native vegetation and lack of structural complexity, the addition of landscaped areas to the project site will not create high-quality bird habitat within this area.

The project site is located at the base of the Redwood Shores peninsula, adjacent to a narrow reach of Belmont Creek and within approximately one mile of more the extensive tidal marshes surrounding the peninsula. These marshes provide regionally important habitat for many species of waterbirds and marsh-associated birds. A review of data associated with the "Sem Ln. public access trail" eBird hotspot located along the trail immediately east of the project site indicates that 139 species of birds have been recorded along Belmont Creek adjacent to the project site (Cornell Lab of Ornithology 2022). The majority of these species are common resident, migrant, or wintering wading birds, waterfowl, and passerines (i.e., songbirds).

In general, bird species that are attracted to marsh and aquatic habitats in the project vicinity are expected to move past the project site when flying along Belmont Creek, or when flying between these habitats. The numbers of these birds moving past the site will vary by time of year and by species. Many birds, such as waterfowl, often tend to move in large groups, while other species, such as Alameda song sparrows, will move through individually. Local bird numbers also vary by time of year, as many birds form small to large flocks during winter and migration, and occur in more widely spaced pairs during the breeding season. Shorebirds and waterbirds are unlikely to disperse from the adjacent reach of Belmont Creek onto the project site, as these species are strongly associated with tidal habitats and open water. Therefore, no shorebirds or waterbirds are expected to move onto or through the project site regularly or in numbers.

Landbirds, however, will be attracted to trees and landscaped areas on the site, and will primarily move between the areas of landscaping on the site and in the surrounding vicinity. Moderate numbers of migratory songbirds are concentrated at the edge of the San Francisco Bay during spring and fall migration, though they tend to use more heavily vegetated areas such as riparian corridors or large, well-vegetated parks such as Coyote Point in San Mateo, or Shoreline Park in Mountain View. No heavily vegetated park areas or natural habitat such as riparian vegetation is present in the vicinity of the project site to attract migrating songbirds (or would be present with project implementation), and the project site is not located between two high-quality habitat areas such that songbirds would be flying past the site at an altitude as low as the proposed buildings. As a result, there is no expectation that migratory songbirds would be particularly attracted to, or would make heavy use of, the habitats in the site vicinity.

Nevertheless, due to the disproportionately high habitat value of the undeveloped tidal marshes surrounding the Redwood Shores peninsula compared to more developed areas of Belmont, as well as the relatively large number of migrants seasonally concentrated along the edge of the San Francisco Bay, fairly large numbers of birds are expected to fly past the project site relative to regional populations. Resident birds that are present in the vicinity year-round will use the vegetated habitats along Belmont Creek in moderate numbers for foraging, and songbirds migrating along the Pacific Flyway will utilize these habitats in moderate numbers for resting and foraging. As a result, higher numbers of birds are expected to be present along Belmont Creek compared to the surrounding developed areas of Belmont. Resident and migratory songbirds may disperse outward from the slough looking for foraging, resting, nesting, or roosting sites. During such dispersal, these birds could move toward and onto the project site and into the site's landscape vegetation.

Sensitive and rare bird species that occur in the site vicinity are discussed in the sections above. The only high-quality habitat for state and federally listed bird species (i.e., the California Ridgway's rail and California black rail) in the vicinity is located downstream of the site, and these species are not expected to fly past the site on a regular basis (and, hence, are not expected to be at-risk for collisions with glass on the proposed building). Small numbers of Alameda song sparrows, Bryant's savannah sparrows, and northern harriers, and larger numbers of yellow warblers, all California species of special concern when breeding, occur in the ruderal and marsh habitats adjacent to the project site and are expected to fly past the site in small numbers year-round. Several other sensitive species may occasionally fly over the site as occasional migrants, transients, or foragers, but are also not expected to occur on the site in appreciable numbers. No additional sensitive or rare bird species are expected to occur in the site vicinity.

It has been well documented that glass windows and building façades can result in injury or mortality of birds due to birds' collisions with these surfaces (Klem et al. 2009, Sheppard and Phillips 2015). Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation. The extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates (Gelb and Delacretaz 2009, Borden et al. 2010, Cusa et al. 2015, Riding et al. 2020). Further, the greatest risk of avian collisions with buildings occurs in the area within 60 feet of the ground because this is the area in which most bird activity occurs (San Francisco Planning Department 2011, Sheppard and Phillips 2015).

Three separate buildings are proposed to be constructed on the project site. Two of these buildings (Buildings 1 and 2) are office, technology, and/or R&D, including life sciences, buildings, and the third is a parking garage. The three buildings create a central courtyard amenity space. The central portion of the site will be an open, landscaped area vegetated with a mix of native and nonnative trees, and predominantly native shrubs and native herbaceous plants. Resident and migratory landbirds are expected to be present along Belmont Creek, and some could disperse onto the project site from these areas. These birds will be drawn westward into landscaped habitats adjacent to the building facades into the interior landscaped areas adjacent to buildings one and two, as well as into the narrower, north-south landscaped passageway between these two buildings (Figure 6). Additionally, birds are likely to move westward from Belmont Creek along the northern boundary of the project site, as large trees, including native coast live oaks, are proposed along this boundary. As a result, there is some potential for bird collisions with the glass facades of the proposed buildings.

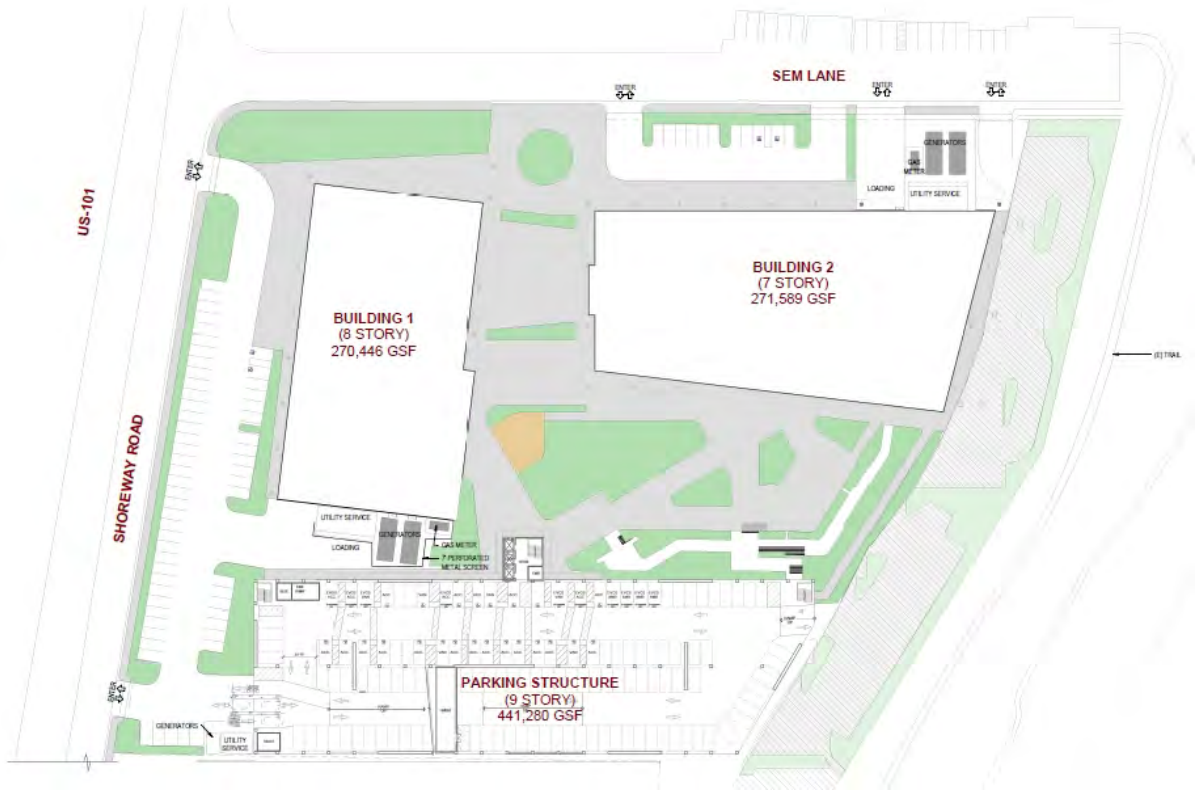

Figure 6. Site Plan. Resident and migratory landbirds are expected to disperse onto the site from Belmont Creek to the east (right) into landscaped areas adjacent to and between the buildings and along the northern margin of the site, where they may encounter glass building façades.

Certain architectural features of the proposed buildings may reduce their overall collision risk to birds. Based on the project plans, the proposed parking garage will have very little glass on its façade, and thus, will not pose a heightened collision risk to birds. Further, Buildings 1 and 2 may feature spandrel and opaque glass, vertical mullion extensions (i.e., fins), minimized and shielded exterior lighting, and recessed glass facades in some areas. Fins and recessed glazing increase the visibility of the building to birds approaching from varying oblique angles, and opaque and spandrel glass reduce the risk of collision due to transparency. Nevertheless, the facades of Buildings 1 and 2 are expected to present large expanses of reflective glass where birds can potentially perceive reflected sky and/or vegetation and collide with the glass as they attempt to reach those reflections. Thus, the extensive glazing proposed on Buildings 1 and 2 will likely result in some bird collisions.

The risk of collisions is highest where existing and proposed vegetation will be reflected in this glass, along the east and north facades of Building 1, and along all facades of Building 2. Such collisions are likely to be most frequent within 60 feet of the ground, where extensive glazing would be located opposite landscape vegetation, where birds will be drawn into the site from adjacent undeveloped habitats by landscape vegetation, and at the altitudes where most bird activity occurs. The risk is lower along the western and southern facades of Building 2, where less extensive (and less resource-rich) locally nonnative vegetation is proposed, and where the adjacent roadways (Bayshore Freeway and Shoreway Road) limit bird abundance. Given that a moderate number of

resident and migratory landbirds are expected to occur on the site after project completion, there is potential for avian collisions to occur frequently enough to result in a significant impact under CEQA. Implementation of the recommended measures for bird-safe building design below, as well as compliance with General Plan Policy 5.3-6 (regarding exterior lighting) and implementation of recommended measures (*Lighting Impact Reduction Measures*) in Section 6.1.7, would reduce these potential impacts to less-than-significant levels.

Implement Bird-Safe Building Design. Glazing on identified bird hazards (the east and north facades of Building 1 and all facades of Building 2) will be treated with a bird-safe glazing treatment such that no more than 10% of the total façade area from 0–60 feet above grade consists of untreated glazing. Bird-friendly glazing includes, but is not limited to, opaque glass, covering the outside surface of clear glass with patterns, paned glass with fenestration, frit or etching patterns, and external screens over nonreflective glass. Highly reflective glass is not permitted. Bird-safe glazing would have the following parameters:

a. Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of four inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of two inches;

   OR

b. Bird-safe glazing shall have a Threat Factor[1] less than or equal to 30.

To reduce reflections of clouds and vegetation in glass and help ensure that bird-safe treatments on the lower surfaces of glass are visible below any reflections, all glazing on the buildings will have a visible reflectance of 15% or lower.

6.5 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

6.5.1 Impacts Due to the Removal of Ordinance-Sized Trees (Less than Significant)

The proposed project will remove trees on the project site, likely including trees that meet the definition of "protected" trees by City of Belmont. Per the City of Belmont Tree Ordinance, permits from the City's planning and building department and payment of a fee are required for the removal of any trees which meet the definition of "protected" tree, as defined in Section 3.3.2 above. The removal of trees protected by the City of

[1] A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found at https://abcbirds.org/wp-content/uploads/2021/01/Master-spreadsheet-1-25-2021.xlsx.

Belmont's tree ordinance, in the absence of compliance with the City's Municipal Code, would be considered potentially significant under CEQA.

As described in Section 3.3.1, the City of Belmont 2035 General Plan (City of Belmont 2017) includes policies that protect natural resources such as trees. The most relevant policies are 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") and 5.3-9 ("Promote the healthy growth of trees and control the removal of trees within the city"). Compliance with these policies will minimize project impacts on ordinance-sized trees. In addition, in accordance with the provisions of the City of Belmont tree protection ordinance, the project will comply with standard City of Belmont tree removal permit conditions and replace trees that are removed in accordance with these tree removal policies. Such compliance would reduce any potential impacts due to conflicts with the City's tree preservation ordinance to less-than-significant levels under CEQA.

6.6 Impact due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (Less Than Significant)

The San Bruno Mountain Habitat Conservation Plan is the only Habitat Conservation Plan that has been approved in San Mateo County, but this plan does not cover the project site or the surrounding vicinity. No Natural Community Conservation Plans have been approved or are in preparation in San Mateo County. Therefore, the proposed project would not conflict with any adopted Habitat Conservation Plans or Natural Community Conservation Plans, or with any other approved local, regional, or state habitat conservation plans.

6.7 Cumulative Impacts

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. The cumulative impact on biological resources resulting from the project in combination with other projects in the project vicinity and larger region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, CEQA mitigation measures, and permit requirements for each project; compensatory mitigation and proactive conservation measures associated with each project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

Future development activities in this part of Belmont may result in impacts on the same habitat types and species that will be affected by the project. Implementation of the project, in combination with other projects in the area and other activities that impact the species that are affected by this project, could contribute to cumulative effects on special-status fish and EFH, federally or state protected wetlands and waters, habitat for

nonbreeding special-status species, migratory birds, and roosting bats. However, these projects will all comply with conditions of their City approvals (e.g., CEQA measures) as well as the conditions of any applicable regulatory agency permits, to avoid, minimize, and mitigate impacts on these resources, thus reducing cumulative impacts.

The 1301 Shoreway Road Project would implement recommended measures as necessary to reduce impacts on biological resources, as described above. Thus, the project will not have a cumulatively considerable contribution to cumulative impacts on biological resources.

Section 7. References

[BCDC] San Francisco Bay Conservation and Development Commission. 2012. San Francisco Bay Plan.

[CDFW] California Department of Fish and Wildlife. 2022. VegCAMP Natural Communities Lists. <https://www.wildlife.ca.gov/data/vegcamp/natural-communities>. Accessed May 1722.

[CNDDB] California Natural Diversity Database. 2022. Rarefind 5.0. California Department of Fish and Wildlife. Accessed June 2022 from http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp

[CNPS] California Native Plant Society. 2022. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. http://www.rareplants.cnps.org/advanced.html. Accessed through June 2022.

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken (editors). 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press. Berkeley, California.

Becker, G. S., I. J. Reining, D. A Asbury, and A. Gunther. 2007. San Francisco Estuary Watersheds Evaluation. Identifying promising locations for steelhead restoration in tributaries of the San Francisco Esturary. Center for Ecosystem Management and Restoration. 92 pp.

Beier, P. 2006. Effects of artificial night lighting on mammals in Rich, C. and T. Longcore, eds. Ecological Consequences of Artificial Night Lighting. Covelo, CA: Island Press. Pp 19–42.

Borden, W. C., O. M. Lockhart, A. W. Jones, and M. S. Lyons. 2010. Seasonal, taxonomic, and local habitat components of bird-window collisions on an urban university campus in Cleveland, OH.

City of Belmont. 2017. City of Belmont 2035 General Plan. Adopted November 14, 2017.

Cornell Lab of Ornithology. 2022. eBird. http://www.ebird.org/. Accessed through August 2022.

Cusa, M., D. A. Jackson, and M. Mesure. 2015. Window collisions by migratory bird species: urban geographical patterns and habitat associations. Urban Ecosystems, 18(4): 1427–1446.

de Molenaar, J. G., M. E. Sanders, and D. A. Jonkers. 2006. Road Lighting and Grassland Birds: Local Influence of Road Lighting on a Black-tailed Godwit Population in Rich, C. and T. Longcore, eds. Ecological Consequences of Artificial Night Lighting. Covelo, CA: Island Press. Pp 114–136.

DeCandido, R. and D. Allen. 2006. Nocturnal hunting by peregrine falcons at the Empire State Building, New York City. Wilson J. Ornithol. 118(1): 53–58.

Faber-Langendoen, D., J. Nichols, L. Master, K. Snow, A. Tomaino, R. Bittman, G. Hammerson, B. Heidel, L. Ramsay, A. Teucher, and B. Young. 2012. NatureServe Conservation Status Assessments: Methodology for Assigning Ranks. NatureServe, Arlington, VA.

Gauthreaux, S. A. and C. G. Belser. 2006. Effects of Artificial Night Lighting on Migrating Birds in Rich, C. and T. Longcore, eds. Ecological Consequences of Artificial Night Lighting. Covelo, CA: Island Press. Pp 67–93.

Gelb, Y. and N. Delacretaz. 2009. Windows and vegetation: primary factors in Manhattan bird collisions. Northeastern Naturalist, 16(3): 455–470.

Google Inc. 2022. Google Earth (Version 7.3.0.3832) [Software]. Available from earth.google.com.

Herbert, A. D. 1970. Spatial Disorientation in Birds. Wilson Bull. 82(4): 400–419.

Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished report. California Department of Fish and Game, Natural Heritage Division, Sacramento, CA.

International Dark-Sky Association. 2011. Model Lighting Ordinance with User's Guide. Available: https://www.darksky.org/wp-content/uploads/bsk-pdf-manager/16_MLO_FINAL_JUNE2011.PDF. Accessed June 2022.

Klem, D., Jr., C. J. Farmer, N. Delacretaz, Y. Gelb, and P. G. Saenger. 2009. Architectural and landscape risk factors associated with bird-glass collisions in an urban environment. The Wilson Journal of Ornithology 121(1):126-134.

Leidy, R. A. 1984. Distribution and Ecology of Stream Fishes in the San Francisco Bay Drainage (and associated unpublished data, 1981-1984). Hilgardia 52(8).

Leidy, R. A., G. S. Becker, and B. N. Harvey. 2005. Historical Distribution and Current Status of Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) in Streams of the San Francisco Estuary, California. Center for Ecosystem Management and Restoration.

Longcore, T. and C. Rich. 2004. Ecological Light Pollution. Front. Ecol. Environ. 2(4): 191–198.

McBroom, J. 2018. California Ridgway's Rail Surveys for the San Francisco Estuary Invasive Spartina Project 2017. January 2018.

McBroom, J. 2020. California Clapper Rail Surveys for the San Francisco Estuary Invasive Spartina Project 2019. January, 2020.

McBroom, J. 2021. California Clapper Rail Surveys for the San Francisco Estuary Invasive Spartina Project 2020. February 2021.

Miller, M. W. 2006. Apparent Effects of Light Pollution on Singing Behavior of American Robins. Condor 108(1): 130–139.

Negro, J. J., J. Bustamante, C. Melguizo, J. L. Ruiz, and J. M. Grande. 2000. Nocturnal activity of lesser kestrels under artificial lighting conditions in Seville, Spain. J. Raptor Res. 34(4): 327–329.

[NRCS] Natural Resources Conservation Service. 2022. Web Soil Survey. U.S. Department of Agriculture. Accessed through June 2022 from: http://websoilsurvey.nrcs.usda.gov.

[NWI] National Wetlands Inventory. 2022. Wetlands Mapper. U.S. Fish and Wildlife Service Accessed June 2022 from http://www.fws.gov/wetlands/Wetlands-Mapper.html.

Pierson, E. D., W. E. Rainey, and C. Corben. 2006. Distribution and status of western red bats (*Lasiurus blossevillii*) in California. California Department of Fish and Game, Habitat Conservation Branch, Species Conservation and Recovery Program Report 2006-04.

Riding, C. S., T. J. O'Connell, and S. R. Loss. 2020. Building façade-level correlates of bird–window collisions in a small urban area. The Condor 122(1): 1–14.

Ringer, R. K. 1972. Effect of light and behavior on nutrition. J. Anim. Sci. 35: 642–647.

Rogers, D. I., T. Piersma, and C. J. Hassell. 2006. Roost availability may constrain shorebird distribution: Exploring the energetic costs of roosting and disturbance around a tropical bay. Biol. Conserv. 33(4): 225–235.

Rottenborn, S. C. 2007. Savannah sparrow Passerculus sandwichensis. In W.G. Bousman, editor. Breeding bird atlas of Santa Clara County. p 408-409. Santa Clara Valley Audubon Society, Cupertino, CA.

San Francisco Planning Department. 2011. Standards for Bird-Safe Buildings. Planning Department. July 14, 2011.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation Second Edition. Califonia Native Plant Society Press Sacramento, CA.

Sequoia Audubon Society. 2001. San Mateo County Breeding Bird Atlas. Sequoia Audubon Society, Woodside, CA.

Shellhammer, H. S. 2000. Salt marsh wandering shrew, *Sorex vagrans halicoetes*. Pages 109-113 in P. R. Olofson, editor. Goals Project. Baylands Ecosystem Species and Community Profiles: Life Histories and Environmental Requirements of Key Plants, Fish and Wildlife. San Francisco Bay Area Wetlands Ecosystem Goals Project. San Francisco Bay Regional Water Quality Control Board, Oakland, California.

Shellhammer, H. 2005. Salt marsh harvest mouse database and maps. San Francisco Estuary Institute. Accessed through March 2015 from: http://www.sfei.org/content/salt-marsh-harvest-mouse-database-and-maps.

Sheppard, C. and G. Phillips. 2015. Bird-Friendly Building Design, 2nd Ed. The Plains, VA: American Bird Conservancy, 2015.

Smith, K. R. 2019. Ecology and Conservation of the Salt Marsh Harvest Mouse in the Modern San Francisco Estuary. Ph.D. Dissertation. U.C. Davis, California.

Van Doren, B. M., K. G. Horton, A. M. Dokter, H. Klinck, S. B. Elbin, and A. Farnsworth. 2017. High-intensity urban light installation dramatically alters nocturnal bird migration. Proceedings of the National Academy of Sciences of the United States of America: 114 (42): 11175–11180

Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, editors. 1990. California's wildlife. Volume III: Mammals. California Department of Fish and Game, Sacramento, California.

Appendix A. List of Observed Plants

Scientific Name	Common Name
Acacia melanoxylon	Blackwood acacia
Avena fatua	Wild oats
Baccharis pilularis	Coyote brush
Brassica nigra	Black mustard
Bromus diandrus	Ripgut brome
Bromus hordeaceus	Soft chess
Carduus pycnocephalus	Italian thistle
Carpobrotus chilensis	Chilean sea fig
Distichlis spicata	Salt grass
Erigeron canadensis	Horseweed
Erodium cicutarium	Stork's bill filaree
Eucalyptus conferruminata	Spider gum
Eucalyptus sideroxylon	Red iron bark
Festuca perennis	Italian rye grass
Foeniculum vulgare	Fennel
Frankenia salina	Alkali heath
Geranium dissectum	Wild geranium
Grindelia stricta	Gumweed
Hirschfeldia incana	Summer mustard
Hordeum murinum	Foxtail barley
Jaumea carnosa	Jaumea
Lactuca serriola	Prickly lettuce
Lepidium latifolium	Perennial pepperweed
Malva spp.	cheeseweed
Medicago polymorpha	California burclover
Plantago elongata	Coast plantain
Polypogon monspeliensis	Rabbitsfoot grass
Puccinellia maritima	Seaside alkaligrass
Rhamnus alaternus	Italian buckthorn
Rumex crispus	Curly dock
Salicornia pacifica	Pickleweed
Salsola soda	alkali Russian thistle
Silybum marianum	Milk thistle

Spartina alterniflora	smooth cordgrass
Stipa miliacea ssp. *miliacea*	Smilo grass
Trifolium hirtum	Rose clover
Vicia sativa	vetch

Appendix B. Representative Photos of the Study Area

Photo 1. Belmont Creek, tidal salt marsh, and ruderal grassland adjacent to the project site.

Photo 2. Belmont Creek and tidal salt marsh adjacent to the project site.

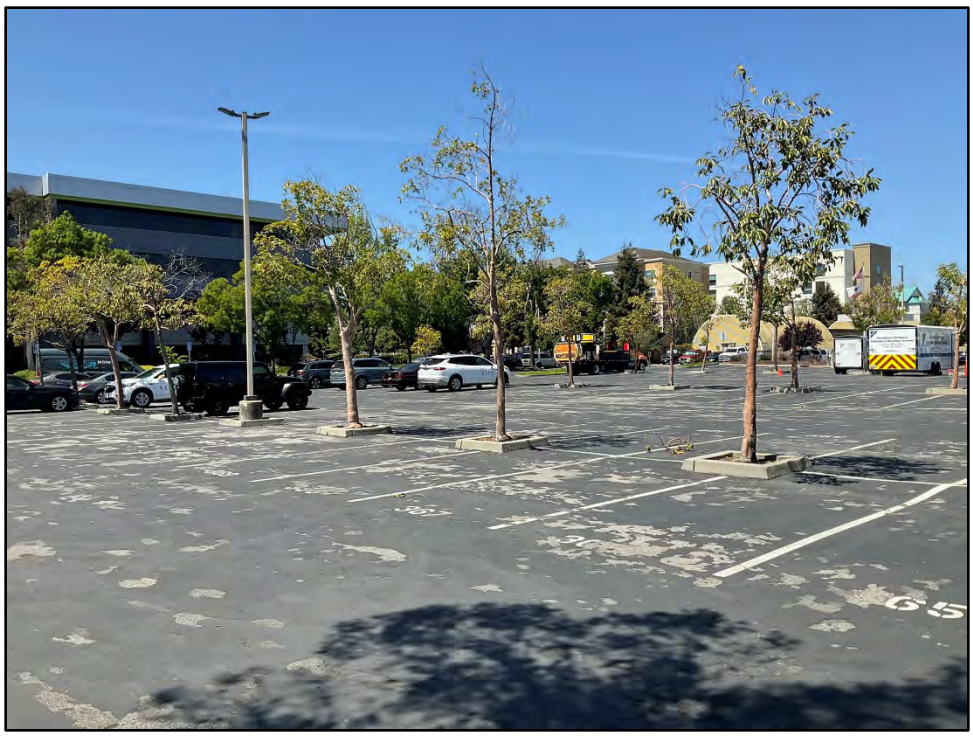

Photo 3. Developed/landscaped surface parking lot on the project site.